

Illegal Wildlife Trade (IWT) Challenge Fund Evidence Annual Report

To be completed with reference to the “Project Reporting Information Note”:
(<https://iwt.challengefund.org.uk/resources/information-notes/>).

It is expected that this report will be a **maximum of 20 pages** in length, excluding annexes)

Submission Deadline: 30th April 2023

Submit to: BCF-Reports@niras.com including your project ref in the subject line

IWT Challenge Fund (IWTCF) Project Information

Project reference	IWTEV001
Project title	Developing a problem-oriented approach to reduce turtle trafficking in Cambodia
Country/ies	Cambodia
Lead Partner	Wildlife Conservation Society, Cambodia Program
Project partner(s)	N/A
IWTCF grant value	£ 98,343.00
Start/end dates of project	01 August 2022, 30 January 2024
Reporting period (e.g. April 2022-Mar 2023) and number (e.g. Annual Report 1, 2, 3)	August 2022-March2023, Annual Report 1
Project Leader name	Sarah Fumey
Project website/blog/social media	NA
Report author(s) and date	Sarah Fumey, 30 April 2023

1. Project summary

Illegal hunting and trade continue to impact freshwater turtle species in Cambodia with current approaches unable to address the root causes of illegal trade. The Critically Endangered Southern River Terrapin (*Batagur affinis*) (SRT) and Cantor’s Giant Softshell Turtle (*Pelochelys cantorii*) (CGST) are affected by illegal hunting and trade, despite protection under Cambodian law and by CITES, (SRT: Appendix 1; CGST: Appendix II). Cambodia holds significant global populations of both species in Sre Ambel River system in Koh Kong Province for the SRT, and in the Mekong River system in Kratie and Stung Treng Provinces for the CGST (Figure 1 and 2). Based on current knowledge of population size, Cambodia presents the best opportunity for their long-term conservation.

Existing approaches, focused on patrols and outreach in local communities, while reducing pressure on the species, have not prevented overexploitation and continued population decline. Harvesting of eggs for consumption, accidental capture by fishers, and opportunistic and deliberate capture and trade of adults are key threats to both species. Community-based nest protection programs, head-starting of hatchlings, and community outreach have mitigated these community level threats but have not addressed underlying drivers of illegal harvesting. Since 2015 there have been a minimum of 28 known incidents of dead or live SRTs captured, and at least a dozen incidents of CGST and SRT trade.

Besides, community members from some of the 19 villages alongside the Sre Ambel and Mekong River systems have reported impacts on their livelihoods and food security from loss of

land to agricultural concessions, loss of access to forest resources, and consequently increasing reliance on aquatic resources. Sand dredging, unsustainable and illegal fishing have reduced the viability of fishing as a livelihood option however, leaving some individuals in a precarious situation.

This project aims to address limited effectiveness of traditional approaches focused on increasing responses from law enforcement and the criminal justice system, by collecting evidence needed and developing an innovative alternative approach to address trafficking, and consumption of these two species, focused on crime prevention. A detailed understanding of the drivers of poaching, trade, and nature of demand for these two species, is a prerequisite for more targeted and efficient action. For instance, egg collection and consumption might be poverty-driven, or preference-driven, opportunistic, or targeted. Traded adults may be opportunistically caught by local fishers or deliberately captured by specialist traders.

Evidence will be collected to build this critical knowledge, which will be outlined in the production of at least two crime scripts, mapping trade chains for two Critically Endangered species, the SRT and the CGST, including individuals involved in exploitation, their motivations, and drivers of demand. This evidence base will allow for the identification of points of intervention, addressing the factors of crime commission, to enable prevention. For example, if this process identifies food insecurity as a key driver of turtle poaching, actions supporting alternative sources of food will be proposed. This methodology will lead to the development of an evidence-based strategy that focuses holistically on crime prevention, in collaboration with the Fisheries Administration and local communities, to reduce poaching, illegal trade, and consumption of these species in the long-term.

This project will fill gaps in current conservation programs for two Critically Endangered species, which in the long-term we anticipate will result in behaviour change demonstrated through fewer poaching and trade incidences, contributing to stable or increasing populations of these species, and propose a model for enhanced conservation of other species affected by poaching, trade, and consumption.

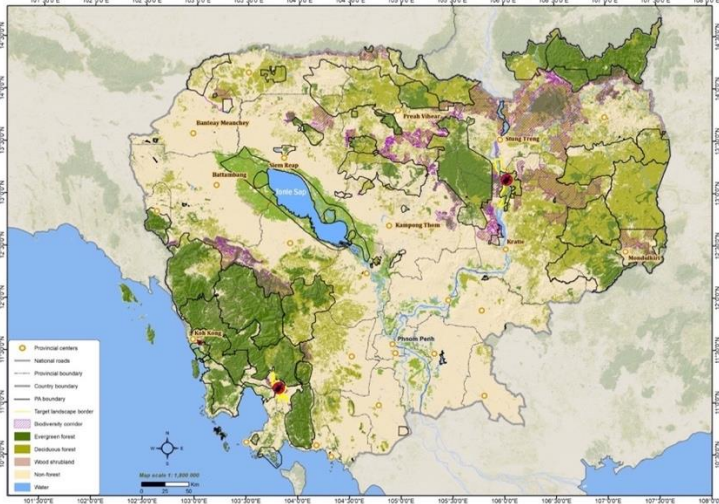


Figure 1: Map of the project target areas, where significant populations of SRTs and CGSTs live: Sre Ambel River system in Koh Kong Province for the SRT, and Mekong River system in Kratie and Stung Treng Provinces for the CGST.

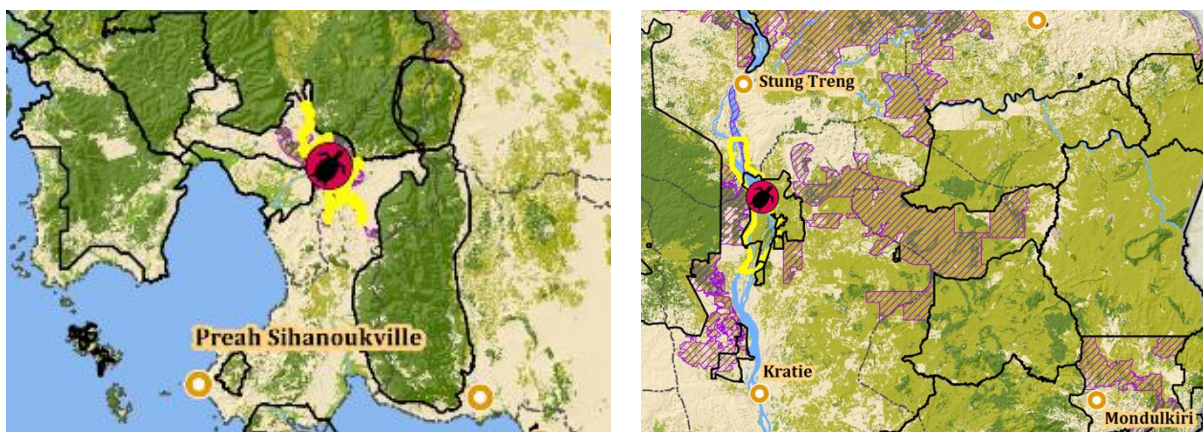


Figure 2: Maps of target areas, Sre Amel River system (left) and Mekong River system (right).

2. Project stakeholders/partners

The Fisheries Administration (FiA), Fisheries Administration Cantonments of Koh Kong, Preah Sihanouk, Kratie and Stung Treng, Provincial Departments of Agriculture, Forestry and Fisheries of the Ministry of Agriculture, Forestry and Fisheries (MAFF) are the key project partners at the national and provincial levels. Their role in the project is to provide inputs to the research led by WCS through sharing enforcement and judicial records of turtle-related offences and knowledge of turtle exploitation. During the first year of the project, we collaborated closely with the FiA, conducting a series of formal sub-national and national level meetings to introduce the project and its approach.

- On September 9, 2022, we introduced the project, its objectives and expected outputs to the Deputy Governor of Sre Ambel district, the Chief of development community office SA District, and FiA officers from the Cantonment and Koh Kong Province (27 participants).
- On October 12, 2022, we conducted a similar meeting in Stung Treng with 22 participants including two of head cantonments from Fishery Administration. On October 18, 2022, we conducted the project introduction in Kratie with 23 participants including one FiA Official.
- On October 7, 2022, the research team and the landscape manager introduced the project to Mr. Ouk Vibol, Director of Department of Fisheries Conservation.

These meetings were successful, we received further confirmation of FiA's interest in the project and their full support for implementing activities.

In February and March, we engaged with 3 FiA officials during interviews, as part of our evidence collection work. During these interviews, the Research Lead and Assistant used a set of pre-defined questions to collect information from the FiA officials on their knowledge of SRT and CGST poaching and trade in their area, based on incidents they have been dealing with, or the broader context.

The project also involved local communities in both Sre Ambel and the Mekong areas, where we have evidence of SRT and CGST poaching and trade. Collecting further and detailed information from local communities has been relatively easy as our landscape teams, implementing conservation work in Sre Ambel since 2002 and in the Mekong area since 2017, were able to make connections and introduce the research team to relevant individuals within those communities. We will continue to engage with those communities while making progress with the project, especially when developing strategic interventions to address turtle poaching

and trade, which are likely to be implemented within those communities. The project has also been working closely with Dr. Andrew Lemieux, an expert and project advisor regarding the crime scripting approach. He has been a key partner, regularly providing advice to the research and helping us to build the staff's capacity in implementing this novel approach.

3. Project progress

3.1 Progress in carrying out project Activities

Output 1. A detailed understanding of at least two specific turtle trade chains including identification of drivers and opportunities for crime prevention.

Activity 1.1: Organise training and ensure ongoing mentoring for project Staff on the problem-oriented wildlife protection approach.

We contracted Dr. Andrew Lemieux, an expert in the field of criminology and crime science applied to conservation, to provide support to project staff throughout the project. Based in the Netherlands, Dr Lemieux supported staff through online sessions. Between November 2022 and February 2023, we held four two-hour sessions with Dr. Lemieux. Nine staff (3M, 6F) including project staff, landscape staff, and staff from the WCS Viet Nam Program implementing a separate IWT-CF evidence project joined these sessions.

The first session was a general introduction to the problem-oriented approach and provided an opportunity for the team to become familiar with this methodology. Three online sessions followed including crime scripting (8 staff; 2M, 6F), review of the draft crime script for Sre Ambel (5 staff; 1M, 4F), and review of the draft Mekong site crime script (5 staff; 1M, 4F). The online format based on selected topics and ongoing activities has been effective, allowing staff to receive support tailored to their needs and regular feedback on draft outputs, as well as answers to questions that arise while conducting the research.

The core project staff (the Crime Prevention Research Lead and Crime Prevention Research Assistant) also received two training sessions from Dr. Emiel DeLange, Conservation Impact Advisor at WCS Cambodia, who provided support on developing appropriate data collection and recording tools, as well as guidance on data coding and analysis.

Activity 1.2: Organise meetings with project stakeholders to introduce the project and approach.

On Friday 9 September, the project team organised a meeting in Sre Ambel with representatives from local stakeholders including village chiefs, communes and community fishers who will be targeted by the project, Fisheries Administration (FiA) officers from Phnom Penh, the Cantonment and Koh Kong Province, Deputy Governor of Sre Ambel district, Chief of Community Development Office SA District, and community and village members. The Crime Research Lead presented the project and answered participants' questions. The FiA representatives expressed their interest and support to the work.



Figure 3: Crime Prevention Research Lead introducing the project to stakeholders in Sre Ambel



Figure 4: Project introduction meeting with stakeholders in Kratie

The project team also conducted two meetings with local stakeholders and authorities in the Mekong landscape in Kratie on October 12, 2022 and in Stung Treng on October 18, 2022 and a meeting with the Director of the Department of Fisheries Conservation of the FiA in Phnom Penh on October 7, 2022.

Activity 1.3: Collect and analyse information through field surveys and discussion with local community members, online open-source research, compilation of existing records of patrols, captures, voluntary reports and enforcement and judicial action, to determine drivers and facilitators of poaching, illegal trade, and consumption of the two turtle species.

On 30 November 2022, the Research Lead and Research Assistant organised an internal half-day workshop with four staff from Sre Ambel and Mekong landscapes, which are the target areas of this project. They used questions on the issue of poaching to guide the discussion, aiming to 1) collect information on SRT and CGST capture and trade, 2) identify knowledge gaps and 3) potential sources of information. Following this, the team developed a data collection plan.

As part of our broader strategy to promote evidence-based interventions, we also developed a collaboration with a PhD Candidate at Netherlands Institute for the Study of Crime and Law Enforcement (NSCR)/Utrecht University). We supported him to conduct livelihood surveys in nine villages in the project target areas between November 2022 and January 2023. Through this work and the collaboration, we have also gained access to data on the use of natural resources (including freshwater turtles) and other livelihood activities by 246 households within the project target areas.

Records of SRT and CGST captured and voluntarily handed over to WCS by local fishermen were also collected and identified as a rich source of information for the research.

Between January and March, the research team conducted a total of 21 interviews. Ten were held in Sre Ambel area (3 Community Fishery (CFi) leaders and 7 local fishermen), and eight took place in the Mekong landscape (3 CFi leaders and 5 local fishermen). The team conducted two interviews with staff from Wildlife Alliance, a local NGO advising and funding the government-led Wildlife Rapid Rescue Team (WRRT) sometimes dealing with freshwater turtles trafficking. An interview was also organised with an FiA official member of the WRRT.

The Research Lead and Research Assistant held two separate focus group discussions in Sre Ambel on February 14, 2023 with five fishermen and seven CFi members respectively, to confirm findings from previous interviews and collect more detailed responses. Participants collectively mapped SRT capture areas, as well as a timeline of major changes related to fishing and SRTs in the area and answered a set of pre-determined questions.

In total, the Research Lead and Research Assistant engaged with 37 stakeholders during the first year of the project.



Figure 5: Project team conducting an interview



Figure 6: View of Preah Angkeo village in Sre Ambel site



Figure 7: Focus Group Discussion



Figure 8: Interview with FiA

The data collected during the interviews and focus groups has been entered into an excel file and is stored on our secure, access-restricted internal share drive. Measures to ensure confidentiality and privacy of the data were implemented as per the approved plan submitted to WCS’ Institutional Review Board’s (plan available on request).

Activity 1.4: Produce at least two crime scripts based on the information collected and analysed.

Crime script development is an iterative process, and the Research Lead and Assistant are developing the scripts as we progress with data collection. At the end of March 2023, we have three draft crime scripts focusing on the three different problems identified through the data collection:

- a) SRT capture in Sre Ambel River system.
- b) CGST capture in the Mekong River in Stung Treng area.
- c) CGST capture in the Mekong River in Kratie area.

For the Sre Ambel crime script (a), interviews are almost complete, and we expect to start conducting analysis of the data to update the crime script in Q1 of Y2. For the Mekong sites (b) and (c), a field trip is scheduled for Q1Y2 to collect more data through two focus group discussions and interviews with FiA. Crime scripts are currently very detailed and several

pages-long. As advised by Dr. Lemieux, we aim at developing synthesized shorter versions of these three crime scripts.

In Sre Ambel our data shows that SRT capture is mostly accidental, by local fishermen, with turtles getting caught in fishing gears. Capturing SRTs intentionally is difficult and probably rare. While there could be an underground trade of SRTs captured accidentally, individuals interviewed did not report evidence of any organised trade. They mentioned rumours or trade, but we were not able to collect any detailed information or evidence of this. Accidental capture remains a massive threat to SRTs and tends to indicate that future interventions will have to focus on preventing accidental capture from happening.

In the Mekong area, the trade used to be significant but has reduced a lot recently due to the declining number of CGST found in the wild. However, we collected evidence that gears aimed at fishing CGST exist, and two known middlemen known for selling various type of wildlife illegally, including freshwater turtles have been identified.

Output 2. Strategic interventions to prevent turtle poaching, trade, and consumption developed through a multi-stakeholder approach including Government, community, and civil society.

Activity 2.1: Organize a series of local meetings to discuss the results of the crime scripts and identify strategic interventions to prevent these crimes.

This activity will start in Y2Q2, as per the workplan.

Activity 2.2: Utilize the outcomes of the workshops to develop an agreed crime prevention strategy.

This activity will start in Y2Q3, as per the workplan.

Activity 2.3: Complete a case study or research paper.

This activity will start in Y2Q3, as per the workplan.

3.2 Progress towards project Outputs

Outputs 1. A detailed understanding of at least two specific turtle trade chains including identification of drivers and opportunities for crime prevention.

Good progress has been made towards this output. At the start of the project there was limited understanding of the capture and trade of the two freshwater turtle species, with most understanding based on anecdotal and sometimes outdated information. While data collection and analysis are continuing, we have already added to the knowledge of the trade in these two species and improved the understanding of their trade from two important landscapes.

During the first eight months of the project, we built capacity of the seven staff involved in the project, with a focus on the three core staff: Project Lead, Research Lead, and Research Assistant. Staff have received training and coaching on implementing a problem-oriented approach and developing crime scripts (Indicator 1.1).

Data collection has been conducted in two sites through interviews and focus groups with stakeholders and is almost complete. Analysis has been initiated and will continue during Q1 and Q2 of Year 2 (Indicator 1.2). We have developed a detailed map of the locations where capture - supposedly accidental - is taking place, alongside how the species are being caught, namely as part of the regular fishing activity of local fishermen. We have also gained an understanding of the methods, gears used, and seasons the turtles are caught and the reasons fishermen handed over any animals accidentally caught to WCS.

It has been challenging to collect information on the trade and sale of SRT and CGST. Whether this is because people are reluctant to share information about something they know is illegal,

or simply because trade and sale are rare and people know less about them, is unclear. Further research in Y2Q1 will allow us to look at these issues in more detail.

Three draft crime scripts outlining the understanding of the trade chains have been produced and we are continuing to update them as additional data is collected (Indicator 1.3). The draft crime scripts are already allowing the initial identification of opportunities for crime prevention and will inform the development of a crime prevention strategy.

Output 2. Strategic interventions to prevent turtle poaching, trade, and consumption developed through a multi-stakeholder approach including Government, community, and civil society.

Activities under this output are not due to commence until after data collection and analysis is complete. As such there is no progress to report on for this Output. We expect to commence these activities in Year 2.

3.3 Progress towards the project Outcome

The project is making good progress on developing a comprehensive evidence base for development and implementation of a crime prevention-based approach to prevent poaching and trafficking of freshwater turtles (outcome). Data collection has gone well and has already added to the knowledge on this issue.

When the project started, there was limited evidence to develop an informed strategy including crime-prevention based interventions for these species. We have made good progress towards achieving such a strategy and importantly provide the evidence on which to base interventions to improve the conservation of these two species.

We are currently still finalising data collection and data entry on the trade chains of SRT and CGST (indicator 0.1). This indicator is slightly behind schedule, but substantial data has been collected by the project through interview and focus group discussions with a total of 37 key stakeholders (local fishermen, CFI leaders, local NGO and FIA). The data and information collected during these interviews is providing significant insight into the drivers and facilitators of the capture and trade in these species and allowing the project team to develop an understanding of the trade chains, while identifying specific points along the capture and possibly the trade, for crime prevention activities.

A selection of the data collected through this process has been provided as means of verification and includes survey questionnaire, interview data, capture records. We have also drafted three detailed maps of the trade chains for these two species (Indicator 0.2).

We are confident that we will achieve the outcome by the end of the project, and produce the finalised preventative strategy (indicator 0.3) and the case study or research paper on strategic interventions to address turtle poaching and trade in Cambodia (indicator 0.4).

3.4 Monitoring of assumptions

Assumption 1: Actors along the trade chain are willing to contribute information and knowledge.

Comment: We found that actors at the beginning of the trade chain (on the capture side) are willing to contribute. Most of these actors reported accidental capture, which implies the act of capture of these turtles is not planned, although as a protected species it would still be considered illegal. The incidental nature of capture rather than targeted fishing could perhaps make them more willing to discuss this issue as it is not seen as a willingly illegal act.

In Sre Ambel, we were not able to identify any actors further along the trade chain, partly because trade is extremely rare and opportunistic and perhaps partly because the stakeholders

we interviewed referred to trade in vague terms and claimed not to have detailed information about actors further along the chain. While this could be true, this could also be interpreted as reluctance to disclose information about members from their own community.

In the Mekong site, we identified two middlemen who are known for trading wildlife, however we decided not to contact them for interviews, as their known involvement in illegal trade of other species could put the safety and security of the staff at risk.

Assumption 2: Greater knowledge and capacity of crime prevention techniques leads to support of this approach by government partners and community stakeholders.

Comment: The introduction of the crime prevention approach provided to government partners and local communities generated genuine interest, with ideas and recommendations about prevention being spontaneously shared with the researchers during interviews and focus group discussions. While this is not the current focus of the activities, as the purpose of the interviews was to understand the situation and not develop interventions yet, we have made notes of the suggestions to be considered during the development of interventions. This input and enthusiasm is encouraging and tends to indicate there is appetite for preventive techniques. We will be able to report more accurately on this assumption at the end of Y2Q3 when we will have completed workshops with stakeholders about potential interventions. Future discussions will also allow us to gauge the retention of knowledge regarding this approach.

Assumption 3: Crime prevention approach will be effective in reducing wildlife trafficking, specifically turtle trafficking in Cambodia.

Comment: It is too early in the project to assess whether this assumption holds true. However, based on our current understanding of the trade, the enthusiasm for this approach with stakeholders, and the discussions with communities on the drivers and facilitators of the trade, we think that prevention approaches will be effective in reducing the threat to turtles, particularly at the site level where capture takes place (accidentally mostly, but not always). This is especially relevant as initial data indicates that capture of the animals themselves appears to be a key trigger of the trade, rather than a group of traders or sellers making orders and boosting capture or poaching. If we can prevent capture at site level and disrupt supply, trade should therefore decrease. Crime prevention techniques could be applied in areas where turtle capture happens and effectively reduce trafficking.

Assumption 4: Project implementation is not impacted by ongoing COVID-19 restrictions.

Comment: This assumption holds true, COVID-19 restrictions have been almost completely lifted in Cambodia and therefore project implementation is not impacted. While a resurgence of cases is always possible, it appears unlikely this would lead to the kind of government restrictions imposed previously and as such the project is unlikely to be affected.

Assumption 5: A training course and ongoing mentoring from an expert will sufficiently build capacity of WCS staff in the implementation of this novel approach.

Comment: This assumption holds true. The first nine months of the project have confirmed that the format chosen (an initial introductory training followed by regular two-hour coaching sessions with an expert to review outputs and provide guidance on next steps) is appropriate for effectively building capacity of key project staff. Regular coaching has allowed better integration of the methodology, tailored feedback, and targeted support when challenges or issues arise in the research. The staff are now demonstrating a good understanding of the methodology. We are confident that after this project, the staff will be able to apply this methodology to other wildlife trafficking problems. We will repeat the capacity building approach in the future.

Assumption 6: Men and women in key localities and roles are willing to share relevant knowledge, experiences and information on egg collection, turtle poaching, trade, and consumption with WCS.

Comment: As explained in the comment to assumption 1, this assumption turned out to be true for the actors not personally involved in the intentional capture and trade. But it proved challenging to collect information from actors involved in trade, either because we were not able to identify them, or because we did not contact them to maintain staff security.

Assumption 7: Agreement between stakeholders can be reached on feasible, strategic priority interventions.

Comment: The assessment of this assumption is pending completion of activities under output 2 and development of the interventions to prevent crime.

3.5 Impact: achievement of positive impact on illegal wildlife trade and poverty reduction

As indicated in our application, the expected impact of this project is that **the implementation of this strategy will enhance the conservation of the Southern River Terrapin and Cantor's Giant Softshell Turtle in Cambodia, through the reduction of key threats, preventing continued population declines.**

We are confident that the evidence collected through this project will enable us to develop crime prevention interventions that can be implemented and tested. As it stands the additional information on the trade of these species will already contribute to the conservation of the two target species. For example, the research already identified potential conservation-focused measures to be taken to prevent turtle capture such as the promotion of fishing gear that would minimize the risk for turtles to be accidentally caught. In addition, the approach that we are using (developing a strong base of evidence to inform preventive interventions) is relatively new, being applied to wildlife related problems in Cambodia for the first time, and with only a few examples in the Mekong region. The lessons learned from this work, which we intend to share widely, will be important contributions to tackling the illegal wildlife trade, potentially informing other projects. We have already seen strong interest in this approach in Cambodia regarding poaching occurring in important landscapes and have started to share our experiences in this work.

Regarding poverty reduction, as gaining additional income is one of the motivations for engaging in illegal capture and trade of SRT and CGST, implementing preventive interventions that will help provide alternative sources of income to vulnerable local populations (typically fishermen) will help to concretely reduce poverty. While many NGOs are already implementing livelihood activities, we hope to demonstrate how these can be made more effective by careful design using detailed evidence. This will be further developed during Y2 of the project through the identification of crime prevention interventions, which could include support to alternative income generating activities.

4. Thematic focus

The project is supporting the following two thematic focuses:

Reducing demand for IWT products: this evidence project is looking at how preventive approaches can be effectively designed, to ultimately help prevent the trafficking of two critically endangered freshwater turtle species, and while it may therefore reduce demand for those. The case study or research paper that will be produced at the end of the project will highlight how this type of approach can help reduce demand for IWT products.

Strengthening law enforcement: depending on the final conclusions of our research, measures related to law enforcement might be included in the preventive strategy that will be

developed jointly with stakeholder in Y2Q2, such as ghost net removal patrols on the river. Therefore, we will be able to respond to this question more accurately in the next Annual report.

5. Impact on species in focus

This evidence project has been designed to generate a strong evidence base that will inform strategies for enhanced conservation of the two focus species, the Southern Royal Terrapin and the Cantor Giant Softshell Turtle. The project is currently half-way through implementation and so we cannot yet describe in detail the outputs that will be produced and that are intended to directly impact the two species. The evidence gathered to date is already providing new information on the poaching and trade of these species and we are confident the data collected in Y2 will further help support interventions that will lead to a positive impact for the conservation of these species.

6. Project support to poverty reduction

This evidence project will indirectly benefit at least 14 communities living in the SRT and CGST sites, using the information gathered in this project in future efforts to tackle wildlife trafficking in these species. These efforts are expected to reduce the level of wildlife trafficking and might contribute to a more sustainable use of natural resources as part of the subsistence strategies for communities. It will also provide alternatives to legal penalties, currently imposed on community members.

7. Gender equality and social inclusion

There is no formal project board for this project given the nature of the activities. The project is an evidence one with data to be used to inform future proposals for identified crime prevention activities. Staff working on the project and supporting its implementation through technical inputs and guidance are predominantly female.

Please quantify the proportion of women on the Project Board.	Informal project board includes 6 females: Project Lead (F), Research Lead (F), Research Assistant (F), Landscape Manager (M)SA Project Officer (F)Mekong Landscape Coordinator (M), HR Officer (F), CWT Regional Coordinator (F).
Please quantify the proportion of project partners that are led by women, or which have a senior leadership team consisting of at least 50% women ¹ .	The Fisheries Administration is the only specified project partner. This agency is male dominated and is led by a male at the central and provincial levels.

The project is ensuring all data collected is gender-disaggregated, to fully understand the roles and motivations of men and women in freshwater turtle poaching, trade, and consumption. This will allow strategic interventions that are gender sensitive to be developed and allow a full understanding of the trade and how interventions will have any gender biased impacts.

While data collection and analysis are not fully completed, some preliminary findings linked to gender roles in the trade chain include:

¹ Partners that have formal governance role in the project, and a formal relationship with the project that may involve staff costs and/or budget management responsibilities.

- *Who is poaching, processing, selling (sex, age, social status)?*
Within Muslim communities, it was frequently noted that women accompany men (their husbands) on fishing trips. However, interviewees report that fishing, poaching, and capturing is conducted by men. Women join to help and provide logistical support and cook. For non-Muslim communities the men rarely take their wives with them and the fishing trips tend to be shorter. Their age varies. In the Mekong area, middlemen or intermediaries who reach out on the river to collect products from fishing (including CGST potentially) are men. We do not have enough data yet to identify a clear pattern in the gender of sellers, although one of the two known wildlife sellers in this area is a Vietnamese female.
- *Who is receiving benefits from poaching and trading?*
We do not yet own any data that can help to answer this question.
- *Who are the decision-makers about poaching, how frequently, how many?*
Data collected so far tends to show that in the Sre Ambel area, capture is mostly opportunistic with fishermen finding turtles caught in their fishing gears. Therefore, decision making would lie mostly on men as they are the ones managing fishing. In the Mekong area, males are also the ones setting fishing gears, including gear aiming specifically at catching CGST and therefore would be making decisions about capturing turtles. However, we need to investigate further how females intervene or not in this decision.
- *Is there evidence of coercion, such as sexual or gender shaming, driving poaching, and trading?*
We did not find any evidence of coercion such as sexual or gender shaming driving poaching and trade.
- *Who is buying and why?*
We do not have any data yet on whether males or females are buying, as we were not able to interact with buyers.

8. Monitoring and evaluation

Monitoring and evaluation (M&E) are conducted by the Project Lead. A half day internal meeting was conducted in August 2022 with the extended project team including landscape staff to discuss the project M&E. The Project Lead introduced the approach and a workplan was discussed and adjusted. This allowed realistic planning of the activities for the first year. Bi-monthly team meetings have been held between the Project Lead, Research Lead and Project Assistant, to assess progress and address potential challenges. The Project Lead is also regularly reporting back to the Regional CWT Coordinator and the Country Director of WCS Cambodia. A mid-project meeting will be held in Y2Q1 with the extended project team, to discuss share the progress and planning for Year 2. This approach has allowed for consistent monitoring of project progress and helps the team to identify and challenges and address these.

No major changes have been made in the M&E plan of the project.

So far activities have successfully led to achieving the first output (detailed understanding of the trade chains for two critically endangered freshwater turtle species), helping to raise the team's capacity to understand the methodology and collect data.

While FiA has not formally requested us to provide updates on the project, we will have opportunities to do so when presenting the finalised crime scripts to them and discussing strategic interventions.

9. Lessons learnt

Lesson 1: The process of developing an application for the WCS Institutional Review Board (IRB) for approval to conduct research with human subjects was a relatively lengthy exercise and caused some delay to our workplan. Although this process was also helpful in ensuring project staff had a full understanding of some of the issues and concerns when conducting this kind of research.

Comment: In future projects, enough time should be allocated to this process in project planning. On a positive note, the training taken by staff on Human research ethics appeared very useful and applies to a lot of the work WCS is doing outside of this project.

Lesson 2: The sensitive nature of the topic of this project is limiting our ability to interact with some stakeholders along the trade chain more than expected. For example, the two middlemen identified in Kratie Province, involved in this trade are also involved in other illegal wildlife trade and interacting with them directly was identified as a safety risk for staff that was too high.

Comment: This challenge is difficult to overcome and should be addressed on a case-by-case basis, with careful assessments of risks associated with approaching individuals involved in illegal activities, and depending on the relationship staff have with local stakeholders. This should also be recognized as a limitation of the study.

Lesson 3: Evidence collection is an iterative process that takes time, requires adaptation in the research plan and a proactive attitude towards the research topic.

Comment: The team has demonstrated a good ability to adapt while the research was making progress and we will continue to encourage this.

Lesson 4: Close support and guidance for the research team was required, to ensure we deliver high-quality crime scripts and a strong analysis of data, both qualitative and quantitative.

Comment: The problem-oriented approach and crime scripting is new to our team and to Cambodia. While our training plan was successful, further training prior to starting the research could have been beneficial and should be considered in future project planning. The analysis phase will be key to ensure that outputs display meaningful and nuanced interpretation of the evidence collected. Given the methodology and topic are relatively new to the team, we had to adjust as the project was ongoing to provide additional support on how to organise, code and analyse data. We plan to maintain coaching during the entire project duration and particularly for the outputs write up phase. We are also considering offering English writing tutoring to the researchers, so they are fully equipped to deliver the outputs. As this project is providing an excellent opportunity to build capacity of the team, in the future they will have the skills required to conduct similar evidence projects.

Lesson 5: Local community members are willing to contribute to projects that give them opportunities to share their knowledge, express their opinions, and contribute to conservation actions in their area.

Comment: We expect this will be a strength for the next phase of the project when we will work with local communities to develop interventions

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

Not applicable.

11. Risk Management

In the first year of the project, we have not seen any new risks arising. However, we continued to monitor risks identified at the application stage through the risk registry and implemented mitigation actions as planned. For example, regarding the Safeguarding risk “Research Lead and Assistant’s safety is compromised as they collect data on a sensitive topic”, the project staff have been introduced to the “CWT Safety and Security Guidelines” and are able to apply them, while the Lead is ensuring that all activities are compliant with the Guidelines. As an example, we are considering conducting market surveys in Y2Q1 and will submit an operational plan for this, so management can assess the risks and confirm that they can be done safely.

12. Other comments on progress not covered elsewhere.

Not applicable.

13. Sustainability and legacy

We did not implement any activities to promote this evidence project yet, as our research is still ongoing, and the development of a research paper or case study is planned for Year 2. The development of a research paper or case study will enable the project to disseminate the knowledge and experience gained within the wider conservation and crime prevention community, potentially informing and benefiting other similar and future initiatives.

Internally we can already see benefits arising from this work, the main one being the increase in capacity of the staff (Project Lead, Research Lead and Assistant) in understanding the problem-oriented approach and applying it to problems within WCS’ landscapes in Cambodia, using innovative tools such as the crime script. Our team is building this skillset, and this is likely to be a major legacy of this project.

Our exit strategy has not changed. This project will result in an evidence-based gender-sensitive preventative strategy to address turtle poaching, trade, and consumption, agreed by WCS, government partners, communities, and civil society. We anticipate the implementation of this novel strategy, through development of a “main project”, will be mainstreamed into WCS’s ongoing work within these two landscapes, which focus on collaborative conservation of the two target species and their habitats.

14. IWT Challenge Fund identity

We did not implement any activities to promote this project as yet. Given its nature as an evidence project and that our research is still ongoing the project does not offer a large number of opportunities for promotion of the Challenge Fund. We plan to publicise the final output of the project, a case study or research paper, to disseminate the knowledge and experience gained within the wider conservation and crime prevention community, potentially informing, and benefiting other similar and future initiatives. We will ensure that the contribution of the UK Government to the project is recognized and that the IWT Challenge Fund is identified by national stakeholders.

15. Safeguarding

Has your Safeguarding Policy been updated in the past 12 months?	No
Have any concerns been investigated in the past 12 months	No

Does your project have a Safeguarding focal point?	Yes: Mr. Chansophea Neou, Human Resources manager, WCS Cambodia Program [REDACTED]	
Has the focal point attended any formal training in the last 12 months?	No	
What proportion (and number) of project staff have received formal training on Safeguarding?	Past: 100 % [7 staff] Planned: 0% [0 staff]	
<p>Has there been any lessons learnt or challenges on Safeguarding in the past 12 months? Please ensure no sensitive data is included within responses.</p> <p>There has not been any challenge related to safeguarding. Staff have received training on WCS safeguarding policies when joining the organization. They have also completed a training on how to conduct research with human subjects, and they have been consistently implementing the principles and good practices learned in their work.</p>		
<p>Does the project have any developments or activities planned around Safeguarding in the coming 12 months? If so please specify.</p> <p>We completed all the safeguarding related activities (human subject training research and IRB application) at the beginning of the project and therefore do not plan additional safeguarding activities during the coming year.</p>		

16. Project expenditure

Table 1: Project expenditure during the reporting period (April 2022-March 2023)

Project spend (indicative) since last Annual Report	2022/23 Grant (£)	2022/23 Total actual IWTCF Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)				
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items (see below)				
Others (see below)				
TOTAL	£41,409.35	£41,409.35		

Table 2: Project mobilising of matched funding during the reporting period (1 April 2022 – 31 March 2023)

	Matched funding secured to date	Total matched funding expected by end of project
Matched funding leveraged by the partners to deliver the project.		
Total additional finance mobilised by new activities building on evidence, best practices and project (£).		

17. OPTIONAL: Outstanding achievements or progress of your project so far (300-400 words maximum). This section may be used for publicity purposes

I agree for the Biodiversity Challenge Funds Secretariat to publish the content of this section (please leave this line in to indicate your agreement to use any material you provide here).

File Type (Image / Video / Graphic)	File Name or File Location	Caption, country and credit	Online accounts to be tagged (leave blank if none)	Consent of subjects received (delete as necessary)
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No

Annex 1: Report of progress and achievements against logframe for Financial Year 2022-2023

Project summary	SMART Indicators	Progress and Achievements April 2020 - March 2021	Actions required/planned for next period
<i>Impact: Conservation of the Southern River Terrapin and Cantor's Giant Softshell Turtle is enhanced through development of a problem-oriented wildlife protection approach to poaching and illegal trade of these species.</i>		Collected evidence on the threats to SRT and CGST to inform a preventative strategy towards IWT. Evidence collection has also identified threats beyond poaching and illegal trade.	
Outcome: <i>Comprehensive evidence base for development and implementation of a crime prevention-based approach to prevent poaching and trafficking of freshwater turtles.</i>	0.1 Data and knowledge of the trade chain for CGST is collected by Y1Q2 and SRT by Y1Q3.	0.1 Collected data on trade chain for CGST and SRT through interview and focus group discussions with 37 stakeholders (e.g., local fishermen, CFI leaders, local NGO and FiA). Example data attached as means of verification.	Conduct two focus groups and at least five individual interviews at the beginning of Y2Q1. Possibly conduct market surveys in the Mekong area.
	0.2 A detailed map of the trade chain for the two target species is available by Y1Q4.	0.2 Three draft crime scripts completed. Final documents pending addition of data to be collected at the beginning of Y2Q1. Indicator is slightly behind schedule but will be achieved by Y2Q2.	Complete crime scripts with addition of data from Y2Q1.
	0.3 A finalised preventative strategy, developed with stakeholders, to address turtle poaching, trade and consumption by Y2Q2.	0.3 and 0.4 Indicators pending completed data collection and analysis.	Meetings and discussions with stakeholders to develop preventive strategy.
	0.4 A case study or research paper on strategic interventions to address turtle poaching and trade in Cambodia completed by Y2Q2.		Develop a case study or research paper.
Output 1. A detailed understanding of at least two specific turtle trade chains including identification of drivers and opportunities for crime prevention.	1.1 10 WCS staff (at least 3F) can implement a problem-oriented wildlife protection approach by Y1Q3.	1.1 7 staff (3M, 4F) can implement a problem-oriented approach, with 3 core staff completing training on the approach. Evidence provided in section 3.2 and Annex 4.1.	
	1.2 Data collection, assimilation and analysis completed in two source sites by end of Y1.	1.2 Data collection almost complete in two sites and expected to be completed by Y2Q1. Data analysis has started and is expected to be completed by Y2Q2. Evidence provided in section 3.2 and Annex 4.3.	

	1.3 At least two detailed crime scripts produced by Y2Q1.	1.3 Draft crime scripts produced. Scripts to be finalised in Y2Q2. Evidence provided in section 3.2 and Annex 4.3.	
Activity 1.1 Activity 1.1: Organise training and ensure ongoing mentoring for project Staff on the problem-oriented wildlife protection approach.		4 online training sessions with Dr. Andrew Lemieux for project staff (21/11/22, 6F, 4M; 12/12/22, 6F, 3M; 01/02/23. 3F, 2M; 28/02/23, 4F, 2M.	Continue coaching sessions with Dr. Lemieux. Approximately 6 sessions planned.
Activity 1.2: Organise meetings with project stakeholders to introduce the project and approach.		4 introductory meetings with stakeholders: Sre Ambel 09/09/2022, Kratie 18/10/2022, Stung Treng 12/10/2022, with FiA in Phnom Penh 7/10/2022.	This activity is completed.
Activity 1.3: Collect and analyse information through field surveys and discussion with local community members, online open-source research, compilation of existing records of patrols, captures, voluntary reports and enforcement and judicial action, to determine drivers and facilitators of poaching, illegal trade, and consumption of the two turtle species.		Data collected from 37 stakeholders, conducted through 21 interviews and two focus groups. Developed a data recording system and methodology and started analysis.	Conduct five more interviews and two focus groups in the Mekong site. We may conduct market surveys as well.
Activity 1.4: Produce at least two crime scripts based on the information collected and analysed.		Developed 3 draft crime scripts.	Update crime script as data is collected and analysed.
Output 2. Strategic interventions to prevent turtle poaching, trade, and consumption developed through a multi-stakeholder approach including Government, community, and civil society.	2.1 At least 25 representatives of Government, community, and civil society stakeholders participate in the development of a crime prevention strategy for the target species' in Y2.	This activity is not planned until after data collection and analysis is complete. Activity to commence in Year 2 as per the workplan.	
	2.2 Strategy outlining targeted interventions is developed for each species using identified crime prevention opportunities, based on feasibility, beneficiaries, and estimated impact by end of Y2.	This activity is not planned until after data collection and analysis is complete. Activity to commence in Year 2 as per the workplan.	
Activity 2.1: Organize a series of local meetings to discuss the results of the crime scripts and identify strategic interventions to prevent these crimes.		To be commenced and completed in Y2	Organise meetings with stakeholders to present the crime script results and collect inputs on the preventive strategy.
Activity 2.2: Utilize the outcomes of the workshops to develop an agreed crime prevention strategy.		To be commenced and completed in Y2	Develop crime prevention strategy with support from Dr. Lemieux.
Activity 2.3: Complete a case study or research paper.		To be commenced and completed in Y2	Develop case study to share results and lessons learned.

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

Project Summary	SMART Indicators	Means of Verification	Important Assumptions
<p>Impact: Conservation of the Southern River Terrapin and Cantor's Giant Softshell Turtle is enhanced through development of a problem-oriented wildlife protection approach to poaching and illegal trade of these species. (Max 30 words)</p>			
<p>Outcome: (Max 30 words) Comprehensive evidence base for development and implementation of a crime prevention-based approach to prevent poaching and trafficking of freshwater turtles.</p>	<p>0.1 Data and knowledge of the trade chain for CGST is collected by Y1Q2 and SRT by Y1Q3.</p> <p>0.2 A detailed map of the trade chain for the two target species is available by Y1Q4.</p> <p>0.3 A finalised preventative strategy, developed with stakeholders, to address turtle poaching, trade and consumption by Y2Q2.</p> <p>0.4 A case study or research paper on strategic interventions to address turtle poaching and trade in Cambodia completed by Y2Q2.</p>	<p>0.1 Responses to surveys; data on seizures.</p> <p>0.2 Two detailed crime scripts for the two target species.</p> <p>0.3 A completed crime prevention strategy including gender considerations and monitoring plan that outlines key actions to reduce trafficking and consumption of target species.</p> <p>0.4 Case study document or peer reviewed research paper submitted.</p>	<p>Actors along the trade chain are willing to contribute information and knowledge.</p> <p>Greater knowledge and capacity of crime prevention techniques leads to support of this approach by government partners and community stakeholders.</p> <p>Crime prevention approach will be effective in reducing wildlife trafficking, specifically turtle trafficking in Cambodia.</p> <p>Project implementation is not impacted by ongoing COVID-19 restrictions.</p>
<p>Outputs 1. A detailed understanding of at least two specific turtle trade chains including identification of drivers and opportunities for crime prevention.</p>	<p>1.1 10 WCS staff (at least 3F) can implement a problem-oriented wildlife protection approach by Y1Q3.</p> <p>1.2 Data collection, assimilation and analysis completed in two source sites by end of Y1.</p> <p>1.3 At least two detailed crime scripts produced by Y2Q1.</p>	<p>1.1 Training materials, attendance records (disaggregated by gender), assignments.</p> <p>1.2 Generated research reports and all existing relevant data are centralized and stored.</p> <p>1.3 Completed crime scripts outline step-by-step the different stages of crime events, the men and women (actors) involved and their motivations, and opportunities for interventions.</p>	<p>A training course and ongoing mentoring from an expert will sufficiently build capacity of WCS staff in the implementation of this novel approach.</p> <p>Men and women in key localities and roles are willing to share relevant knowledge, experiences and information on egg collection, turtle poaching, trade, and consumption with WCS.</p>

<p>Output 2. Strategic interventions to prevent turtle poaching, trade, and consumption developed through a multi-stakeholder approach including Government, community, and civil society.</p>	<p>2.1 At least 25 representatives of Government, community, and civil society stakeholders participate in the development of a crime prevention strategy for the target species' in Y2.</p> <p>2.2 Strategy outlining targeted interventions is developed for each species using identified crime prevention opportunities, based on feasibility, beneficiaries, and estimated impact by end of Y2.</p>	<p>2.1 Meeting/workshop materials and reports, and attendance records (disaggregated by gender).</p> <p>2.2 Crime prevention strategy document, that clearly identifies beneficiaries by gender and stakeholder group, anticipated impact, and feasibility.</p>	<p>Agreement between stakeholders can be reached on feasible, strategic priority interventions.</p>
<p>Output 1 Activity 1.1: Organise training and ensure ongoing mentoring for project Staff on the problem-oriented wildlife protection approach. Activity 1.2: Organise meetings with project stakeholders to introduce the project and approach. Activity 1.3: Collect and analyse information through field surveys and discussion with local community members, online open-source research, compilation of existing records of patrols, captures, voluntary reports and enforcement and judicial action, to determine drivers and facilitators of poaching, illegal trade, and consumption of the two turtle species. Activity 1.4: Produce at least two crime scripts based on the information collected and analysed.</p> <p>Output 2 Activity 2.1: Organize a series of local meetings to discuss the results of the crime scripts and identify strategic interventions to prevent these crimes. Activity 2.2: Utilize the outcomes of the workshops to develop an agreed crime prevention strategy. Activity 2.3: Complete a case study or research paper.</p>			

Annex 3 Standard Indicators

This is an existing evidence project. We have tried to identify 5 Standard Indicators from the Guidance that match current project indicators included in the proposal but were only able to select one (IWT-CF D26). While there is some additional capacity building in the project, the majority of the activities are around collecting evidence and data on IWT. This kind of work is not currently covered in the Standard Indicators provided.

Table 1: Project Standard Indicators

IWTCF Indicator number	Name of indicator using original wording	Name of Indicator after adjusting wording to align with IWTCF Standard Indicators	Units	Disaggregation	Year 1 Total	Total to date	Total planned during the project
IWTCF-B06	Number of criminal networks/trade routes mapped/identified.	Number of freshwater turtle trafficking routes mapped	Number	By species: SRT and CGST.	3	3	3
IWTCF-B24	Number of government institutions/ departments with enhanced awareness and understanding of biodiversity and associated poverty issues	Number of Government agency with enhanced awareness of biodiversity and associated poverty issues	Government institutions	Govt. Organisation Type (local, national, treasury, planning, environmental, agricultural, forestry).	Fisheries Administration, Cantonment level	Fisheries Administration, Cantonment level	Fisheries Administration, Cantonment level
IWTCF-D03	Number of local/national organisations with improved capability and capacity because of the project.	Number of national organisations with improved capability and capacity because of the project.	Number of organisations	Organisation Type.	1 national NGO (WCS Cambodia)	1 national NGO (WCS Cambodia)	1 national NGO (WCS Cambodia)
IWTCF-D10	Number of people who received other forms of education/training (which does not fall into the above category)	Number of WCS staff benefitting from problem-oriented approach training	People/ Number trained	Gender; Age Group; Stakeholder group: Indigenous Peoples, Local Communities, Nationals, public sector, civil society, private sector; Type of training should be outlined.	7 WCS staff (4F, 3M), all expected to be employed by WCS beyond the project.	7 WCS staff (4F, 3M), all expected to be employed by WCS beyond the project.	7 WCS staff (4F, 3M), all expected to be employed by WCS beyond the project.
IWTCF-D17	Number of case studies published.	Number of case studies published as a result of this evidence project.	Number	Case study type: illustrative	0	0	1
IWTCF-D26 (core indicator)	Number of new and enhanced tools/approaches developed for tackling IWT	Number of new strategies developed for tackling SRT and CGST illegal capture, poaching and trade.	3	Preventive strategies to prevent trade of SRT and CGST	0	0	3

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. weblink or publisher if not available online)

No publications have been produced this year.

Checklist for submission

	Check
Different reporting templates have different questions, and it is important you use the correct one. Have you checked you have used the correct template (checking fund, type of report (i.e. Annual or Final), and year) and deleted the blue guidance text before submission?	Yes
Is the report less than 10MB? If so, please email to BCF-Reports@niras.com putting the project number in the subject line.	
Is your report more than 10MB? If so, please discuss with BCF-Reports@niras.com about the best way to deliver the report, putting the project number in the subject line.	
Have you included means of verification? You should not submit every project document, but the main outputs and a selection of the others would strengthen the report.	Yes
Do you have hard copies of material you need 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. However, we would expect that most material will now be electronic.	No
If you are submitting photos for publicity purposes, do these meet the outlined requirements (see section 17)?	NA
Have you involved your partners in preparation of the report and named the main contributors	NA
Have you completed the Project Expenditure table fully?	Yes
Do not include claim forms or other communications with this report.	