



## Illegal Wildlife Trade (IWT) Challenge Fund Half Year Report (due 31<sup>st</sup> October 2020)

<b>Project reference</b>	IWT044
<b>Project title</b>	Critical evidence to drive a reduction in Cambodia's ivory trade
<b>Country(ies)</b>	Cambodia
<b>Lead organisation</b>	Fauna & Flora International
<b>Partners(s)</b>	Royal Government of Cambodia, Royal University of Phnom Penh (RUPP), Royal Zoological Society of Scotland (RZSS)
<b>Project leader</b>	TBC – [Acting – Jeremy Parker, Country Director, Fauna & Flora International, Cambodia Programme ]
<b>Report date and number (e.g. HYR1)</b>	31 <sup>st</sup> October 2020, (HYR 4)
<b>Project website/blog/social media</b>	<a href="http://www.fauna-flora.org/explore/cambodia/">http://www.fauna-flora.org/explore/cambodia/</a>

### 1. Outline progress over the last 6 months (April – Sept) against the agreed project implementation timetable (if your project has started less than 6 months ago, please report on the period since start up to the end September).

**Project Implementation Timetable:** *Financial Year Apr 2020 – Sept 2020. Key Q2-Q3 activities and milestones.*

**Activities** (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)

**1.1** *Conduct annual surveys of markets to monitor and quantify ivory, and consumer profiles (Y4) in Siem Reap, Phnom Penh, and Sihanoukville (target areas informed by prior research by FFI), including vendor surveys and intelligence gathering to identify the supply chain networks – drawing on data mining of existing national reports and surveys, informant networks and triangulated interviews, and consumer surveys in the final year of the project informed by data gathered in the previous years;*

Due to the COVID-19 outbreak and subsequent restrictions on travel and movements, we have been unable to carry out our planned ivory market survey in three cities in Cambodia. A Change Request was approved by DEFRA in April 2020. This has affected almost all activities to follow.

**1.1.4** *Survey Khmer & English news regarding ivory seizure in Cambodia over the last 5 years*

Surveys of Cambodian media to identify and record data of ivory seizures in Cambodia was conducted through monitoring popular social news media on Facebook pages. The 6 most popular newspapers in Cambodia on Facebook were particularly singled out, including: Koh Santepheap Daily, Khmer Times, Kampuchea Thmey Daily, The Phnom Penh Post, Rasmei Kampuchea Daily, and The Fresh News; all of which are followed daily or weekly depending on the news released on each page related to any information of wildlife and especially the ivory and rhino horn seizure made by the Cambodian authority. Beside the newspapers pages, several famous Cambodian television news channels appearing on facebook pages such as: TNN TV, PNN News and BAYON TV, and CTN TV is also followed and check-up daily or weekly to search for any information of cases in ivory and rhino horn seizures in the country.

On 16 July 2020, the Facebook page of TNN TV news was released an information related to ivory seizure as following detail:

*Boeung Keng Kang Police Inspectorate cooperated with the Wildlife Rapid Rescue Team (WRRRT) of the Forestry Administration made a seizure of endangered wildlife specimen at a local sculpture shop named "Preah Mae Neak" locates in house No.250, St.376, group 13, village 08, Songkhat Boeung Keng Kong II, Khan Boeung Keng Kong, Phnom Penh. The shop owner Mr. Prom Rattanak, age 32 and he's Cambodian nationality.*

*Ivory seized in the raid included: 08 pieces of raw ivory specimens with a total weight of 0.59kg and 17 pieces of worked ivory specimens with a total weight of 0.176kg. All specimens were confiscated by the Forestry Administration and the suspect was taken to question at the Phnom Penh Forestry Administration Cantonment.*

**1.2 Produce national map of trading hotspots and networks;**

We continue our collaboration with the government and other NGOs and have started to feed our data into a regional comparison of ivory markets, including a map, led by TRAFFIC International. As part of this we have signed a data sharing agreement and are working towards a joint publication.

**1.3 Conduct gendered surveys of consumers and vendors to better understand the links between poverty and the ivory trade;**

Due to the COVID-19 outbreak and subsequent restrictions on travel and movements, we have been unable to conduct the gendered surveys of consumers and vendors.

**1.4 Provide intelligence to law enforcement on ivory trade networks to facilitate effective enforcement;**

Due to the COVID-19 outbreak and subsequent restrictions on travel and movements, we have been unable to carry out surveys and hence cannot provide intelligence at present.

**1.5 Use existing Asian elephant population genetic data from 250-300 previously collected samples to generate genotype data on a genetic marker system**

The genetic marker system for Asian elephants will use two different types of genetic marker. A mitochondrial DNA (mtDNA) sequence and a SNP-based nuclear DNA marker system. We now have a mtDNA database of 856 sequences, using 320 sequences produced from Cambodian wild elephant samples by this project and 536 previously published sequences from 8 additional countries. The SNP-based nuclear DNA marker system is still being created but will provide a more robust method for determining the origin of ivory from Asian elephants. It consists of 20 SNPs that need to be genotyped in 360 Cambodian wild elephant samples, thus  $20 \times 360 = 7200$  genotypes that need to be produced. The RUPP lab has currently generated 5440 (76%) of the genotypes. As mentioned in the last report, there are two new technicians in the genetics laboratory. An initial training session was provided in February; however, COVID-19 has prevented any in person training during Y4. Training by RZSS staff would have typically occurred in July and although there are many external factors currently affecting productivity, an in-person training session for the two new technicians would be beneficial.

**2.1 Establishment of species identification (Asian/African) testing from initial 30 market survey ivory samples and testing of samples to establish species provenance (mtDNA test);**

Since the Y3 report, 18 ivory samples have been seized in a raid on an ivory carving workshop by a Cambodian enforcement agency. These samples were submitted to the RUPP laboratory in July 2020 and species ID testing was successfully conducted on all 18 samples. All samples were identified as from African elephants and are from at least two different individuals, 4 samples showed greater similarity with our African savannah elephant control and the other 14 grouped with the African forest elephant control. Mitochondrial DNA sequencing to gain a more precise origin for each sample will be conducted in the next two months. In total, the RUPP laboratory has now tested 33 putative ivory samples seized within Cambodia. They have been identified as 27 African elephant, 2 Asian elephant, 2 Woolly Mammoth, 1 African elephant bone and 1 plastic replica. More precise origins of 7 African elephant samples and the two Mammoth samples were reported in Y2 and Y3 reports respectively. A summary for all samples will be completed for the Y4 report.

**2.2 *Production of Cambodian Elephant reference genetic data from existing samples collected from wild elephant surveys to assist with global traceability of ivory (mtDNA, SNP based or microsatellite testing);***

As reported against Activity 1.5, the Cambodian mitochondrial reference database is completed and the SNP database is 76% complete. The databases will consist of data from at least 320 wild Cambodian reference samples. These have been collected by three NGOs in 4 protected areas within Cambodia. The RUPP lab has also just secured a contract to analyse wild elephant samples from a 4<sup>th</sup> region in Northern Cambodia, these can be added to the database in future. Discussions are continuing regarding gaining access to reference samples in Vietnam and Nepal.

**2.3 *Investigation of geographic origin of Asian ivory found in Cambodia;***

Only 2 of the ivory samples tested in the laboratory have originated from Asian elephants. In the Y3 report we outlined that the mitochondrial DNA from these two samples was different, meaning they had originated from two different elephants. We also reported that neither of the sequences matched any of the 320 Cambodian wild elephant reference samples, suggesting they were not poached from elephants within Cambodia. Here, we have extended the analysis to incorporate reference sequences from a further 8 countries (Appendix 1). We show that one ivory sequence (IVY010) matches a mitochondrial lineage found only in Central India and the other ivory sample (IVY011) matches a lineage found in three countries within our dataset (Myanmar, Laos & Malaysia). This suggests that neither ivory sample is from elephants poached within Cambodia, however we still need to complete a nuclear DNA comparison for these two samples, as nuclear DNA provides a more robust dataset for comparison.

**2.4 *Establishment of individualisation and sexing tests to allow for seizure inventory (SNP-based or microsatellite testing);***

Unfortunately, the COVID-19 pandemic has had substantial impact on the project timeline. RUPP was forced to open at reduced hours and both laboratory technicians have been off ill for substantial periods of time. RZSS has also been working at reduced capacity due to staff furloughs between April-September. This has particularly affected this section as it is lab work intensive and relies on difficult to source reagents. There have been delays with delivery of DNA extraction kits and RTPCR reagents. As mentioned above the SNP reference database is only 76% complete and the sexing tests are 80% complete. The completion of these will be key aims during the remaining months of Y4.

**2.5 *Establishment of seizure sampling, data-basing and chain of custody protocols;***

The ivory seizure in July allowed the two new laboratory technicians to perform the process of sampling, databasing and identifying the origin of the ivory for the first time after their training in February. Due to global travel restrictions, RZSS staff had to help support this remotely, which was not ideal, however the new lab team successfully tested all 18 samples, and documented the process as set out in the laboratory chain of custody protocols. The lab team also produced reports for each sample (Appendix 2).

**2.6 *Strengthen professional links of the lab with regional and international wildlife forensics/ elephant genetics network.***

As outlined in the Y3 report a key aim for this activity was the transfer of knowledge to the staff at RUPP via visits to other genetic laboratories both in Asian elephant range states and in the UK. These plans had already been delayed due to the loss of staff in Y3 and have now been put on hold due to COVID-19 during Y4. We see this knowledge sharing and networking as a vital component for the lab's future development and if travel restrictions lift substantially, we still hope to perform a knowledge exchange visit between RUPP and another genetics laboratory, but this is currently looking very unlikely. As more conferences move online this could also be a potential avenue for strengthening links during Y4.

***Objective 3: Strengthened national legislation and enforcement addressing trade and marketing of ivory in Cambodia.***

All activities for Objective 3 are scheduled to be conducted in the final 6 months of the project, although some may be delayed owing to the ongoing COVID crisis. In the meantime, and as stated in the approved Change Request form in March 2020, we have seconded an IWT officer from the Forestry Administration to mitigate delays and directly support areas of project delivery that strengthen relevant

and effective legislation. Witnessing and driving the growth in political will to combat illegal ivory trade over the last three years, we believe this will build the additional capacity and necessary support needed for legislative change. We additionally provided an online training on Crime Prevention to FFI and Wildlife Alliance staff over two days in September 2020.

**2a. Give details of any notable problems or unexpected developments/lessons learnt that the project has encountered over the last 6 months. Explain what impact these could have on the project and whether the changes will affect the budget and timetable of project activities.**

As indicated above, the global COVID pandemic has greatly affected FFI's ability to operate and conduct activities across the board. All of the activities based around surveying and providing intelligence to the Royal Government of Cambodia have been prevented, as surveyors could not operate and markets across the country were shuttered. In addition, a country-wide moratorium on international tourism, particularly from countries believed to be demand-side purchasers such as China and Vietnam, has anecdotally resulted in vendors being able to physically supply to such buyers. Cambodia's postal system has also been affected, presumably halting online sales. Furthermore, governmental workshops that we planned to support during Q4 of the project year have been delayed until further notice. Due to these changes we were unable to fully spend budget in budget lines such as National travel, Fieldwork travel and subsistence, Conferences, workshops, and seminars, and consultancy charges for a consultant carrying out the surveys.

As Cambodia has been slowly re-opening markets and accepting tourists from abroad, the projects activities may be able to resume in the final six months of the project.

**2b. Have any of these issues been discussed with LTS International and if so, have changes been made to the original agreement?**

Discussed with LTS: **Yes**

Formal change request submitted: **Yes** (accompanying this report)

Received confirmation of change acceptance **No**

**3a. Do you currently expect to have any significant (e.g. more than £5,000) underspend in your budget for this year?**

Yes  No  Estimated underspend: £

**3b. If yes, then you need to consider your project budget needs carefully.** Please remember that any funds agreed for this financial year are only available to the project in this financial year.

**If you anticipate a significant underspend because of justifiable changes within the project, please submit a rebudget Change Request as soon as possible. There is no guarantee that Defra will agree a rebudget, so please ensure you have enough time to make appropriate changes if necessary. Please DO NOT send these in the same email as your report.**

**4. Are there any other issues you wish to raise relating to the project or to IWT Challenge Fund management, monitoring, or financial procedures?**

If you were asked to provide a response to this year's annual report review with your next half year report, please attach your response to this document.

Please note: Any planned modifications to your project schedule/workplan can be discussed in this report but **should also** be raised with LTS International through a Change Request. **Please DO NOT send these in the same email.**

Please send your **completed report by email** to [IWT-Fund@ltsi.co.uk](mailto:IWT-Fund@ltsi.co.uk). The report should be between 2-3 pages maximum. **Please state your project reference number in the header of your email message e.g. Subject: IWT001 Half Year Report.**