

## Darwin Initiative Main and Post Project Annual Report

To be completed with reference to the “Writing a Darwin Report” guidance: (<http://www.darwininitiative.org.uk/resources-for-projects/reporting-forms>). It is expected that this report will be a **maximum** of 20 pages in length, excluding annexes)

**Submission Deadline: 30<sup>th</sup> April 2019**

### Darwin Project Information

Project reference	25-021
Project title	Xebanghieng Communities Fisheries Co-management
Host country/ies	Lao PDR
Lead organisation	WWF-Laos
Partner institution(s)	Department of Livestock and Fisheries, Ministry of Agriculture and Forestry National University of Laos
Darwin grant value	£239,546
Start/end dates of project	1 July 2018 to 30 September 2020
Reporting period (e.g., Apr 2018 – Mar 2019) and number (e.g., Annual Report 1, 2, 3)	April 2018 – March 2019 Annual report 1
Project Leader name	Francois Guegan
Project website/blog/Twitter	
Report author(s) and date	06/06/2019

### 1. Project rationale

This project aims at improving freshwater biodiversity and promoting sustainable livelihoods that better manage natural resources, leading to reduced poverty in 10 communities living in the Xebanghien River basin, Savannakhet province, Lao PDR. Key activities include setting up fish conservation zones (FCZs) and fisheries management committees (FMCs), developing women-led alternative livelihoods models and advocating with policy makers to further support the establishment of fisheries co-management structures throughout the country.

Random allocation methodology has been applied to a total sample population of 19 eligible villages resulting in 10 treatment and 9 control villages across three districts

*Table 1: FCZ target villages*

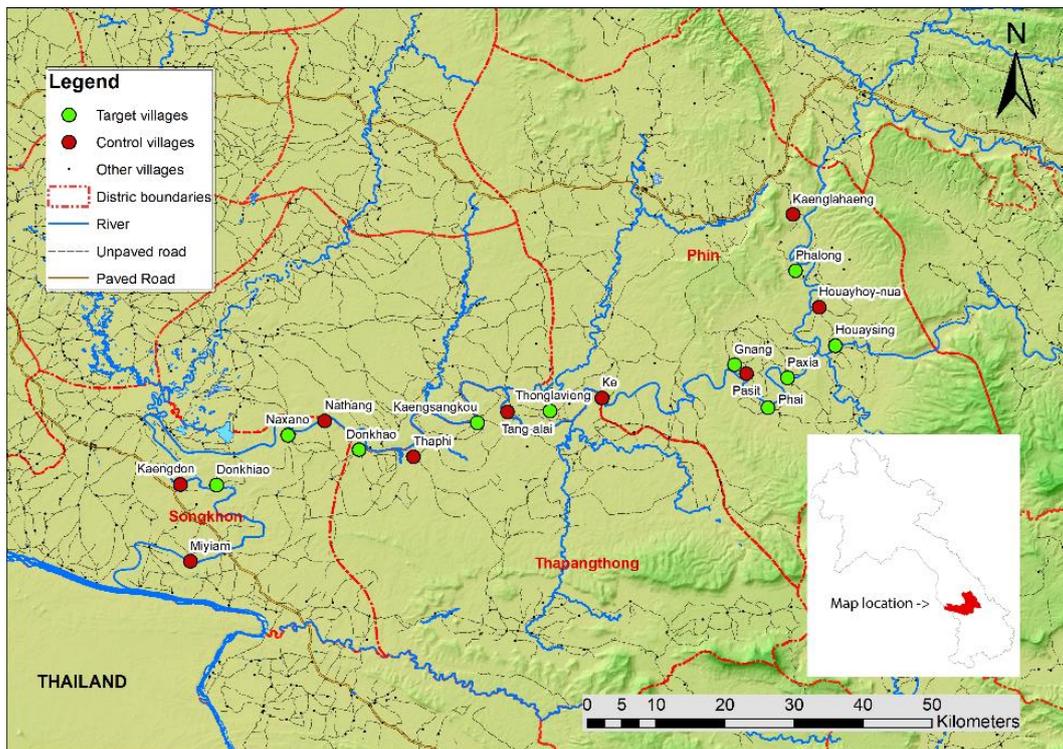
District	Village
Songkhon	Donkhiao
Songkhon	Naxano
Thapangthong	Don Kao
Thapangthong	Keangsangkou

District	Village
Phin	Thonglavieng (Thongmixay)
Phin	Gnang
Phin	Phai
Phin	Paxia
Phin	Houaysing (Sing)
Phin	Phalong

Table 2: Control villages

District	Villages
Songkhon	Miyiam
Songkhon	Kaengdon
Songkhon	Narthang
Thapangthong	Thaphi
Phin	Tang-alai
Phin	Ke
Phin	Pasit
Phin	Houyhoy
Phin	Kenglahaeng

Figure a: detailed map of target villages (available in higher resolution in appendix 1)



## 2. Project partnerships

The **Department of Livestock and Fisheries (DLF)** is our key partner in project implementation and with whom a MoU is signed (in order for the project to be officially recognized and approved, an MoU with a Government counterpart has to be signed before activities can be implemented). The DLF is involved in project planning, monitoring and evaluation and decision making. At the implementation level, the project needs to ensure that the plan is in line with those of the Provincial Agriculture and Forestry Office (PAFO) and District Agriculture and Forestry Office (DAFO) and approved by DLF at the national level.

At the beginning of the project, it was somewhat difficult to work with the local government partners such as PAFO and DAFO, due to the fact that there are limited technical staff with the required capacity to contribute to a project of this nature. However, with close cooperation and guidance, we were able to help them to quickly understand the project, their role and areas of responsibility. Staff of DAFO and PAFO participate in every activity of the project. However, it can be challenging, as they are limited in their ability to assign staff to participate in project activities in a timely manner. Also Government staff rotate and training of new project counterparts can be required.

Apart from the aforementioned challenges, we have had a collaborative relationship with DLF that has been fostered through a long partnership between our two organisations.

One of the key partners on this project is the **National University of Laos**. The academic nature of this project has created a space for additional expertise to be brought in from the academy and this has occurred through the National University of Laos and **Monash University in Australia**. By partnering with these institutions we have access to academics with more specific skills than are kept on staff at the WWF. The partnership with the National University of Laos has been formalised through the signing of a Memorandum of Agreement. In addition to support from the staff at the university we have been able to gain access to a researcher from Australia through the **Australian Volunteers Programme**. This individual is assisting the University and us in developing the research methodology and evaluation materials to complete the outputs laid out in the logframe for this project.

Additionally, a partnership with the University is beneficial in the political climate in Laos as they are able to visit villages and carry out interviews with less intervention and easier approval than an organisation such as ourselves. This has been of great benefit to us in forging relationships with the relevant Government counterparts involved in this project.

Challenges in a partnership such as this mainly surround administrative requirements. Our financial reporting standards differ in some areas to the University due to the international nature of our funding compared with their being just beholden to Lao requirements. This partnership in terms of appropriating funds to the university for research costs is one of the first we have engaged in in this country so there are teething problems in ensuring they meet our reporting requirements. So far reporting requirements have been met successfully.

## 3. Project progress

### 3.1 Progress in carrying out project Activities

#### **Output 1: 10 communities on the Xebanghien River manage their freshwater resources through effective fisheries co-management structures**

- 1.1 10 fish conservation zones (FCZ) officially announced by District authorities in the Xebanghien River basin by May 2020 (June 2019 milestone: FCZ process in 10 villages 30% complete on average)

Focusing on the implementation of FCZs, is on target for completion by May 2020. 10 communities have been selected for the project to be implemented. A map of the region with the village locations along the river has been produced and is attached in appendix 1.

The map of treatment and control village has been shared with our government partners for their approval, which has been given.

Through April and May we will be engaging with the 10 villages receiving the program to ensure they are willing to receive the intervention and develop an FCZ. At the time of writing planning is on-going and the villages themselves have the final say if they want the project to proceed or not.

1.2 10 fisheries management committees (FMC) officially set up, each including women representatives, approved by District authorities and functioning in 10 villages in the Xebanghien River basin by May 2020 (**June 2019 milestone**: all FMC members are selected in at least 5 villages)

As with output 1.1 this work is done through engagement with the villages that has just begun. Work is on track to have FMCs developed during June 2019 and fully completed by May 2020.

**Output 2: Households (and, in particular, women) in fisheries-dependent communities benefit from education in fishing effort and devote additional time to increase revenue and food availability derived from more diversified livelihoods**

2.1 10 women-led production groups set up in 10 villages in the Xebanghien River basin by June 2019

This is a part of the aforementioned engagement that is currently on going. It is on track for completion in June 2019.

2.2 Livelihood diversification options identified by 10 women-led production groups in 10 villages in the Xebanghien River basin by August 2019

This work will begin once the women-led production groups are in place.

2.3 10 women-led production groups in 10 villages in the Xebanghien River producing outputs by March 2020

This work will begin once the women-led production groups are in place.

2.4 Time spent by women to diversify both food availability and income increased by 20% in 100 target households in 10 villages in the Xebanghien River basin by June 2020

This will be assessed in the evaluation of the project at its conclusion.

**Output 3: Successes and constraints of fisheries co-management structures in the Middle Mekong are assessed and inform Lao fisheries policy makers**

3.1 Rapid evaluation report of 42 fisheries co-management structures in Savannakhet Province, completed by June 2019

This work is on going but somewhat delayed. Priority was given to gathering the baseline data for the villages in the new programme prior to implementation so that implementation could occur without creating bias in the baseline data. Delays were caused by the time taken to sign the MoU with the Department of Livestock and Fisheries. A revised date for completion is September 2019.

3.2 Evaluation report of at least 8 fisheries co-management structures in which change can be attributed to previous WWF/DLF interventions, including recommendations, completed by August 2019.

This work is tied to the rapid evaluation of the 42 villages. From that evaluation a deeper investigation of 8 villages showing significant change will be done. Reasons for delay are the same as 3.1. A revised date for completion is October 2019.

3.1 Publication of results and recommendations through local media (local newspapers), written material (policy brief), and social media (articles, movie, clips), by March 2020 (**milestones**: first news items published before March 2019; short movie completed by December 2019)

Vientiane times covered the signing ceremony of the MoU between the WWF and DLF and stories were published on March 18 and 19 in both Lao and English (see appendix 2). Plans are being formulated for the development of other media and publications.

3.2 Commitment made by Fisheries authorities to promote fisheries co-management nationwide and the project's research recommendations during multi-stakeholder advocacy workshop presenting the results of both surveys and previous research, conducted before March 2020

This will be planned towards the end of 2019 for the workshop to occur in March 2020.

### **3.2 Progress towards project Outputs**

#### **Output 1: 10 communities on the Xehanghien River manage their freshwater resources through effective fisheries co-management structures**

Delays occurred in the signing of the MoU with the Department of Livestock and Fisheries. This was signed in March and work will begin in April to implement the project in the 10 treatment villages. Progress is now being made and the June 2019 milestones should be met. At this stage there is no reason to think that the May 2020 end goals will not be met.

Currently, the 10 villages have been selected and approved by the Provincial and District Agriculture and Forestry Offices (PAFO and DAFO). Fieldwork will start next month to engage with the villages for their assent to the project terms.

#### **Output 2: Households (and, in particular, women) in fisheries-dependent communities benefit from education in fishing effort and devote additional time to increase revenue and food availability derived from more diversified livelihoods**

We completed the field activity plan with approval from PAFO and DAFO. At the time of writing we are working through the process of selecting the activities and the 10 model families in 10 project target villages. We are on track to complete this activity by the end of June 2019.

#### **Output 3: Successes and constraints of fisheries co-management structures in the Middle Mekong are assessed and inform Lao fisheries policy makers**

The work being done here on the outputs of a rapid evaluation of 42 villages and a deeper evaluation of 8 villages that show change has been delayed. This is due to priority being given to gathering baseline data for the treatment and control study on the new villages receiving the project. Part of this delay can be attributed to the delay in signing the MoU with the government counterpart, without which field work is impossible, and part is now due to the impassable roads through the worst of the wet season. A field team from the National University Of Laos will be gathering data in early June for baseline household data and they will inform us of the quality of the roads. It is likely that if the roads are too difficult we will delay data gathering for this aspect to September 2019 with reporting done by the end of October.

The communication through various media platforms will adjust accordingly and be done when there is data gathered and a story to tell.

### **3.3 Progress towards the project Outcome**

#### **Outcome: Fish stocks and fish biodiversity have improved and poverty reduced in 10 villages in the Xebanghien River basin through effective community-based conservation of freshwater resources and alternative livelihood models**

Note that a copy of the household survey is attached in appendix 3. Also attached is the fish picture reference booklet to support the biodiversity survey, in appendix 4.

##### Measurable indicators:

0.1 By June 2020, an average of 10% decrease in fishing effort for the same yield (catch per unit effort) is observed by all fishing households in 10 villages (**baseline** to be determined during pre-project surveys)

This indicator will show an increase in fish stock in the river as a decrease in fishing effort for same yield or a higher yield for the same effort will be evidence of a larger fish stock in the absence of any change in gear or practices that make fishing easier. This will be determined by surveys and the control group will exist to test the counterfactual. The project if current rates of progress are maintained should show this outcome at the end of the project. This will be determined by a household survey conducted in May 2020.

0.2 Time freed from fishing is reallocated to other livelihood options in at least 50% of fishing households in 10 villages (**baseline** to be determined during pre-project surveys)

The baseline data is being gathered through Time Use and Livelihood modules of our baseline household survey. These modules will be delivered to the same households in May 2020 to determine if this outcome has been reached. It will be difficult for a mid-project update on this due to the short implementation period and the time taken for fish population to grow naturally.

- 0.3 By June 2020, mean last capture dates for 2 selected endangered endemic species show a decrease from project start in 10 villages (**baseline** to be determined during pre-project surveys)

The baseline data will be gathered shortly with the household survey and then the questions will be asked again in May 2020.

- 0.4 By June 2020, the knowledge, attitude and practice (enforcement) of the Fisheries Law in 10 villages has increased by at least 50% (**baseline** to be determined during pre-project surveys)

The baseline will be determined in the baseline household survey. The same households will be visited in May 2020 to determine the changes. The control group will control for any Province or Nationwide changes to fisheries rules or information dissemination in the next 12 months.

### 3.4 Monitoring of assumptions

*Assumption 1: No new major infrastructure developments (e.g. dam) will begin within the project lifetime in lowland areas*

Comments: There are currently no dams and no construction of any dams or other major infrastructure projects on the Xebanghien river. If something does occur the presence of the control group will still show us what would have happened in the absence of the project. We may lose the before and after comparison but the counterfactual test remains showing what happens with and without the project.

*Assumption 2: Fish populations can increase despite existing pressures by infrastructure construction at the Mekong Basin level .*

Comments: As above for assumption 1. The presence of the control group will limit the impact of such changes on the study.

*Assumption 3: No major socially disruptive event (e.g. drought, abnormal and/or non-seasonal flood, social unrest) prevents independent impartial monitoring*

Comments: Little can be done to mitigate this. However, our control group and the balance of the treatment and control groups on geographic, biodiversity and socio-economic indicators will mean that if something does occur we can still test the counterfactual and determine the impact of the project.

*Assumption 4: People in control villages are willing to participate in survey effort*

Comments: Our surveys will be carried out by National University of Laos staff and students. They will call ahead to arrange interviews with local fishermen. They are experienced at engaging with local people and the village leadership. It is very likely that we will be successful in interviewing 10 households per village.

#### **Output 1 10 communities on the Xebanghien River manage their freshwater resources through effective fisheries co-management structures**

*Assumption 1: FCZ locations allow efficient monitoring and law enforcement by communities*

Comments: This can only be controlled for by our implementation team working with the FMC to ensure monitoring and enforcement are possible. Our team is aware of this and it will be a part of the planning phase with the village FMC.

*Assumption 2: Village leadership is stable and pushes for regulations to be enforced*

Comments: This is outside of our control completely. We will work with each village leadership and FMC to ensure the project continues through leadership changes.

**Output 2: Households (and, in particular, women) in fisheries-dependent communities benefit from reduction in fishing effort and devote additional time to increase revenue and food availability derived from more diversified livelihoods**

*Assumption 1: Raw materials can be obtained locally and/or purchase is affordable*

Comments: Work will be done with the production groups to help them to use local or affordable materials.

*Assumption 2: Access to markets is affordable*

Comments: Access to market can be difficult in these remote areas. Assistance will be given to overcome any obstacles in accessing markets in a manner that makes the taking of goods to them cost effective.

**Output 3: Successes and constraints of fisheries co-management structures in the Middle Mekong are assessed and inform Lao fisheries policy makers**

*Assumption 1 Access is physically possible to all 42 villages*

Comments: As the 42 villages have been visited by the WWF previously, we should be able to access them again. As mentioned previously the issues posed by poor roads and the wet season may mean delays in accessing until after the wet season.

*Assumption 2: Villagers in communities where fisheries law enforcement has been weak are willing to participate in surveys*

Comments: The University team are experienced at working with communities for data gathering and as a part of the Lao government they are able to visit areas and collaborate with the Provincial and District governments more freely than the WWF.

*Assumption 3: Subject gathers enough attention for press releases to be published in local media*

Comments: Holds true. This will be done.

*Assumption 4: No major disruption (either internal or external) prevents the completion of all surveys and data can be processed on time*

Comments: This is on track. As shown by the delay due to the MoU being signed things do come up that effect timely delivery in Laos. However, there should be no further issues of this magnitude.

*Assumption 5: Policy makers are willing to participate in dissemination meetings and take on the recommendations for follow up actions*

Comments: At present our collaboration with DLF and PAFO and DAFO has been strong. Our impact evaluation lead presented the methodology at the University to representatives from DLF and the Dean of the Faculty of Agriculture and it was well received. As DLF, PAFO, DAFO and the National University of Laos are closely involved in this project through its various phases it is likely that they will be receptive to a workshop and receiving the results and recommendations of the project.

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

The justification for this work is based on a wide literature of qualitative analysis of fisheries co-management and a smaller amount of literature on quantitative analysis of similar projects. Members of the team working on this project from the WWF, National University of Laos and Monash University conducted a previous study that is pending publication that showed a tangible increase in number of fish species caught in the past 12 months in villages with the WWF Comfish III project versus those who did not receive the project. That work is pending publication and up for review at the time of writing.

This study will expand on that work by following a treatment and control group from the beginning as opposed to using matching techniques as was done previously with established FCZs and FMCs. This project will give a similar biodiversity output of number of species caught

in the past 12 months. If successful this will provide an evidentiary foundation for further implementation of this project in other villages.

Alongside the testing of biodiversity we will test for livelihood outcomes and nutrition information. The aforementioned previous study determined an increase in nutritional outcomes for girls but not for boys. As part of the rapid evaluation of the 42 villages we hope to determine why this was the case. We should also be able to show that this project is good for the environment but also acts to alleviate poverty and malnutrition in the villages that receive it.

#### **4. Contribution to the Global Goals for Sustainable Development (SDGs)**

The project proposal documents lists alignment with the following SDGs:

- SDG15 (Life on Land) by conserving fish biodiversity (indicators 15.1, and 15.5);
- SDG1 (No Poverty) by offering livelihoods diversification options, the project will support livelihoods improvement, with positive impact especially in terms of food security, nutrition and overall health (indicator 1.4);
- SDG2 (Zero Hunger) in particular indicators 2.1 and 2.2, as fish are a key source of protein for local communities in the target area, as well as indicator 2.4 with reference to “sustainable food production systems [...] that increase productivity and production, and that help maintain ecosystems”;
- SDG5 (Gender Equality), in particular indicators 5.5 and 5.A, as women are included and their voices promoted in the fisheries management committees;
- SDG16 (Peaceful and Inclusive Societies for Sustainable Development) by promoting the implementation of the Fisheries Law, the project will contribute to indicator 16.3, which encourages the rule of law.

As mentioned elsewhere in this report, since there was significant delays in getting the project started in the field, contribution of the project towards these SDGs in the 2018-19 Financial Year cannot yet be substantiated.

#### **5. Project support to the Conventions, Treaties or Agreements**

The project proposal refers to the CBD’s Aichi target as follows:

**Target 1:** Awareness-raising and active participation of communities are an essential component of each step in the setting up of the fisheries committees and conservation zones. As a result of the project, community members will be more aware of the values of biodiversity and how to conserve and use it sustainably.

**Target 2:** WWF Laos helped develop the 2009 Fisheries Law that allowed for community fisheries to exist in Laos. An important aspect of this law is to have communities at the centre of conservation. As a result, the biodiversity value of freshwater resources have been integrated into the national development and poverty reduction strategies. This project aims to continue this effort by supporting 10 communities while reflecting on the long term impact and sustainability of the model to inform development and poverty reduction strategies.

**Target 6:** By supporting 10 communities to better managed fish stocks and harvest them sustainably, overfishing will be avoided so that the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.

**Target 11:** The importance of freshwater protected areas is often hidden by forest protected areas and marine parks and have in the past received little attention by conservationists. However, they play a vital role in supporting river biodiversity, especially since there are no other way to conserve wild fish in a tropical river system such as the Mekong, and because they are areas of unmatched importance for biodiversity and ecosystem services to the local communities.

**Target 12:** This project focuses on contributing to the achievement of this Target through improving the conservation status of threatened Mekong Megafauna. These species are chronically threatened largely through unsustainable fishing practices resulting in over-fishing. Through using science to identify conservation zones and employing a method successfully

implemented for fish recovery in numerous sites, the project will contribute to improving conservation status, and thus reduced extinction risk, for endangered species that benefit from lowland seasonal flooding in Mekong tributaries such as the critically endangered Mekong giant catfish, and lesser known threatened species such as the Wallago attu or Bagarius yarrelli, both of them near-threatened and with population rapidly decreasing.

**Target 14:** In the villages of the project areas, fisheries are an essential part of livelihoods. Other livelihood options come in addition to fisheries, including paddy rice, and vegetable cultivation, etc. but fisheries are central. Hence by improving fisheries management, and eventually increasing fish stocks, the project will be restoring and safeguarding ecosystems services that sustaining the health, livelihoods and well-being of communities.

**Target 19:** The comprehensive M&E framework that this project will follow is not only focused on project delivery within the imparted timeframe, but also on previous community fisheries accomplishments, to assess their long term impact on biodiversity. By means of thorough scientific examination, the impact of existing fisheries co-management structures will be assessed and the results will be shared and transferred, with a view to improve, if necessary, the regulatory frameworks.

This alignment holds true at the end of the reporting period. However, the delays in signing the MoU with the DLF have prevented the project to start activities in target communities, hence none of our objective can be substantiated with evidence in this reporting period

## **6. Project support to poverty alleviation**

According to the Lao Agricultural Census Office (2012), in 2010-11, 71% of all farming families in Laos practiced capture fisheries. In short, wild fish biodiversity and abundance provides a poverty safety net for those who rely on fish protein for subsistence.

However infrastructure development and illegal practices have affected the capacity of the Mekong river system to produce fish. These changes affect mostly rural people dependent on fish for their subsistence and puts them at risk of falling into (further) poverty. The poorest people are being hardest hit because fishing is their only source of protein. As a result, communities resort to overexploitation; fish stocks continue to decline and villagers spend more time fishing for smaller catches, sometimes leading to conflicts between communities.

The project, by setting up community management structures that increase fish stocks, and by offering livelihoods diversification options, will support livelihoods improvement, with positive impact especially in terms of food security, nutrition and overall health. This contributes to reducing poverty. However, the delays in signing the MoU with the DLF have prevented the project to start activities in target communities, hence none of our objectives can be substantiated with evidence in this reporting period.

## **7. Project support to gender equality issues**

Through the project's outcome 1, women will be represented in the fisheries committees, and will hence benefit from increased voice in the fisheries decision making processes.

Through outcome 1, it is also expected that all households' members will benefit from reduction in fishing effort. As fishing, which is mostly done by men, becomes more regulated and harvest more predictable, women are able to plan and develop small businesses in fish transformation (e.g. fermented or dry fish), or agriculture extension, and increase their income. Eventually, thanks to reduced fishing time, families – both men and women – have the possibility to diversify their income. This allows them to cope better with economic stress.

In order to support this, the project will raise the awareness of target communities with regards to gender equality in natural resources management, using material used in other projects that have demonstrated a positive impact on women's participation in the villages' natural resources management processes.

Through the project's outcome 2, women will benefit from increased income from livelihood diversification. This will in turn increase their voice in household decision making so that they have a stronger voice, among others, in natural resources management.

As in all our projects, this project will disaggregate data by gender in all three outputs starting with baseline, and in all follow-up surveys. This will allow us to monitor women's participation, representation, and how women benefit from the project.

At the end of the reporting period, no field activities have started, hence evidence of our endeavours (detailed above) cannot yet be gathered. We will be able to demonstrate some of this in our next report.

## **8. Monitoring and evaluation**

Internally, WWF Laos uses a template called "monthly monitoring report", which consists of a set of spreadsheet to track the progress of the activities on a monthly basis, and indicators on a quarterly basis. The M&E framework has not changed since the start of the project – apart from adding another 3 months to the project as no-cost extension and slight changes in milestones to reflect the delays in getting the project started (all this has been approved by DEFRA).

Output 3 on its own is almost entirely dedicated to M&E. Outputs 1 and 2 also have a strong M&E component, key not only to ensure effective management of the project but also in producing the data necessary to publish the peer-review papers that will originate from the project.

## **9. Lessons learnt**

Most importantly, communities are very interested in our project and keen to work with us. The project is also receiving good attention from Government agencies at the technical level and good cooperation mechanisms are in place, also with the National University.

However, as the delays in signing the MoU with the DLF have shown, the time needed for some processes cannot be compressed. We had initially expected that the process could be speeded up by organizing a mid-term review of the MoU under which this project was meant to be integrated (the WWF-DLF's Lao Thai Fisheries project). This was recommended by the Ministry of Agriculture and Forestry in early July 2018. However, the Ministry of Foreign Affairs (MoFA) was not able to decide at the time, as senior staff were busy with the impact of the floods ravaging the country. A new meeting was organized on September 13, 2018, during which it was decided that a new MoU was needed.

Again, we were optimistic that, given the circumstances, MoFA would be doing its best to speed up the process. Unfortunately they did not and it took 6 months to finalize the process.

Given the opportunity, we would do things differently by anticipating that for any new grant a new MoU is needed, which can shorten the process since preliminary steps can be done as soon as we know that the project will receive funding.

## **10. Actions taken in response to previous reviews (if applicable)**

N/A

## **11. Other comments on progress not covered elsewhere**

This is discussed in previous sections, especially section 9, and elsewhere in the report, mostly concerning the delays in signing the MoU with the DLF.

## 12. Sustainability and legacy

Due to delays in project implementation, the project has had limited opportunities to consider its legacy, apart from the natural questions that come with delays in project implementation, i.e. how to ensure that the project reaches the objectives set in the exit strategy. The latter is based on the idea that the project will reach a stable and sustainable end point in the 10 target communities through the creation of 10 co-management structures that will continue to manage fisheries after project end as well as diversified livelihoods that will benefit women and men in target communities in the long term.

Aside direct biodiversity sustainability, our exit strategy consists of enhancing the capacity of villagers and setting up structures enabling communities to manage their commons. This approach aims at building the systems and knowledge base required for longevity of behaviour changes. This is reinforced through demonstrating the value of FCZs through awareness-raising efforts (sessions supported by information, education and information (IEC) material, consensus building, group discussions, etc.). Eventually, adult villagers will fish more responsibly and take an active part in fisheries co-management (e.g. be part of the management committee), making this project sustainable.

Since we were able to sign our MoU only in March 2019, project implementation has been delayed by 6 months. We have hence requested a no-cost extension of 3 months and believe that over the lifetime of the project that remains, we will be able to catch up with the delays and still deliver on our exit strategy.

## 13. Darwin identity

Due to delays in project implementation, the only opportunity the project has had to publicise itself and the Darwin Initiative is through the communication we supported to cover the signature of the Memorandum of Understanding with the DLF. A set of evidence is produced in appendix 2. This was also relayed on our Facebook page.

## 14. Project expenditure

**Table 1: Project expenditure during the reporting period (1 April 2018 – 31 March 2019)**

<b>Project spend (indicative) since last annual report</b>	<b>2018/19 Grant (£)</b>	<b>2018/19 Total Darwin Costs (£)</b>	<b>Variance %</b>	<b>Comments (please explain significant variances)</b>
Staff costs (see below)				
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items (see below)				
Monitoring & Evaluation (M&E)				
Others (see below)				
<b>TOTAL</b>				

## Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2018-2019

Note: this is based on the logframe revised in January 2019, with project life extension to September 2020 approved on 15 May 2019

Project summary	Measurable Indicators	Progress and Achievements April 2018 - March 2019	Actions required/planned for next period
<p><b>Impact</b></p> <p>Improved freshwater biodiversity and sustainable livelihoods that better manage natural resources lead to reduced poverty in the Middle Mekong</p>		Due to delays in implementation, this is not yet applicable.	
<p><b>Outcome</b></p> <p>Fish stocks and fish biodiversity have improved and poverty reduced in ten villages in the Xebanghien River basin through effective community-based conservation of freshwater resources and alternative livelihood models</p>		<p>0.1 Design of the survey that will determine baseline is now complete.</p> <p>0.2 Same as above.</p> <p>0.3 Same as above.</p> <p>0.4 Same as above.</p>	<p>0. Complete baseline survey in 10 target villages and 9 control villages</p> <p>1. Kick-start the process of creating FCZs in 10 target villages.</p> <p>2. Complete livelihood diversification activities management regulation in 10 target villages.</p> <p>3. Start fish catch monitoring in 10 villages, at least 10 households per village.</p> <p>4. Undertake last sighting date interviews in target and control villages (10 households per ).</p> <p>5. Start awareness raising in 10 target villages, providing knowledge of fish endanger species, illegal fishing gears by Lao Fisheries Law and knowledge of sustainable fishing methods and fish spawning season.</p>
	<p>0.1 → By June 2020, an average of 10% decrease in fishing effort for the same yield (catch per unit effort) is observed by all fishing households in 10 villages (<b>baseline</b> to be determined during pre-project surveys)</p> <p>0.2 Time freed from fishing is reallocated to other livelihood options in at least 50% of fishing households in 10 villages (<b>baseline</b> to be determined during pre-project surveys)</p> <p>0.3 → By June 2020, mean last capture dates for 2 selected endangered endemic species show a decrease from project start in 10 villages (<b>baseline</b> to be determined during pre-project surveys)</p> <p>0.4 → By June 2020, the knowledge, attitude and practice (enforcement) of the Fisheries Law in 10 villages has increased by at least 50% (<b>baseline</b> to be determined during pre-project surveys)</p>		

Project summary	Measurable Indicators	Progress and Achievements April 2018 - March 2019	Actions required/planned for next period
<p><b>Output 1.</b> 10 communities on the Xebanghien River manage their freshwater resources through effective fisheries co-management structures</p>	<p>1.1 → 10 fish conservation zones (FCZ) officially announced by District authorities in the Xebanghien River basin by May 2020 (<b>June 2019 milestone:</b> FCZ process in 10 villages 30% complete on average)</p> <p>1.2 → 10 fisheries management committees (FMC) officially set up, each including women representatives, approved by District authorities and functioning in 10 villages in the Xebanghien River basin by May 2020 (<b>June 2019 milestone:</b> all FMC members are selected in at least 5 villages)</p>	<p>No implementation progress yet at the end of the reporting period. However, we are confident the process we have started (i.e. MoU, local consultations, survey design with NUoL, etc.) despite taking time, will ensure the creation of the FCZs in the target villages will be completed in a timely manner.</p>	
<p>Activity 1.1 Desk review and GIS mapping of potential new target villages on the Xebanghien river and its tributaries, included 10 target villages and 10 control villages</p>		<p>Completed. However, only 9 control villages have been selected. NUoL assures that it does not pose a problem in terms of statistical analysis.</p>	
<p>Activity 1.2 Selection of 10 target villages and 10 control villages and seek FPIC (Free Prior and Informed Consent)</p>		<p>Completed. 10 target villages and 9 control villages. FPIC was sought through consultations with local authorities and villagers.</p>	
<p>Activity 1.3 Survey 10 target villages and 10 control villages pre-project (surveys including: law enforcement KAP, time use module, food consumption and anthropometric measurements from local health centres) with village authorities and randomly selected household representatives</p>		<p>Ongoing. To date, the surveys design is 90% complete. The latest draft is available in annex 3 and 4.</p>	<p>Survey to be conducted in Q1 of next reporting period. Report will be available at the end of the next reporting period.</p>
<p>Activity 1.4 Conduct last sighting date interviews in 10 target villages and 10 control villages pre-project</p>		<p>Not yet started.</p>	<p>Start the process in July 2019.</p>
<p>Activity 1.5 Start process of setting up Fish Conservation Zones (FCZs) and Fisheries Management Committees (FMC) in 10 target villages: Consensus Building, with awareness raising sessions on the benefits of FCZs, prohibited fish species, Fisheries Law and gender equality</p>		<p>Not yet started.</p>	<p>Start the process in June 2019.</p>
<p>Activity 1.6 Continue process: Draft Regulations, including demarcation of FCZ and creation of FMC</p>		<p>Not yet started.</p>	<p>Follow up from above, expected to complete by August 2019.</p>

Project summary	Measurable Indicators	Progress and Achievements April 2018 - March 2019	Actions required/planned for next period
Activity 1.7 Continue process: Revisions and Update of Regulations of village fisheries		Not yet started.	Follow up from above, expected to complete by December 2019.
Activity 1.8 Continue process: Village Approval of regulations		Not yet started.	Follow up from above, expected to complete by January 2020.
Activity 1.9 Continue process: District Approval (decree) of regulations		Not yet started.	Follow up from above, expected to complete by March 2020.
Activity 1.10 Finalize process: Announcement and Dissemination of regulations		Not yet started.	Follow up from above, expected to complete by May 2020.
Activity 1.11 Survey 10 target villages and 10 control villages post-project (surveys including: law enforcement KAP, time use module, food consumption and anthropometric measurements from local health centres) with village authorities and randomly selected household representatives		Not yet started.	Expected to start in June/July 2020
Activity 1.12 Conduct final last sighting date interviews in 10 target villages and 10 control villages post-project		Not yet started.	Expected to start in June/July 2020
<b>Output 2.</b> Households (and, in particular, women) in fisheries-dependent communities benefit from reduction in fishing effort and devote additional time to increase revenue and food availability derived from more diversified livelihoods	2.1 → 10 women-led production groups set up in 10 villages in the Xebanghien River basin by June 2019  2.2 → Livelihood diversification options identified by 10 women-led production groups in 10 villages in the Xebanghien River basin by August 2019  2.3 → 10 women-led production groups in 10 villages in the Xebanghien River producing outputs by March 2020  2.4 → Time spent by women to diversify both food availability and income increased by 20% in 100 target households in 10 villages in the Xebanghien River basin by June 2020	2.1 No group set up yet. Plan discussed and approved by local authorities (PAFO and DAFO).  2.2 No progress yet.  2.3 No progress yet.  2.4 Survey design to establish baseline completed.	

Project summary	Measurable Indicators	Progress and Achievements April 2018 - March 2019	Actions required/planned for next period
Activity 2.1. Survey 10 target villages and select pilot households to develop women-led production groups; seek FPIC		Not yet started.	Survey to be conducted in Q1 of next reporting period. Report will be available at the end of the next reporting period.
Activity 2.2. Form 10 women production groups (one in each village)		Not yet started.	Start process in July 2019.
Activity 2.3. Survey group members pre-project (combine with activity 1.3)		Not yet started.	Survey to be conducted in Q1 of next reporting period. Report will be available at the end of the next reporting period.
Activity 2.4. Select livelihoods diversification activities to be supported and funded through the project		Not yet started.	Start process in August 2019.
Activity 2.5. Disburse funds to production group		Not yet started.	Start process once above is completed.
Activity 2.6. Organize vocational trainings based on the needs identified by the members of the production groups		Not yet started.	Same as above.
Activity 2.7. Provide equipment to support the starting of community enterprises (handicraft agriculture tourism enhancement, marketing and sales, etc)		Not yet started.	Same as above.
Activity 2.8. Organize marketing trainings based on the vocational skills acquired		Not yet started.	Same as above.
Activity 2.9. Survey group members post-project (combine with activity 1.11)		Not yet started.	Expected to start in June/July 2020
<b>Output 3.3.</b> Successes and constraints of fisheries co-management structures in the Middle Mekong are assessed and inform Lao fisheries policy makers	3.1 → Rapid evaluation report of 42 fisheries co-management structures in Savannakhet Province, completed by June 2019  3.2 → Evaluation report of at least 8 fisheries co-management structures in which change can be attributed to previous WWF/DLF interventions, including recommendations, completed by August 2019.  3.3 → Publication of results and recommendations through local media (local newspapers), written material	3.1 Delayed until September 2019 due to priority given to new villages baseline data and wet season.  3.2 Will occur after 42 villages on those that show significant change	

Project summary	Measurable Indicators	Progress and Achievements April 2018 - March 2019	Actions required/planned for next period
	<p>(policy brief), and social media (articles, movie, clips), by March 2020  <b>(milestones:</b> first news items published before March 2019; short movie completed by December 2019)</p> <p>3.4 → Commitment made by Fisheries authorities to promote fisheries co-management nationwide and the project's research recommendations during multi-stakeholder advocacy workshop presenting the results of both surveys and previous research, conducted before March 2020.</p>	<p>3.3 Newspaper articles in English and Lao covering MoU signing ceremony have been published in the Vientiane Times. Other multimedia communications will occur throughout project.</p> <p>3.4 Not progress yet. Not needed until early 2020.</p>	
Activity 3.1 Desk review of 42 fisheries management structures set up in Savannakhet province (mapping, current infrastructure development confirmation of village location and metadata, etc.)		Mapping done. Surveys prepared.	
Activity 3.2 Field visit of all 42 villages and survey of their fisheries management structures and biodiversity (surveys of 1/ village authorities eliciting which rules are in place and perceptions of how they are implemented (law enforcement) and 2/ local ecological knowledge on river biodiversity)		Not done yet. Delayed until September 2019.	Survey to be conducted when roads are easily passable. Likely September 2019.
Activity 3.3 Data treatment: create homogeneous groups in terms of linking structure (i.e. law enforcement) and performance (i.e. biodiversity), using a cluster analysis of classification trees		Not yet started.	Will occur after data gathered in September.
Activity 3.4 Publish preliminary report and disseminate of lessons learnt through press releases policy brief and online content		Not yet started.	Start process once the above is completed.
Activity 3.5 Conduct a qualitative survey of at least 8 villages (final number to be determined during activity 3.3) to understand why some rules were changed or not (focus group discussions) and how did they change lives (most significant change methodology)		Not yet started.	Same as above.
Activity 3.6 Writing of evaluation report		Not yet started.	Same as above.
Activity 3.7 Production of a short movie presenting the concept of fisheries co-management and its benefits for conservation and local people's livelihoods		Not yet started.	Same as above.
Activity 3.8 Organize a multi-stakeholder advocacy workshop presenting the results of both surveys and previous research		Not yet started.	Same as above.

## Annex 2: Project's full current logframe as presented in the application form (unless changes have been agreed)

Note: this is based on the logframe revised in January 2019, with project life extension to September 2020 approved on 15 May 2019

Project summary	Measurable Indicators	Means of verification	Important Assumptions
<p><b>Impact:</b> (Max 30 words) Improved freshwater biodiversity and sustainable livelihoods that better manage natural resources lead to reduced poverty in the Middle Mekong.</p>			
<p><b>Outcome:</b> (Max 30 words) Fish stocks and fish biodiversity have improved and poverty reduced in ten villages in the Xebanghien River basin through effective community-based conservation of freshwater resources and alternative livelihood models</p>	<p>0.1 → By June 2020, an average of 10% decrease in fishing effort for the same yield (catch per unit effort) is observed by all fishing households in 10 villages (<b>baseline</b> to be determined during pre-project surveys)</p> <p>0.2 Time freed from fishing is reallocated to other livelihood options in at least 50% of fishing households in 10 villages (<b>baseline</b> to be determined during pre-project surveys)</p> <p>0.3 → By June 2020, mean last capture dates for 2 selected endangered endemic species show a decrease from project start in 10 villages (<b>baseline</b> to be determined during pre-project surveys)</p> <p>0.4 → By June 2020, the knowledge, attitude and practice (enforcement) of the Fisheries Law in 10 villages has increased by at least 50% (<b>baseline</b> to be determined during pre-project surveys)</p>	<p>0.1 → Time use module surveys pre and post-project with selected households</p> <p>0.2 → Time use module surveys pre and post-project with selected households</p> <p>0.3 → Local ecological knowledge surveys (last sighting date interviews) pre and post project with selected households</p> <p>0.4 → Knowledge, attitude and practice surveys pre and post-project with selected households</p>	<ul style="list-style-type: none"> <li>- No new major infrastructure developments (e.g. dam) will begin within the project lifetime in lowland areas</li> <li>- Fish populations can increase despite existing pressures by infrastructure construction at the Mekong Basin level</li> <li>- No major socially disruptive event (e.g. drought, abnormal and/or non-seasonal flood, social unrest) prevents independent impartial monitoring</li> <li>- People in control villages are willing to participate in survey effort</li> </ul>

<p><b>Outputs:</b></p> <p>1. 10 communities on the Xebanghien River manage their freshwater resources through effective fisheries co-management structures</p>	<p>1.1 → 10 fish conservation zones (FCZ) officially announced by District authorities in the Xebanghien River basin by May 2020 (<b>June 2019 milestone:</b> FCZ process in 10 villages 30% complete on average)</p> <p>1.2 → 10 fisheries management committees (FMC) officially set up, each including women representatives, approved by District authorities and functioning in 10 villages in the Xebanghien River basin by May 2020 (<b>June 2019 milestone:</b> all FMC members are selected in at least 5 villages)</p>	<p>1.1.1 → Publication of FCZ District decrees</p> <p>1.1.1 → Project monitoring records</p> <p>1.2.1 → FMC official members lists</p> <p>1.2.2 → Project monitoring records</p>	<ul style="list-style-type: none"> <li>- FCZ locations allow efficient monitoring and law enforcement by communities</li> <li>- Village leadership is stable and pushes for regulations to be enforced</li> <li>- No new major infrastructure developments (e.g. dam) will begin within the project lifetime in target villages or directly upstream</li> </ul>
<p>2. Households (and, in particular, women) in fisheries-dependent communities benefit from reduction in fishing effort and devote additional time to increase revenue and food availability derived from more diversified livelihoods</p>	<p>2.1 → 10 women-led production groups set up in 10 villages in the Xebanghien River basin by June 2019</p> <p>2.2 → Livelihood diversification options identified by 10 women-led production groups in 10 villages in the Xebanghien River basin by August 2019</p> <p>2.3 → 10 women-led production groups in 10 villages in the Xebanghien River producing outputs by March 2020</p> <p>2.4 → Time spent by women to diversify both food availability and income increased by 20% in 100 target households in 10 villages in the Xebanghien River basin by June 2020</p>	<p>2.1 → Production groups registration</p> <p>2.2 → Groups meeting minutes</p> <p>2.3 → Products for sale or consumption</p> <p>2.4 → Time use surveys pre and post-project</p>	<ul style="list-style-type: none"> <li>- Raw materials can be obtained locally and/or purchase is affordable</li> <li>- Access to markets is affordable</li> <li>- No major socially disruptive event (e.g. drought, abnormal and/or non-seasonal flood, social unrest) prevents people from investing in new livelihoods activities</li> </ul>

<p><b>3. Successes and constraints of fisheries co-management structures in the Middle Mekong are assessed and inform Lao fisheries policy makers</b></p>	<p>3.1 → Rapid evaluation report of 42 fisheries co-management structures in Savannakhet Province, completed by June 2019</p> <p>3.2 → Evaluation report of at least 8 fisheries co-management structures in which change can be attributed to previous WWF/DLF interventions, including recommendations, completed by August 2019.</p> <p>3.3 → Publication of results and recommendations through local media (local newspapers), written material (policy brief), and social media (articles, movie, clips), by March 2020 (<b>milestones</b>: first news items published before March 2019; short movie completed by December 2019)</p> <p>3.4 → Commitment made by Fisheries authorities to promote fisheries co-management nationwide and the project's research recommendations during multi-stakeholder advocacy workshop presenting the results of both surveys and previous research, conducted before March 2020.</p>	<p>3.1.1 → Law enforcement practice and perception surveys</p> <p>3.1.2 → Rapid biodiversity surveys using local ecological knowledge</p> <p>3.2 → Evaluation report and recommendations</p> <p>3.3.1 → At least 2 press releases and newspaper articles, one policy brief and at least 10 social media content</p> <p>3.3.2 → One short movie and 2 short clips promoting fisheries co-management</p> <p>3.4 → Participants list and minutes of meeting, recommendations, public statement by fisheries authorities</p>	<ul style="list-style-type: none"> <li>- Access is physically possible to all 42 villages</li> <li>- Villagers in communities where fisheries law enforcement has been weak are willing to participate in surveys</li> <li>- Subject gathers enough attention for press releases to be published in local media</li> <li>- No major disruption (either internal or external) prevents the completion of all surveys and data can be processed on time</li> <li>- Policy makers are willing to participate in dissemination meetings and take on the recommendations for follow up actions</li> </ul>
<p>1.1 → Desk review and GIS mapping of potential new target villages on the Xebanghien river and its tributaries, included 10 target villages and 10 control villages</p> <p>1.2 → Selection of 10 target villages and 10 control villages and seek FPIC (Free Prior and Informed Consent)</p> <p>1.3 → Survey 10 target villages and 10 control villages pre-project (surveys including: law enforcement KAP, time use module, food consumption and anthropometric measurements from local health centres) with village authorities and randomly selected household representatives</p>			

- 1.4 → Conduct last sighting date interviews in 10 target villages and 10 control villages pre-project
- 1.5 → Start process of setting up Fish Conservation Zones (FCZs) and Fisheries Management Committees (FMC) in 10 target villages: Consensus Building, with awareness raising sessions on the benefits of FCZs, prohibited fish species, Fisheries Law and gender equality
- 1.6 → Continue process: Draft Regulations, including demarcation of FCZ and creation of FMC
- 1.7 → Continue process: Revisions and Update of Regulations of village fisheries
- 1.8 → Continue process: Village Approval of regulations
- 1.9 → Continue process: District Approval (decree) of regulations
- 1.10 → Finalize process: Announcement and Dissemination of regulations
- 1.11 → Survey 10 target villages and 10 control villages post-project (surveys including: law enforcement KAP, time use module, food consumption and anthropometric measurements from local health centres) with village authorities and randomly selected household representatives
- 1.12 → Conduct final last sighting date interviews in 10 target villages and 10 control villages post-project
  
- 2.1 → Survey 10 target villages and select pilot households to develop women-led production groups; seek FPIC
- 2.2 → Form 10 women production groups (one in each village)
- 2.3 → Survey group members pre-project (combine with activity 1.3)
- 2.4 → Select livelihoods diversification activities to be supported and funded through the project
- 2.5 → Disburse funds to production groups
- 2.6 → Organize vocational trainings based on the needs identified by the members of the production groups
- 2.7 → Provide equipment to support the starting of community enterprises (handicraft, agriculture, tourism enhancement, marketing and sales, etc.)
- 2.8 → Organize marketing trainings based on the vocational skills acquired
- 2.9 → Survey group members post-project (combine with activity 1.11)
- 3.1 → Desk review of 42 fisheries management structures set up in Savannakhet province (mapping, current infrastructure development, confirmation of village location and metadata, etc.)
- 3.2 → Field visit of all 42 villages and survey of their fisheries management structures and biodiversity (surveys of 1/ village authorities eliciting which rules are in place and perceptions of how they are implemented (law enforcement) and 2/ local ecological knowledge on river biodiversity)
- 3.3 → Data treatment: create homogeneous groups in terms of linking structure (i.e. law enforcement) and performance (i.e. biodiversity), using a cluster analysis of classification trees
- 3.4 → Publish preliminary report and disseminate of lessons learnt through press releases, policy brief and online content
- 3.5 → Conduct a qualitative survey of at least 8 villages (final number to be determined during activity 3.3) to understand why some rules were changed or not (focus group discussions) and how did they change lives (most significant change methodology)
- 3.6 → Writing of evaluation report

- 3.7 → Production of a short movie presenting the concept of fisheries co-management and its benefits for conservation and local people's livelihoods
- 3.8 → Organize a multi-stakeholder advocacy workshop presenting the results of both surveys and previous research

## 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
6A	Number of people to receive other forms of education/training (which does not fall into categories 1-5 above) *	Expected 50/50 male to female ratio	Lao	0	TBC	TBC	0	TBC
6B	Number of training weeks to be provided	Expected 50/50 male to female ratio	Lao	0	TBC	TBC	0	TBC
9	Number of species/habitat management plans (or action plans) to be produced for Governments, public authorities, or other implementing agencies in the host country	10		0	10	0	0	10
11A	Number of papers to be published in peer reviewed journals	1	Lao/French/Australian	0	0	1	0	1
11B	Number of papers to be submitted to peer reviewed journals	>1	Lao/French/Australian	0	0	>1	0	>1
14A	Number of conferences/seminars / workshops to be <b>organised</b> to present/disseminate findings	1	Lao/French/Australian	0	0	1	0	1
14B	Number of conferences/seminars / workshops <b>attended</b> at which findings from Darwin project work will be presented/ disseminated.	2	Lao/French/Australian	0	1	1	0	2
20								

**Table 2 Publications**

<b>Title</b>	<b>Type</b> (e.g. journals, manual, CDs)	<b>Detail</b> (authors, year)	<b>Gender of Lead Author</b>	<b>Nationality of Lead Author</b>	<b>Publishers</b> (name, city)	<b>Available from</b> (e.g. weblink or publisher if not available online)

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

N/A

### **Checklist for submission**

	Check
<b>Is the report less than 10MB?</b> If so, please email to <a href="mailto:Darwin-Projects@ltsi.co.uk">Darwin-Projects@ltsi.co.uk</a> putting the project number in the Subject line.	x
<b>Is your report more than 10MB?</b> If so, please discuss with <a href="mailto:Darwin-Projects@ltsi.co.uk">Darwin-Projects@ltsi.co.uk</a> about the best way to deliver the report, putting the project number in the Subject line.	x
<b>Have you included means of verification?</b> You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	x
<b>Do you have hard copies of material you want to submit with the report?</b> If so, please make this clear in the covering email and ensure all material is marked with the project number. However, we would expect that most material will now be electronic.	x
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.	