Illegal Wildlife Trade (IWT) Challenge Fund Evidence Final 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: no later than 3 months after agreed project end date.

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

IWT Challenge Fund 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
Project partner(s)	N/A
IWTCF grant value	£98,343.00
Start/end dates of project	01 August 2022 - 30 January 2024
Reporting period and number (e.g. Annual Report 1, 2, 3)	August 2022 – January 2024 Final Report
Project Leader's name	Sarah Fumey
Project website/blog/social media	N/A
Report author(s) and date	Sarah Fumey, 30 April 2024

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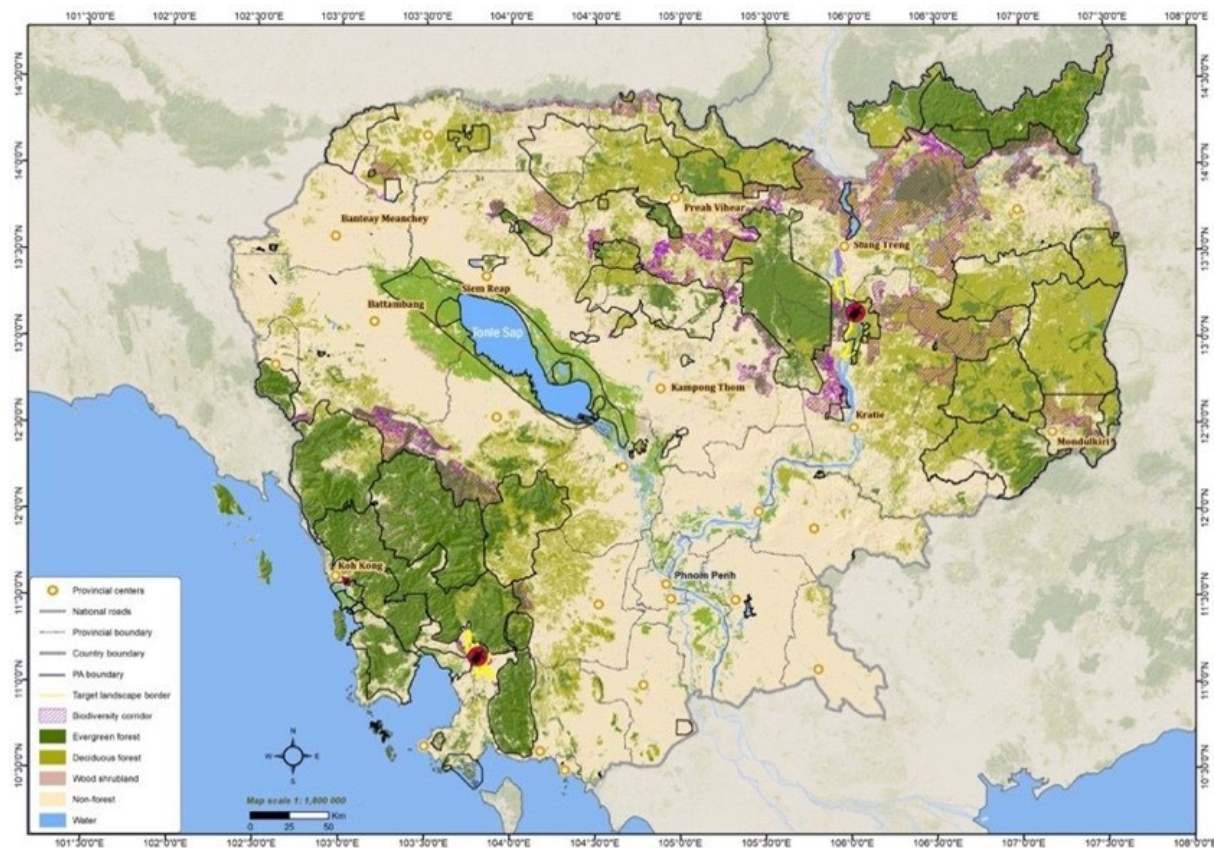
Figure 1: Map of the project target areas, where significant populations of SRTs and CGSTs live: Sre Ambel River system in Koh Kong Province for the SRT, and Mekong River system in Kratie and Stung Treng Provinces for the CGST.
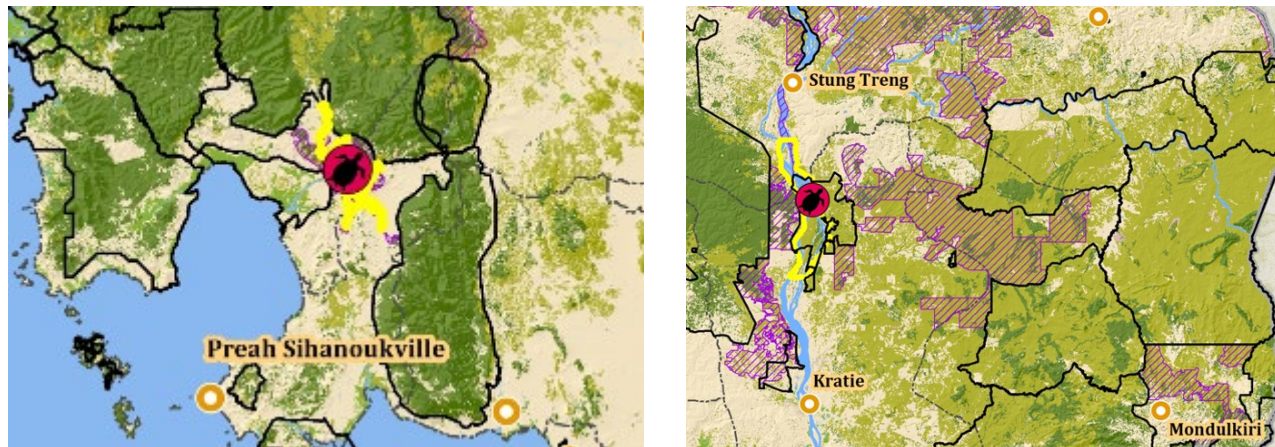

Figure 2: Maps of target areas, Sre Amel River system (left) and Mekong River system (right).

Existing approaches to reduce illegal hunting and trade focus on patrols and outreach in local communities. These activities may have reduced pressure on the species but have not prevented overexploitation and continued population decline. This project aimed to address the limited effectiveness of traditional approaches to mitigating the illegal hunting and trade (focused on increasing response from law enforcement and the criminal justice system).

The project collected the evidence needed to identify and understand the drivers of trafficking in the two species and developed species specific innovative alternative approaches to address trafficking, focused on crime prevention. This critical knowledge is outlined in two crime scripts, mapping trade chains for the SRT and the CGST, including individuals involved in exploitation, their motivations, and drivers of demand.

This evidence base allowed the identification of points for intervention, focussed on addressing the factors of crime commission, to enable prevention. This methodology led 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 and illegal trade of these species in the long-term.

This project can be used as a model for enhanced conservation of other species affected by poaching, trade, and consumption.

2.   Project Partnerships

There were no formal project partners under this project, with all budget management and implementation sitting with WCS. The project did have a number of important stakeholders, noted below, who were involved in the research collection and development of the preventative strategies.

The central level 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), community fisheries and local authorities along the Sre Ambel and Mekong River, were the key project partners. In the project, they provided inputs to the research project through participating in individual interviews or focus group discussions, and were closely associated to the development of the intervention strategies for each species, through in-depth consultation workshops led by WCS. These partners will be closely involved in the implementation of the strategies.

3.   Project Achievements

3.1 Outputs

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

This output was achieved. 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. At the end of the project, we have significantly added to the knowledge of the capture of these two species and improved the understanding of their trade from two important landscapes.

Data collection was completed in two sites through interviews and focus group discussions with stakeholders. Analysis was carried out (Indicator 1.2) with data from 65 stakeholders from FiA (five), communities (57), and NGOs (three). We have developed a map of the locations where capture - supposedly accidental - is taking place, alongside gathering important information on how the species are being caught 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 importantly to help inform future conservation efforts, the reasons fishermen handed over any animals accidentally caught to WCS.

As highlighted in the Y1 Annual report, it has been challenging to collect information on the trade and sale of SRT and CGST. Two factors are likely to prevent stakeholders from sharing information on this activity. First, people are reluctant to share information about something they know is illegal and involves people from their communities or social network. Second, it seems that trade has decreased compared to past years and so many of the community members are unaware of ongoing trade activity. In the Mekong, we believe this is partly because of the decrease in the size of populations in the wild, evidenced by the monitoring conducted by WCS' field teams.

Livelihood surveys conducted in nine villages alongside the SA and Mekong rivers (Activity 1.2) identified impacts on communities' livelihoods from declining fish stocks as contributing drivers of increasing reliance on aquatic resources, including capture and trade in the target species. When families rely on aquatic resources they cannot afford to be picky on which resources they utilise, especially when the aquatic resources are also under increasing pressure. When ranked, the main reason given by households for not capturing turtles was their unavailability (68%), followed by knowledge that capture is illegal (57%), and the low availability (33%).

The data collected has been used to produce two crime scripts, (Annexes 7 and 8) outlining the capture and the trade chains (Indicator 1.3) for each species. The crime scripts allowed the identification of opportunities for crime prevention at specific stages of the crime and informed the development of two crime prevention strategies (Annexes 7 and 8).

During the course 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).

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

This output has been achieved. At the beginning of the project, as part of its conservation work in the landscape, WCS was conducting activities addressing freshwater turtle poaching and trade to some extent. However, there were no comprehensive strategies designed through a participatory approach involving stakeholders, aimed specifically to prevent turtle poaching, trade, and consumption.

By the end of the project, we have developed two targeted preventive strategies (Annexes 7 and 8) in close collaboration with stakeholders, to prevent turtle capture (in SA) and capture and trade (in the Mekong). A total of 109 stakeholders from both target areas were consulted in the co-design of the strategic interventions, based on the results of our research (Indicator 2.1). These included 4 FiA officers, 22 representatives of local authorities (commune and village chiefs), 83 community members including members of Cfis and women's organisations, and local fishers. In-depth consultations (Annexes 5 and 6) with these stakeholders helped design interventions that are realistic, implementable in the context of the sites, and tailored to the specific local situations. The strategies have been finalised and are pending final approval from FiA.

The interventions address needs or gaps that have been identified through our crime script analysis, confirmed by stakeholders, and offer opportunities to prevent specific events along the crime chain from happening. We developed two strategies which outline the results of our research, including an illustrated version of the crime scripts and a list of prioritized interventions to implement in the two landscapes, using identified crime prevention opportunities, based on feasibility, beneficiaries, and estimated impact by end of Y2 (Indicator 2.2).

3.2   Outcome

The expected outcome of this evidence project was a comprehensive evidence base for development and implementation of a crime prevention-based approach to poaching and trafficking of freshwater turtles.

When the project started, there was limited evidence available to inform the development of an informed strategy including crime-prevention based interventions for these species. At the end of the project, there is a strong evidence base that provides a solid understanding of the capture and trade of two target species and has informed the design of two strategies to prevent poaching and trafficking of freshwater turtles.

Data was collected throughout Y1 and until Y2Q1 (Indicator 0.1). A total of 65 stakeholders were engaged through individual interviews or focus group discussions, from FiA (four), communities (59), and NGOs (two). Two detailed crime scripts have been developed, outlining the steps in capture and trade (Indicator 0.2). Using the evidence collected and the crime scripts, we worked with 109 stakeholders including 4 FiA officers, 22 representatives of local authorities (commune and village chiefs), 83 community members including members of Cfis, women's organisations, and local fishers, to develop and finalise two site specific preventative strategies, to address turtle poaching and trade (Indicator 0.3).

To ensure capitalization of these findings, we 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. A joint research paper presenting an analysis of the crime script analysis and livelihood survey results has been drafted and submitted to WCS for review, with publication expected at the end of 2024 (Indicator 0.4).

3.3 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 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. Consultation workshop held with stakeholders in Y2 confirmed their interest in using preventative techniques to address the problem. Many relevant ideas were shared and included in the strategies that will be implemented in future projects.

Assumption 3: Crime prevention approach will be effective in reducing wildlife trafficking, specifically turtle trafficking in Cambodia.
Comment: This assumption holds true. 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 has not been impacted.

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 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 for assumption 1, this assumption turned out to be true for the actors not personally involved in the intentional capture and trade of the target species. 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: Discussions that took place during consultation meetings led to identifying interventions that all stakeholders agreed on. Communities and FiA had relatively similar views of the problems and are willing to work together to prevent turtle capture and trade. The ongoing fruitful collaboration between all parties that has been established over many years as part of our conservation work provides strong basis for consensus on this topic.

3.4 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.**

The evidence collected through this project enabled us to develop crime prevention interventions that can be implemented and tested. The knowledge build on the capture and trade of these species will contribute to their conservation. For example, we 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 see 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, we designed preventive interventions that will help provide alternative sources of income to vulnerable local populations (typically fishermen) and will eventually reduce poverty. For example, one of the crime prevention interventions agreed upon by stakeholders in SA, consists in supporting community members in increasing their income by doing fish processing products and sell them locally and nationally.

4.   Contribution to IWT Challenge Fund Programme Objectives

4.1   Thematic focus

The project is supporting the following two thematic focuses:

Reducing demand for IWT products: this evidence project was focussed on looking at how preventive approaches can be effectively designed, to ultimately help prevent the trafficking of two critically endangered freshwater turtle species, and therefore reduce demand for those. The research paper that is currently being produced will discuss the relationship of local fishermen to fishery resources (including turtles) and drivers for their use. These findings were used as the foundations for our strategy. In the future, this type of evidence-based approach is anticipated to effectively help reduce demand for IWT products if integrated with existing approaches to reducing demand.

Strengthening law enforcement: Based on our findings and the results of the consultations, measures related to law enforcement have been included in the preventive strategy, focusing on improving patrol planning, or conducting patrols specifically aiming at ghost net removal from the river. Stakeholders have highlighted the need to continue support to and strengthening of law enforcement, noting the need to identify more effective approaches that prevent the crime from happening rather than relying on punishment after the crime has occurred.

4.2   Impact on species in focus

This evidence project has been designed to generate a strong evidence base to inform strategies for enhanced conservation of the two focus species, the Southern Royal Terrapin and the Cantor Giant Softshell Turtle. The project has designed 20 interventions using crime prevention techniques, targeting specific points along the crime chain for each species, that are intended to directly impact the their conservation through a reduction in capture and trade. While numbers recorded as being caught for both species are small, the populations of both are critically endangered and removal of any individuals from the remaining population could render the species as ecologically extinct.

The strategies developed and focussed interventions at key points in the trade chain will reduce the opportunities of accidental turtle capture, while law enforcement will be strengthened to reduce intentional captures. Communities will be further engaged in new areas that have been identified as locations where offenders come from, so they play a more active role in sensitizing people on the importance of protecting the target species. As the need for income is a key driver for capturing and trading turtles, some interventions will help provide alternative income to potential offenders.

4.3   Project support to poverty reduction

While the project itself did not include implementation of activities that will directly reduce poverty the evidence gathered during the project and the interventions designed based on this evidence will benefit at least 14 communities living in the SRT and CGST sites, through 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.

4.4 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 project with data collected 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.

During our research, we identified women as potential influencers within the households, and the potential for them to play a role in preventing capture and trade of the species. Therefore, consultations with a total of 27 women (either working as fishers and members of the Cfis, or living in communities in our target areas), were organised in November 2023 in the two project target areas. These meetings helped us to gain a better understanding of the role of women in the households, and in fishing and community activities, and to design relevant interventions that acknowledge the role women play.

In SA, we found that all women who participated knew that the SRT is protected by law and understood its ecological importance. Only one had ever seen an SRT. It was found by her husband who then reported it. The others had only heard about it, through social media posts, local events, and release ceremonies. They rarely go fishing themselves but play a key role in buying, preparing, and fixing the gears used in fishing. They are also the ones selling the fish in the market or to a wholesaler. Most of them are members of local groups or associations such as a Savings Group or a Rattan Production Group, all supported by Non-Governmental Organizations (NGOs).

Women were confident they can convince their husbands to report and hand the turtle over, should they find one. The risk of punishment seemed to be a deterrent. They believe the absence of a market to sell the turtle could be an argument (our research did not confirm the absence of such market). They insisted that education and sensitization for the households is the most efficient approach to prevent intentional turtle capture. They said that males, because they are the ones fishing, are the key target for this. They were open about the fact that they expect an incentive and/or a direct benefit for participating in conservation activities.

In light of this, the strategies involve associating women to our interventions by developing some awareness raising and education materials and initiatives with them and having them conduct these sessions or events.

In the Mekong, we found that women play an important role in assisting their husbands or households in fishing, by preparing the food for overnight trips, fixing the fishing nets, driving the boat, and selling fish. Women said they "rarely get to see CGST directly", they have mostly seen pictures and heard about it from others. Some women did not know that the CGST is protected and that its capture or trade is illegal.

During the discussion women confirmed that given the high market price of CGST, it would be difficult to find compelling arguments to encourage fishers or their family member to hand back the CGST if they found one. The risk of punishment was indicated as a potential deterrent and a recent example of this was when a CGST was handed over to FiA, and the news of this capture spread in the village, which put pressure to give it back to avoid punishment.

While feeling they could certainly influence their husband's decisions, and sometimes discussions at community level, women explained that they are not always capable of effectively engaging. They highlighted that they themselves need to receive more information on the species and its legal protection, to be better equipped to convince others. Women can also conduct awareness raising or education sessions as part of our 'Alert conscience' intervention, outlined in the strategy.

The women participate in associations, the most popular ones being savings and mothers' groups. For instance, in Stung Treng province, most women interviewed participated in the loan and saving group supported by Siembok District and the Provincial department of the Ministry of Agriculture, Forestry and Fisheries (MAAF), as well as in the community fishery and forestry group. They mentioned saving groups and agriculture groups supported by Culture and Environment Preservation Association (CEPA) and the Regional Community Forestry Training Center for Asia and the Pacific (RECOFTC). These groups could be used to contact and engage women.

5.   Monitoring and evaluation

Monitoring and evaluation (M&E) were conducted by the Project Lead throughout the duration of the project. A half day internal meeting was conducted in August 2022 with the extended project team including landscape staff to introduce and discuss the project M&E. The Project Lead introduced the approach and a workplan was discussed and adjusted based on inputs from the project team. This allowed realistic planning of the activities for the first year.

Bi-monthly team meetings were held between the Project Lead, Research Lead and Project Assistant, to assess progress and address potential challenges. The Project Lead was also regularly reporting back to the Regional CWT Coordinator and the Country Director of WCS Cambodia. A mid-project meeting was held in Y2Q1 with the extended project team, to discuss and share the progress and planning for Year 2. This approach allowed for consistent monitoring of project progress and helped the team to identify any challenges and address these.

No major changes were made in the M&E plan of the project throughout its implementation.

Activities successfully led to achieving project outputs (detailed understanding of the trade chains for two critically endangered freshwater turtle species).

While FiA has not formally requested us to provide updates on the project, had opportunities to do so when presenting the research results and crime scripts analysis to them, and discussing strategic interventions.

6.   Actions taken in response to Annual Report reviews

The feedback received on our Annual Reports was taken into consideration, as described below.

1. *It is very important to maintain good and trusting relationships with communities, especially since they are going to be key in any future interventions to reduce poaching and trade of turtles. It would be helpful to have a stakeholder engagement plan for this engagement in particular.*
   A stakeholder engagement plan (Annex 9) was developed and was shared with the Half Year report. It has been implemented as planned.
2. *The Annexes provided with the Annual Report are not referenced directly in the report text – this would be helpful to do in future reports for ease of finding the evidence to support progress on*

activities.
This was done in the last Half Year Report and in the final report.

3. *Evidence is provided of progress of one crime script in Annex. It would be useful to see all three of the drafted crime scripts in a more complete format for the next Half Year Report as it is challenging to assess the quality of the development of the scripts from what was provided.*
The draft crime scripts were shared with the Half Year Report and have been included in the relevant Annex documents with this final report. While the initial logframe was mentioning three crime scripts, our analysis led to identifying two trade routes. The collection and trade of turtle eggs which had been identified as a potential trade problem, was not significant enough according to our results, to be qualified as such. Therefore, we produced only two crime scripts.

4. *The M&E plan is not shared by the project so it's not possible to comments on the robustness for the project. If there is a plan it would be helpful if the project could share it for the next Half Year Report. A mid-project meeting is planned for Y2Q1, so the minutes of this meeting would be ideal to provide evidence of the M&E process.*
The M&E plan (Annex 10) was shared with the Half Year Report. Monitoring has been carried out through an on-going basis. Minutes for the mid-project planning were not developed, as the meeting focused on updating our workplan and scheduling implementation of the activities.

While the feedback on the previous annual report was discussed in detail within the project team (CWT and landscape staff), we did not feel it was required to share them with our only key stakeholder, FiA, as they were mostly focused on management and reporting.

7.   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 (Annex 3) 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 limited 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 was difficult to overcome and should be addressed on a case-by-case basis, with careful assessments of safety and security risks associated with approaching individuals involved in illegal activities, and depending on the relationship staff have with local stakeholders. To address this challenge, we also arranged for two staff to attend a WCS training on conducting interviews on sensitive topics in Bangkok, Thailand, in September 2023. Our team is now better equipped to deal with this kind of situations.

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 in other work outside of this project.

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 was 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. As this project provided 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: This has been a strength for the project, as we were able to effectively engage with a large number of stakeholders. While it is difficult to get people to share knowledge on specific sensitive aspects, the consultations conducted yielded many valuable inputs and ideas. The feedback from community members who participated in the process was also positive, indicating an increase in buy in if they are consulted and involved in designing activities.

Lesson 6: Fishing is a male dominated sector and therefore it was difficult to ensure gender balance in the stakeholders engaged. In total there were only 7 women from both sites, who participated in interview and focus group discussion.
Comment: It is critical to provide space for women specifically to share knowledge. We did so by conducting workshops, in addition to the interviews and focus group discussions, with women only, gathering a total of 27 women from CFis or villages from our target area. This was very useful to collect information. However, since this topic is less relevant to women as very few of them are directly involved in fishing, they also had less inputs to share. Active facilitation of the discussions proved to be an efficient way to foster reflection. We also made sure no males were present, to ensure a safe space for participants.

8.   Risk Management

During the project, we did not identify or experience any risks that were not idenitifed in the initial risk assessment. We monitored the 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 were introduced to and followed the "CWT Safety and Security Guidelines" and were able to successfully apply these guidelines to ensure their safety throughout the project. Another risk identified was the general elections that took place in July 2023 in Cambodia, during which government officials are usually less available for collaboration. We managed to mitigate this risk by conducting activities involving FiA before and after this period, and therefore it did not impact our work.

9.   Sustainability and legacy

To ensure the legacy of this project and allow stakeholders and partners in the conservation community to benefit from our results and the lessons learned, we combined our research results and our preventive interventions into two strategy documents. These outline our methodology, results, analysis, and proposed interventions in a layout that includes illustrated crime scripts. With the support of our communication's team, these will be shared widely amongst national stakeholders and international conservation partners, as well as internally within WCS for other country programs facing similar wildlife trafficking problems.

The development of an academic research paper is ongoing, with an advanced draft available. This paper will be submitted for publishing and hopefully published before the end of 2024, enabling the project to disseminate the knowledge and experience gained with 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, Deputy Country Director) in understanding the problem-oriented approach and applying it to other problems within WCS' landscapes in Cambodia. Our team has built this skillset, and this is a major legacy of this project.

Our exit strategy has not changed. This project has resulted in two evidence-based, gender-sensitive, preventative strategies to address poaching and trade of the target species. We submitted a "main" project to IWT Challenge Fund which was not approved for funding. We will continue to look for funds from other donors to implement the strategic interventions. In the meantime, we are working to mainstream these interventions into WCS's ongoing work within these two landscapes, which focus on collaborative conservation of the two target species and their habitats.

10.   IWT Challenge Fund Identity

Given the nature of this project, an evidence project, our main communication activity was the promotion of the strategies and the research paper currently being prepared. All of these documents acknowledge the critical support provided by the IWT Challenge Fund. The contribution of the UK Government and the funding from the IWT Challenge Fund are clearly mentioned in those products, making sure that national and international stakeholders identify and acknowledge the source of funding.

11.   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, ▮▮▮▮▮▮▮▮	
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]	
Has there been any lessons learnt or challenges on Safeguarding in the past 12 months? Please ensure no sensitive data is included within responses. There has not been any challenge related to safeguarding. Staff 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.		
Does the project have any developments or activities planned around Safeguarding in the coming 12 months? If so please specify. We completed all the safeguarding related activities (human subject training research and IRB application) at the beginning of the project. Activities are now completed with the project coming to an end and therefore do not plan additional safeguarding activities during the coming year. Should funding be secured for implementation of the preventative strategies we will continue to ensure all safeguarding procedures are followed.		

12.   Finance and administration

12.1 Project expenditure

Project spend (indicative) since last Annual Report	2023/24 Grant (£)	2023/24 Total actual IWTCF Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)				
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				Researchers executed the task at a lesser cost than expected.
Capital items (see below)				
Others (see below)				We used internal expertise instead of hiring a graphic designer.
TOTAL	£56,933.65	£56,933.65		

Staff employed (Name and position)	Cost (£)
Sarah Fumey, IWT Project Lead	
Som Sitha, Landscape Project Manager	
Chhoeng Sotheavann, Research Lead	
Ouk Sambath, Research Assistant	
Chen Champapao, Sre Ambel Project coordinator	
Gnourn Chanti, Kratie Project coordinator	
Khuth Channy, Project support Officer (Finance)	
Duch Thanirorn, Project support Officer (HR)	
TOTAL	£34,646.70

Capital items – description	Capital items – cost (£)
TOTAL	

Other items – description	Other items – cost (£)

Bank Fees	█████
Communications	
Printing	
Supplies - Other	
Technical Services/C	
TOTAL	**£712.40**

12.2 Additional funds or in-kind contributions secured

Source of funding for project lifetime	Total (£)
112548-Cargill3	█████
111512-INL	
112758-USFWS	
Other donors	
TOTAL	**32,952.71**

Source of funding for additional work after project lifetime	Total (£)
TOTAL	

12.3 Value for Money

This is the first time the problem-oriented crime prevention approach was applied to wildlife trafficking or conservation in Cambodia, to our knowledge. Knowledge and experience gained under this project is being shared within the wider conservation and crime prevention community; informing and benefiting future initiatives, potentially leading to more efficient and effective responses to IWT. This experience will directly benefit future applications for funding to implement the strategic interventions and is already mainstreamed to some extent into WCS's ongoing work, ensuring implementation of some of the interventions from the strategy and project sustainability. However, the "main" project submitted to IWT Challenge Fund as part of the last Call for proposals - Round 10, was not approved for funding. Therefore, most of the potential preventive interventions designed through this project remain unfunded and WCS is continuing to look for funding opportunities to allow implementation and greater sustainability for the project and conservation impact for the species.

WCS' presence in the target landscapes and relationships with local communities, built over two decades, was a major asset for this project. The project benefited from WCS' established and trusted relationship with the FiA, allowing immediate and efficient implementation of activities in the project

timeframe, ensuring good value for money. The project activities, and the participatory nature of the design of the strategy has strengthened these relationships and we will continue to build on this should funding for implementation of the strategies be secured. A focus on a preventative approach, steering law enforcement away from the traditional and somewhat putative approach of fines has helped to build further trust in the communities.

The project has benefited from WCS's internal expertise on the two target species, and on IWT globally. The problem-oriented approach to wildlife protection is being applied by WCS in Sumatra, Indonesia, in Peninsular Malaysia, Viet Nam, India and Lao PDR. While the project lead from Indonesia has been mobilised to share experience with the Cambodia team, the latter has also shared its experience several times during internal workshops and experience sharing sessions. For example, the project team facilitated a session on the problem-oriented approach and this evidence project, as part of our internal Regional CWT Analyst Meeting that took place in Siem Reap in July 2023. In this session, 25 CWT analyst and project leads were able to learn from the project, its results and lessons learned. This type of event helps to build capacity of local staff as well as at a regional level. WCS Cambodia is currently raising funds to apply this same approach in the Northern Plains Landscape where wildlife trafficking is taking place.

13. OPTIONAL: Outstanding achievements of your project (300-400 words maximum). This section may be used for publicity purposes

Non applicable.

Annex 1 Project's original (or most recently approved) logframe, including indicators, means of verification and assumptions.

Note: Insert your full logframe. If your logframe was changed since your application and was approved by a Change Request the newest approved version should be inserted here, otherwise insert application logframe.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
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.*			
Outcome: *Comprehensive evidence base for development and implementation of a crime prevention-based approach to prevent poaching and trafficking of freshwater turtles.*	0.1 Data and knowledge of the trade chain for CGST is collected by Y1Q2 and SRT by Y1Q3.	0.1 Responses to surveys; data on seizures.	Actors along the trade chain are willing to contribute information and knowledge.

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

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

Project implementation is not impacted by ongoing COVID-19 restrictions. |
	0.2 A detailed map of the trade chain for the two target species is available by Y1Q4.	0.2 Two detailed crime scripts for the two target species.	
	0.3 A finalised preventative strategy, developed with stakeholders, to address turtle poaching, trade and consumption by Y2Q2.	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.	
	0.4 A case study or research paper on strategic interventions to address turtle poaching and trade in Cambodia completed by Y2Q2.	0.4 Case study document or peer reviewed research paper submitted.	
Outputs:

1. A detailed understanding of at least two specific turtle trade chains including identification of drivers and opportunities for crime prevention. | 1.1 Organise training and ensure ongoing mentoring for project Staff on the problem-oriented wildlife protection approach. | 1.1 Training materials, attendance records (disaggregated by gender), assignments. | A training course and ongoing mentoring from an expert will sufficiently build capacity of WCS staff in the implementation of this novel approach.

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 WC. |
| | 1.2 Organise meetings with project stakeholders to introduce the project and approach. | 1.2 Generated research reports and all existing relevant data are centralized and stored. | |
| | 1.3 At least two detailed crime scripts produced by Y2Q1. | 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. | |

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.	2.1 Meeting/workshop materials and reports, and attendance records (disaggregated by gender).	Agreement between stakeholders can be reached on feasible, strategic priority interventions.
	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.	2.2 Crime prevention strategy document, that clearly identifies beneficiaries by gender and stakeholder group, anticipated impact, and feasibility.	

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.

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.

Annex 2 Report of progress and achievements against final project logframe for the life of the project

Project summary	Measurable Indicators	Progress and Achievements March 2022- April 2024
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.*		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 *Comprehensive evidence base for development and implementation of a crime prevention-based approach to prevent poaching and trafficking of freshwater turtles.*	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 65 stakeholders from FiA (5M), communities (55M, 2F), and NGOs (3M). Example data attached as means of verification (Annex 4).
	0.2 A detailed map of the trade chain for the two target species is available by Y1Q4.	0.2 Two crime scripts completed. Crime script documents attached as means of verification (Annex 7 and 8). Note : crime scripts are included in the strategy document. While the initial logframe was mentioning three crime scripts, our analysis led to identifying two trade routes. The collection and trade of turtle eggs which had been identified as a potential trade problem, was not significant enough according to our results, to be qualified as such. Therefore we produced only two crime scripts.
	0.3 A finalised preventative strategy, developed with stakeholders, to address turtle poaching, trade and consumption by Y2Q2.	0.3 Two preventive strategies finalised with stakeholders – Preventive strategies to address capture of the SRT in Sre Ambel River system; Preventive strategy to address capture and trade of the CGST in the Mekong river. Strategy documents attached as means of verification (Annex 7 and 8). Note : they are finalised but pending final formal approval by FiA. We are following up closely and will share the final versions as soon as they are available.
	0.4 A case study or research paper on strategic interventions to address turtle poaching and trade in Cambodia completed by Y2Q2.	0.4 Advanced draft of a research paper available, expected to be published by the end of 2024.
Output 1. A detailed understanding of at least two specific turtle trade chains including identification of drivers and opportunities for crime prevention.	1.1 WCS staff (at least 3F) can implement a problem-oriented wildlife protection approach by Y1Q3.	1.1 Seven staff (3M, 4F) can implement a problem-oriented approach, with 3 core staff completing training on the approach. Means of verification provided in Annex 1.
	1.2 Data collection, assimilation and analysis completed in two source sites by end of Y1.	1.2 Data collection completed in two sites. Means of verification provided in Annex 4. Note: full data set cannot be shared as per our data protection policy and to ensure confidentiality.
	1.3 At least two detailed crime scripts produced by Y2Q1.	1.3 Two crime scripts finalised. Means of verification provided in Annex 7 and 8.

Activity 1.1 Organise training and ensure ongoing mentoring for project Staff on the problem-oriented wildlife protection approach.		9 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 ; 24/05/23 3F, 4M ; 28/06/23 3F, 5M ;19/07/23 3F, 5M ; 06/09/23 3F, 3M ; 03/10/23 4F, 3M). Evidence provided in Annex 1.
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. Means of verification provided in Annex 2.
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 65 stakeholders including FiA (5M), communities (55M, 2F), and NGOs (3M), through 21 interviews and three focus groups discussion. Analysis completed. Means of verification provided in Annex 4. Note: full data set cannot be shared as per our data protection policy and to ensure confidentiality.
Activity 1.4: Produce at least two crime scripts based on the information collected and analysed.		Two crime scripts were produced, using data collected in Activity 1.3. (Annex 7 and 8). Note: crime scripts are included in the strategy document.
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.	2.1 A total of 109 stakeholders were consulted to co-design strategic interventions. These include 4 FiA officers (4M), 22 representatives of local authorities (commune and village chiefs – 19M, 3F), 83 community members including members of Cfis and women's organisations (53M, 30F), and local fishers. Consultation reports are attached as means of verification in Annex 5 and 6.
	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.	2.2 Two strategies were developed to prevent SRT capture in Sre Ambel, and CGST capture and trade in the Mekong, were finalised. They are attached as means of verification in Annex 7 and 8.
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.		Five meetings were organized to design preventive interventions: 7 July 2023: Internal meeting CWT and landscapes teams (4F, 3M) 8-10 August 2023: consultation in Sre Ambel, 35 participants (33M, 2F). 22-24 August 2023: two consultations in the Mekong sites with 47 participants (43M, 4F). 2-3 November 2023: meeting with 19 women in the Mekong site. 7 November 2023: consultation meeting with 8 women in SA. Report for the two main consultations are available in Annex 5 and 6.

Activity 2.2. Utilize the outcomes of the workshops to develop an agreed crime prevention strategy	Crime prevention strategies developed by the Project Lead, research Lead and Research Assistant, with the support of landscape team and Dr. Andrew Lemieux. Strategies available as means of verification in Annex 7 and 8.
Activity 2.3: Complete a case study or research paper.	Collaboration with PhD Candidate at Netherlands Institute for the Study of Crime and Law Enforcement (NSCR)/Utrecht University to develop a joint research paper presenting a joint analysis of the crime script analysis and livelihood survey results has been drafted. Review by WCS ongoing with publication expected at the end of 2024.

Annex 3 Standard Indicators

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 (project end)	Total planned during the project	Comment
IWTCF-B06	Number of criminal networks/trade routes mapped/identified.	Number of freshwater turtle trafficking routes mapped	Number	By species: SRT and CGST.	3	2	3	Analysis led to reassess the number of trade routes to 2.
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	The project is developing a research paper.
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	2	3	Through analysis it was decided to develop two strategies (one

						for each target area and species).

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)
Illegal harvesting of turtles in Cambodia: implications for conservation strategies	Academic paper	Publication being drafted for submission. Jordi Janssen, WCS Cambodia, (In Prep)	M	Dutch	To be confirmed	Draft available.

Annex 4: Supplementary material (optional but encouraged as evidence of project achievement)

The following materials are available in the report Annexes:

Annex 1: Training/coaching session reports and training material
Annex 2: Project presentation used during the introductory meetings
Annex 3: IRB application approved
Annex 4: Sample of survey questions and sample of survey data
Annex 5: Consultation on preventive strategic interventions in Sre Ambel
Annex 6: Consultation on preventive strategic interventions in the Mekong
Annex 7: Preventive strategy Sre Ambel
Annex 8: Preventive strategy Mekong
Annex 9: Stakeholders engagement plan
Annex 10: M&E plan

Checklist for submission

	Check
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.	
If you are submitting photos for publicity purposes, **do these meet the outlined requirements (see section 13)?**	
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.	
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.	
Have you involved your partners in preparation of the report and named the main contributors	
Have you completed the Project Expenditure table fully?	
Do not include claim forms or other communications with this report.	