



Illegal Wildlife Trade (IWT) Challenge Fund Annual Report

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

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IWT Challenge Fund Project Information

Project reference	IWT044
Project title	Critical evidence to drive a reduction in Cambodia’s ivory trade
Country/ies	Cambodia
Lead organisation	Fauna & Flora International
Partner institution(s)	Royal Government of Cambodia, Royal University of Phnom Penh, Royal Zoological Society of Scotland
IWT grant value	£ 334,735
Start/end dates of project	1 st July 2017 – 31 st March 2021
Reporting period	Annual Report 3: 1 st April 2019 – 31 st March 2020
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Project website/blog/social media	https://www.fauna-flora.org/projects/elephant-conservation-cambodia https://www.rzss.org.uk/conservation/our-projects/project-search/applied-conservation-genetics/conservation-genetic-capacity-building-in-cambodia/
Report author(s) and date	Regine Weckauf, Alexander Ball, 30 April 2020

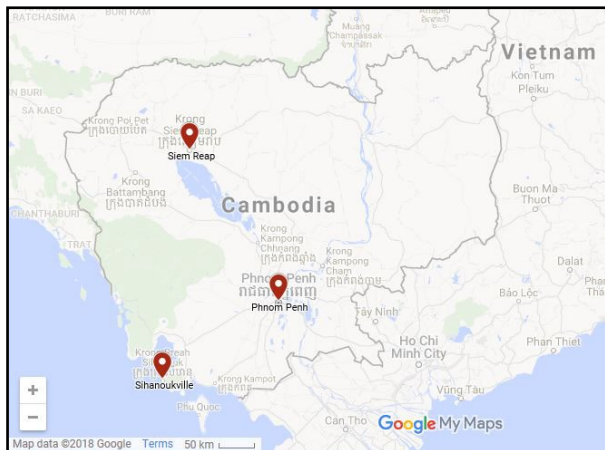
1. Project summary

African elephant (VU) populations have declined by 30% between 2007 and 2014, primarily due to global increase in poaching for ivory. Illegal trade in ivory is also a threat to Asian elephants (EN), of which fewer than 52,000 remain. Global illegal ivory trade, driven by organised crime networks, benefits the few whilst impoverishing communities local to source populations who bear the costs of poaching activities and enforcement responses, e.g. insecurity, ecosystem degradation.

This project seeks to reduce illegal ivory trade in Cambodia, a country at risk of becoming a driver of the global trade, by enabling more effective enforcement. FFI market surveys suggest Cambodian ivory trade networks are linked to other IWT networks, amplifying unsustainable harvest of domestic wildlife species. Little is known about these networks, but many of Cambodia’s poorest, most natural resource-dependent communities live closest to source populations and are likely being impacted by poaching and wildlife depletion. Critically, with the closure of China’s ivory markets, there is real risk of illegal ivory markets diverting to Cambodia; FFI documented that buyers of worked ivory are mostly from China, where ivory trade was recently banned.

We provide essential evidence for urgent policy improvements, by tackling the lack of knowledge of Cambodian ivory markets and trading networks through research, including identifying links to communities living closest to source populations. We will build capacity for genetic analysis of ivory to determine provenance and regional trade networks, further informing regional efforts to stop IWT. Finally, building on FFI's long-standing relationships with government partners, we will address legislative weaknesses and support the implementation of the Cambodian Elephant Conservation Action Plan and National Ivory Action Plan (NIAP) to ensure effective enforcement that prevents illegal trade in African and Asian ivory.

Our annual ivory market surveys and ivory trade network surveys are carried out in the three cities most frequented by international and domestic tourists, Phnom Penh, Siem Reap, and Sihanoukville, indicated in below map. The conservation genetics lab is located in the country's capital Phnom Penh.



2. Project partnerships

The main partners on this project are the Royal University of Phnom Penh (RUPP), the Royal Zoological Society of Scotland (RZSS) and the Royal Government of Cambodia's Forestry Administration (FA) of the Ministry of Agriculture Forestry and Fisheries (MAFF).

FFI has been working in partnership with RUPP since 2005 in the development and support of Cambodia's first and only MSc in Biodiversity Conservation. In 2016, FFI established a partnership with RZSS in support of the creation of the first conservation genetics lab in Cambodia housed in the Faculty of Science of RUPP. RZSS is the technical lead in implementing Objective 2 in partnership with RUPP. RZSS is one of the few international genetics facilities that specialises in building the capacity of international underserved institutions. RZSS WildGenes Lab has extensive experience globally in IWT work and building the capacities of genetics labs.

RUPP, FFI and RZSS remain in regular contact regarding the genetic training and testing of samples. In Year 3, RZSS has conducted two training sessions for the lab technicians at RUPP, each for 2 weeks duration covering key topics in conservation genetics and transference of lab techniques (Annex 4.1). In-country meetings between the wider project team have occurred during both of these sessions, with 6 project meetings between RZSS, RUPP and FFI staff to discuss project progress and future aims, in addition to regular skype catch-ups between FFI and RZSS as and when needed. The RUPP lab is continuing to work with the elephant DNA obtained from wild Cambodian elephants, provided by FFI and two other NGOs working within Cambodia, WWF and WCS. A conservation biologist consultant for WWF has also attended both of the Year 3 training sessions. The help of the Elephant Valley Project (EVP) and the Phnom Tamao Wildlife Rescue Centre (PTWRC) have continued in Year 3 with both organisations providing DNA samples from their captive elephants. This has given the RUPP staff access to good quality positive controls for their testing procedures. The RUPP lab has continued to engage with other conservation staff within the country, hosting introduction visits from WCS and Free the Bears. The Siamese crocodile breeding program, run by FFI, is now using the laboratory to test for hybrid status of crocodiles before release.

FFI has continued its relationship with the Ministry of Environment (MoE) who is not an official partner on the project, but has a high interest in reducing elephant ivory marketed in Cambodia. A planned inter-ministerial workshop on reducing national demand of ivory and rhino horn to be supported by FFI has been postponed for the time being.

Since late 2018, FFI has been collaborating with TRAFFIC International which is undertaking a regional ivory market monitoring project to compare ivory markets and corresponding fluctuations in trade amongst five lower-Mekong countries (Laos, Thailand, Myanmar, Cambodia, and Vietnam). FFI is sharing research findings and supporting logistics.

Internally, FFI holds regular quarterly review meetings including Project Lead, relevant FFI Cambodia staff, and Senior Technical Specialist, Wildlife Trade to review progress against the log frame and annual work plan, and to enable wider technical input. Several additional meetings of this team have also been held to address specific technical elements of project delivery, as required, and also supported by FFI's Policy Advisor (IWT).

3. Project progress

3.1 Progress in carrying out project Activities

Output 1. Improved understanding of Cambodian ivory markets and trading networks – including exploring links between drivers of IWT and poverty – informing policy and interventions to address ivory trade.

1.1 Biannual ivory surveys of markets, vendors, and intelligence gathering to identify the supply chain networks – drawing on data mining of national reports and surveys, informant networks and triangulated interviews

Market surveys: As mentioned in earlier reporting, we have formally decreased our biannual market surveys to once per year due to staff being recognised by vendors. Having planned the Y3 ivory market survey across Phnom Penh, Siem Reap, and Sihanoukville for early 2020, we have been unable to carry out these surveys due to the CoVid-19 outbreak and subsequent restrictions on travel and movements (Change Request Form has been submitted). However, we supported national ivory market surveys carried out by TRAFFIC in October 2019 by providing logistical support and guidance on shop locations, and an overview and insights on government relations and relevant Cambodian customs. These surveys were based on our previous survey methodology and locations and we are hence able to use this data to compare market trends. The TRAFFIC survey results suggest a **50% reduction in ivory availability in markets** [data confidential as not yet published] **compared to the availability recorded by FFI's 2017 market surveys, and a 60% decrease of ivory shops since FFI's market surveys in April 2019** (Annex 4.2). Particularly noteworthy is the substantial decrease in shops offering ivory for sale in Phnom Penh, reduced from 42 shops recorded in April 2019 to 7 shops recorded in October 2019. A full report incorporating the latest TRAFFIC and FFI research is currently being written up as a joint publication (expected September 2020).

It is possible that this reduction in ivory availability is a direct result of the MoE issuing a [directive to shops selling ivory and rhino horn](#) in September 2019. Having shared our 2017 and 2019 market survey data with the MoE, our list of ivory shops has been used to distribute targeted announcements informing vendors of legal implications of trading ivory, rhino horn, and other IWT products, with the appeal to surrender items as part of a first warning stage. The announcements were issued to 30 shops in Siem Reap, 19 shops in Phnom Penh, and two shops in Sihanoukville. While this action might make investigations harder if it were to shift markets underground, the directive should make judicial actions and prosecutions easier in the long term providing the legal system with clear terms on which to impose prosecutions (something currently lacking).

Online survey: Facebook is still the most popular social media platform in Cambodia; 10.5 million users were recorded in March 2020, 63% of the total population¹. Young entrepreneurs use the platform to advertise and sell products unregulated. During Y3 we finalized the analysis of the below three online trade survey periods (Annex 4.3).

1 February to 31 March 2019 (high season): Between 1 February to 31 March, 2019, a total of **38 online ivory shops** have been identified and surveyed, recording **466 elephant products** (437 ivory; 29 elephant bone and molar teeth) for sale, **210 advertisements**, and **361 comments**. We found that **96%** online shops were operated from **Phnom Penh**, and that **4 new shops opened since our last survey** (2 opening in 2018, 2 opening in 2019). **95%** of online shop owners were male and approximately **60%** were aged between 25 and 34 years old. Among posts advertising elephant products, **93%** were advertisements for ivory items, others being

¹ <https://napoleoncat.com/stats/facebook-users-in-cambodia/2020/03>

molars. A majority of online adverts were carved ivory items (91%), with 81% of carved ivory being Buddha figurines. Other items were also found such as pendants, beads, ring, necklace, Chinese figurine, bangles, and pens. 95% of comments were posted by males and 99% of people that interacted with elephant ivory adverts were Cambodians. 82% of Cambodian commenters were identified as living in Phnom Penh, 18% living elsewhere in Cambodia such as Battambang, Kampong Cham, Kandal, Siem Reap, and Sihanoukville. 70% of comments showed interest in purchasing the items, 97% of which was for self-consumption. 9 out of 38 online ivory shops changed their names during the survey period.

1 August to 30 September 2019 (low season): Between 1 August to 31 September, 2019, a total of 44 online ivory shops were identified and surveyed, recording 266 elephant products (263 ivory; 3 molar teeth) for sale, 113 advertisements, and 217 comments. We found that 35% online shops were operated from Phnom Penh, and that 6 new shops opened in 2019. 89% of online shop owners were male and approximately 36% were aged between 25 and 34 years old. Among posts advertising elephant products, 99% were advertisements for ivory items, others being molar. A majority of online adverts were carved ivory items (96%), with 90% of carved ivory being Buddha figurines. Other items were also found such as pendants, pendants and rings. 95% of comments were posted by males and 99% of people that interacted with elephant ivory adverts were Cambodian. 35% of Cambodian commenters were identified as living in Phnom Penh, 11% living elsewhere in Cambodia such as Battambang, Kampong Cham, Siem Reap and Sihanoukville. 77% of comments showed interest in purchasing the items, 80% of which for self-consumption.

1 February to 31 March 2020 (high season): Between 1 February to 31 March, 2020, a total of 48 online ivory shops were surveyed and 573 elephant products were found for sale (572 ivory; 1 molar) across 257 advertisements, with 362 comments. We found that 58% online shops were operated from Phnom Penh. 10 shops opened in 2018 and another 10 in 2019. 87% of online shop owners were male and approximately 42% were aged between 25 and 34 years old. Among posts advertising elephant products, over 99% were advertisements for ivory items, others being molar. A majority of online adverts were for carved ivory items (86%), with 82% of carved ivory being Buddha figurines. Other items were also found such as pendants, beads, rings, necklaces, pendants and necklaces. 96% of comments were posted by males and 99% of people that interacted with elephant ivory adverts were Cambodians. 45% of commenters were identified as living in Phnom Penh and 11% living elsewhere in Cambodia such as Battambang, Kampong Cham, Siem Reap, Banteay Meanchey and others. 79% of comments showed interest in purchasing the items, and 77% for self-consumption. 4 out of the 48 online ivory shop changed to different names during the survey period.

Throughout Year 3 of the project we have seen a **steady increase (26%) in online shops offering ivory for sale**. While the amount of elephant products for sale decreased by almost half during the low tourist season, it increased overall (by 23%) when compared between the two high seasons of 2019 and 2020.

Media survey (Annex 4.4): We continued surveying media outlets for information on ivory seizures, **recording only 6.8kg of ivory** over the last year, coming from one seizure of a carving factory in Phnom Penh in March 2020. Alongside the ivory, 5.5kg of tiger bones, 1 tiger tooth, 1.03kg of pangolin scales, and 103 dead seahorses were seized.

1.2 Produce national map of trading hotspots and networks

We delivered a first version of our national map of trading hotspots and networks in our Annual Report 1 in April 2018. Our market surveys since then have documented the changes of ivory present in markets in Cambodia and a full analysis of this additional information, capturing trading hotspots and networks, is still underway. Initial analysis suggests that trading hotspots and networks are highly transient and fluid.

1.3 Gendered surveys of consumers and vendors to better understand the links between poverty and the ivory trade

While we were unable to carry out our physical ivory market surveys during Year 3 (see 1.1.), our survey of the online trade of ivory products showed that on average **90% of online shop owners were male**, while on average **95% of comments on ivory advertisement were posted by men**.

Additional, further analysis of our 2019 market survey gave insights into the demographics of ivory sellers and consumers, supporting our earlier findings that rarity and expense, and as

such wealth, are the values driving the trade. For example, **14% of traders mentioned the term “blood ivory”** (see Annex 4.2 for reference) unprompted as a sales tactic. The term is intrinsically Chinese, being used to describe rare ivory that has been harvested off poached or live elephants, rather than collected from elephants that have died of natural causes, fetching higher prices than other ivory products and confirming a prominent affluent Chinese market. The data further found that some carving factories are adapting their production tactics to mass production through the use of advanced automated machinery such as CNC (Computer Numerical Control), indicating a financial and logistical ability of traders to acquire a growing amount of raw ivory and produce carved items to be sold at a higher frequency into the local market. These findings are in line with our research investigating the relationship of poverty to the illegal wildlife trade in ivory in Year 2 which revealed that wealth, not poverty, is a driver of the trade.

We plan to carry out a more detailed research of ivory consumers in Year 4.

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

The data gathered during our ivory market surveys in April 2019, as well as all online trade data, has been shared with the Wildlife Rapid Rescue Team (WRRT) of Wildlife Alliance, which encompasses officers of the Forestry Administration (FA), to be used in their enforcement responses. The raw data of these surveys has also been shared with the MoE, who has used our details of ivory shops to distribute targeted announcements informing vendors of legal implications of trading ivory, rhino horn, and other IWT products, with the appeal to surrender items as part of a first warning stage. This [directive was issued to 30 shops in Siem Reap, 19 shops in Phnom Penh, and two shops in Sihanoukville in September 2019](#). While this action might make investigations harder if it were to shift markets underground, the directive should make judicial actions and prosecutions easier in the long term providing the legal system with clear terms on which to impose prosecutions (something currently lacking).

Further to this work, we supported sharing of information with law enforcement by encouraging the public to report wildlife crime via the WRRT hotline, in our ivory awareness raising campaign at the Phnom Penh International Airport (Annex 4.5). Materials included a billboard and elephant statue located in arrival areas, and a postcard including a call to action via a hotline number. While the postcard was picked up by 1000 travellers entering Cambodia during the month of July 2019, we estimate that approximately 750,000 people will have seen the billboard. The elephant statue generated a lot of interest, especially from the customs agency and on Facebook, resulting in the highest organic reach (14,000) ever seen on our Facebook page, and led to ongoing relationships that have benefited FFI.

1.5 Use existing Asian elephant population genetic data from 250-300 previously collected quality-screened DNA faecal samples to generate genotype data on a genetic marker system, which will enable Cambodian elephant population-level data to be used as a reference resource by laboratories within the ASEAN Wildlife Forensic Network

As reported in Year 2, the RUPP laboratory now has access to over 360 DNA samples from wild Cambodian elephants that are to be used to generate a reference database using two complimentary genetic marker systems. The first, using mitochondrial sequence data has been generated for 320 of the samples and the second, based on 20 nuclear SNPs, has been generated for 41% of the samples. The Cambodian sample database was planned to be completed during Year 3 but the loss of two staff members has led to delays. Discussions with laboratories in Nepal, Vietnam and Hong Kong are ongoing regarding access to samples for a wider Asian elephant database.

Output 2. National and international capacity for collaborative IWT management and enforcement is built

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);

The results of species identification testing of 15 ivory samples was reported at the end of Year 2, please (Annex 4.6 for the results that were presented at the International Congress for Conservation Biology in July 2019). No further ivory samples have been obtained, but a

subsequent analysis of the two samples identified as Woolly mammoth samples has been conducted revealing that they are most likely of North American origin (Annex 4.7). Training of the two new laboratory technicians in the two ivory identification techniques has commenced, with the lab techniques transferred by RZSS in February 2020. Training in the analysis techniques is ongoing and will be a focus of the next training workshop if more ivory samples are obtained.

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);

The mtDNA reference database for the Cambodian elephant samples is complete, the lab now has sequences for 320 samples. The SNP based database which will be the more robust method of determining origin is not yet complete. In total 40 SNP markers have been tested and a panel of 20 were selected for their variability in the Cambodian elephants, using the genetic samples provided from 14 captive elephants within the country. These 20 SNPs are now being genotyped in 481 wild elephant faecal samples. A total of 41% of the genotyping is complete with the rest now to be completed within Year 4.

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

The RUPP laboratory currently has 2 ivory samples that have been identified as from Asian elephants. The main method of determining their origin will rely on the SNP reference database that is currently in production. However, the mtDNA reference database is now complete and we have conducted a comparison with the results from the two ivory samples. The results show that neither of the ivory samples match elephant haplotypes in the Cambodian database (Annex 4.8). The next step will be to include mtDNA data from wild elephants in other countries.

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

RZSS have transferred a gel electrophoresis-based sexing test to the RUPP laboratory. This has been shown to correctly assign the sex of 7 captive Cambodian elephant samples of known sex. It has subsequently been able to successfully sex 7 of the 13 ivory samples. Due to the low quality of DNA from the ivory samples these tests will be repeated in triplicate and optimised to see if we can sex the 6 additional samples. The sexing test is also being used to sex the wild Cambodian reference samples. This was due to be completed in March 2020 but due to COVID-19 lockdowns the RUPP reagent stocks have not been replenished. At present 243 faecal samples have been sexed (Annex 4.9).

The SNPs in the 20 SNP panel have been selected based on their variation within Asian elephant samples. Our tests on the 14 captive elephant samples from Cambodia show that the SNP panel is able to provide unique genetic signatures for each individual and can accurately discriminate between closely related individuals with >99% accuracy. In Year 4 both Asian elephant ivory samples will be genotyped and compared to the captive and wild elephant databases that are currently being generated by the RUPP laboratory.

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

Only one ivory seizure occurred at the end of the project year (see 1.1), however the two new lab technicians at RUPP have been trained in the ivory DNA extraction protocol (in Feb 2020) so they are ready if they have to obtain and work with samples from a seizure. The staff at RUPP record all sample details and test results in access databases. Gel electrophoresis test results are stored electronically in excel files and also physical photographs of each gel are stored in a laboratory folder. Chain of custody protocols were set-up in the RUPP laboratory during Year 2, involving the photographing and cataloguing of each sample that enters the laboratory. All visitors to the laboratory must sign a guest book and any samples that are received must be accompanied by a signed sample transfer form. All ivory samples are kept within a locked safe and the time and date that each sample leaves and returns to the safe is recorded.

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

Two members of the team attended the International Congress for Conservation Biology (ICCB) in Kuala Lumpur in July 2019. With more than 2000 delegates and being based in SE Asia, this was a key opportunity to expand networks within Asian elephant conservation, wildlife trade and conservation genetics. The main RUPP laboratory staff member presented a poster entitled “Using genetics to aid conservation in Cambodia” highlighting the work of the Conservation Genetics laboratory (Annex 4.10). The RZSS WildGenes programme manager presented a talk in the Wildlife Trade session entitled “Using genetics to reveal the origin of illegally traded ivory in Cambodia” (Annex 4.11). Links were made with a huge number of conservation practitioners within SE Asia with the IUCN Asian Elephant Specialist Group discussion being key to linking with Asian elephant biologists in the region. Ongoing discussions with genetic laboratories in Nepal, Vietnam and Hong Kong are also helping to strengthen the links with researchers in key range countries. In Year 4 the plan is for the RUPP lab staff to visit another conservation genetics lab first-hand for increased training opportunities and to strengthen links with researchers internationally.

Output 3. National legislation regarding ivory is in place and effectively enforced

3.1 Produce official report to the government with results from Outputs 1 and 2 highlighting the need for laws banning the sale of ivory;

This is on track for delivery in Year 4. We are coordinating with, and sharing ivory market research findings with, the government on an on-going basis.

3.2 Engage with Ministry of Environment to ensure that laws banning ivory sale and purchase are incorporated into the development of legislation

We have continued to engage with the MoE to ensure that laws banning ivory sale and purchase are incorporated into the development of legislation. This includes providing feedback on the ongoing development of the Environment and Natural Resources Code (ENR Code) which has yet to pass. Specific language banning the sale and purchase of ivory is part of the legislation. Currently, the Code draft contains an article prohibiting the advertisement or selling of fake wildlife products to be treated to the same standard of prosecution as real wildlife, which currently is lacking. The government is still reviewing the latest draft, and we are awaiting feedback for the next steps. As mentioned under 1.4, we also shared our 2017 and 2019 market survey data with the MoE, which has supported their decision to directly inform shop owners of the illegality of selling ivory.

We specifically continued our ongoing engagement with the General Directorate of Administration for Nature Conservation and Protection (GDANCP) of the MoE to support a planned workshop on national IWT issues, specifically focused on ivory and rhino horn. Due to the current Covid-19 safety measures the workshop has been postponed to later this year. One of the outputs of this collaboration is the ivory awareness raising campaign, see 1.4.

Additionally, MoE GDANCP has prompted the Department of Customs and Excise of the Ministry of Economy and Finance to issue a letter to strengthen prevention measures and crackdown activities on the import, export, and transportation of illicit ivory, rhino horn, and their parts and derivatives across borders and domestically within the country. This letter outlines six action plans (Annex 4.12).

3.3 Work with the Forestry Administration/CITES Management Authority to encourage implementation of the National Ivory Action Plan, and close legislative loopholes to facilitate arrest and prosecution of ivory traders;

We have continued our collaboration with the FA/CITES Authorities to encourage implementation of the National Ivory Action Plan (NIAP), and close legislative loopholes to facilitate arrest and prosecution of ivory traders. We met with the Cambodian CITES Scientific and Management Authorities, both based at the FA, ahead of the CITES CoP 18 (held in Geneva in August 2019). We encouraged implementation of the NIAP and offered technical support, including the use of our market survey findings to inform further enforcement actions, and discussed the use of our genetic lab for testing of ivory as part of confiscations and in court cases. Additionally, one member of staff from the FFI Cambodia Programme attended the CITES CoP 18. Based on a policy brief (Annex 4.13) prepared ahead of the CoP, FFI shared market survey findings with a selection of key stakeholders, including TRAFFIC and EIA. Following our

attendance at the CITES CoP 18, we are now supporting the organisation of a workshop hosted by the FA to disseminate and implement the results of the CITES Cop18 on a national level (initially scheduled for March 2020, now postponed to later this year).

In August 2019, the Ministry of Agriculture, Forestry, and Fisheries (MAFF) established an inter-ministerial taskforce to investigate, prevent and suppress illegal ivory trade (Annex 4.14), including the FA, the MoE, and the Ministry of Justice amongst others. In continuing our assistance in strengthening relevant and effective legislation, we are now looking into working directly with members of this taskforce through for example short-term secondment contracts for the last year of the project. This will build the necessary capacity and support to effect the required upgrades in legislation and enforcement. One of an early output is a translation of an IWT product ID guide for TRAFFIC International into Khmer language. A web based publication is planned and will acknowledge Defra IWTCF.

3.4 Engage and train airport border controls and the Forestry Administration/CITES Management Authority to improve airport screening for ivory products entering and leaving Cambodia.

While we engaged with the FA and their CITES Management Authorities (see 3.3), we were unable to carry out official training during Year 3. A training component was planned during a FA-led workshop early 2020 but had to be postponed due to Covid-19 restriction.

3.2 Progress towards project Outputs

1. Improved understanding of Cambodian ivory markets and trading networks – including exploring links between drivers of IWT and poverty – informing policy and interventions to address ivory trade.

At the onset of this project very little was known about ivory markets, hotspots and trade networks in Cambodia. Additionally, interventions addressing ivory trade were minimal, as law enforcement authorities lacked knowledge of ivory trade and how to address it. During the second and third years of this project, we have shared key findings and actionable information with the government and other key stakeholders involved in informing and delivering law enforcement actions, including sharing intelligence on ivory vendors which has resulted in further actions by the government (see 3.2) and sharing data with TRAFFIC directly supporting regional ivory market monitoring (Indicator 1.1-1.2).

Our DNA work confirmed that ivory is from a diverse range of sources, including African elephants, Asian elephants and Woolly mammoths (Indicator 2.1). Confirming that the market in Cambodia is driven by wealth and that Chinese consumers drive much of the end-user ivory market in Cambodia, we put forward recommendations to the MoE that lead to the first ivory awareness raising installation at the main airport of Cambodia (Indicator 1.2). This collaborative work is planned to be built into a larger national strategy to reduce demand for ivory and other IWT products in Cambodia (see 3.2). We are in ongoing discussions with the FA and CITES MA around delivering on the NIAP (see 3.3).

2. Strengthened national capacity for genetic analysis of ivory and regional collaboration for mapping of ivory trade to inform interventions to address ivory trade.

The RUPP laboratory has two technicians that have been trained to extract DNA from ivory samples and run a species ID test. A genetic database of wild and captive Cambodian elephants is being constructed that will allow the identification of ivory samples that have originated from elephants within Cambodia. Discussions with geneticists in Nepal, Vietnam and Hong Kong including within the ASEAN wildlife forensics network is increasing regional collaboration.

3. National legislation regarding ivory is in place and effectively enforced

The groundwork to effectively leverage governmental commitment for strengthening national legislation and law enforcement has been laid in the first 3 years of the project. Data and evidence on ivory has been gathered, and will continue to be gathered, and is shared and discussed with the government (Indicator 3.1). Our survey data led to the first ever seizures of market-level and online-traded ivory in Year 2, resulting in successful prosecution of at least 2 traders, in Cambodia (Indicator 3.4). We have trained officials of the Forestry Administration, the Royal Police, and staff of Wildlife Alliance in ivory identification in Year 2, and are planning to hold trainings for customs officials (Indicator 3.4). Genetic analysis revealed that African

Elephant ivory is present in Cambodian markets, something that has never been proven before and has critically supported the closing of the existing loophole surrounding African elephants in legislation and prosecution (Indicator 3.2).

3.3 Progress towards the project Outcome

Outcome: Effective enforcement of illegal ivory trade in Cambodia, through improved knowledge of Cambodian ivory markets and trading networks, increased national capacity for genetic analysis of ivory, and strengthened legislation.

The project has shared the results that were compiled during the last three years, and closely engaged with the government and other relevant stakeholders to highlight these findings and garner support for effective enforcement of the illegal domestic ivory trade. While we saw a spike in ivory items available for sale in markets during Year 2, confirming our predictions early on, we have now seen a reduction of ivory offered for sale during Year 3 (see 1.1). As mentioned earlier, this might be a direct result of the increased knowledge of the trade and subsequent governmental action. Recognising that parts of the trade may have shifted out of sight, we believe that in the long-term new and developing governmental actions and directives will increase and expedite judicial actions and prosecutions for ivory trafficking and marketing, something that remains a critical limitation presently. We have seen the success of two traders being prosecuted in Year 2 and will focus our support of the government in ensuring appropriate legal responses in Year 4. We remain confident that we can progress towards a 50% decrease in sold ivory items in the markets from baseline by end of year 4 (Indicator 1 & 3).

Our ivory DNA testing shows that the illegal ivory trade in Cambodia is having far-reaching effects, with ivory samples being trafficked from across the globe. The majority of the 15 samples tested are of African origin, from a diverse range of regions, including West, Central, East and Southern Africa. We have also identified two mammoth samples that are of likely North American origin and two Asian elephant samples that do not match any of the Cambodian elephant reference samples. This suggests that the ivory samples are from outside of Cambodia, and that there are multiple illicit trade routes leading to the ivory that is being sold in the Cambodian market. There is now a laboratory at RUPP which has two technicians trained to extract DNA from ivory and test for species identity within Cambodia for the first time. Our DNA findings confirming the presence of African elephant ivory in Cambodian markets for the first time has supported the critical step that the government has taken to close the legal loophole that existed for African Elephants (Indicator 2).

3.4 Monitoring of assumptions

Outcome assumptions:

Assumption 0.1: The market surveys capture the actual existing ivory market

Comments: Over the first two years of the project, the domestic trade of ivory in Cambodia was very open and we were able to easily capture the scale of the market through questions and photos at all three locations. Due to the increase in public attention and governmental action (see 1.1) we now see a reduction in ivory for offer in physical shops (with an increase in online sales). It is unclear if this is due to an actual reduction in ivory or if the market is shifting underground, and we will remain in close contact with our enforcement partners to monitor this where possible. However, we believe that on-going governmental action will increase judicial actions and prosecutions in the long term, something that is currently critically lacking.

Assumption 0.2: The government and enforcement authorities are open to creating and enforcing strengthened laws concerning ivory trade

Comments: The progress on the Environmental Code, the inclusion of the African Elephant to the national protected species list in Year 2 of the project, and the establishment of the inter-ministerial taskforce on ivory (Annex 4.14) support this.

Assumption 0.3: The government and airport authorities release ivory confiscation figures

Comments: We will keep this in mind when engaging in more depth with the government in Year 4.

Output 1 assumptions:

Assumption 1.1: Potentially sensitive information is shared

Comments: Due to team members having been recognised in past surveys, we will continue to employ external and experienced consultants for any future surveys to extract sensitive trader information beyond documenting ivory for sale.

Assumption 1.2: Government supports strengthened law enforcement

Comments: We have seen first seizures of carved ivory items taking place in shops and the online trade during Y2 and Y3 of the project, out of which a minimum of two have resulted in prosecutions. See also Assumption 0.2.

Output 2 assumptions:

Assumption 2.1: Government is open to continued testing of ivory

Comments: While we are still positive that the government has a high interest in the testing of ivory, recent heightened political sensitivity around ivory has led the government to being more closed off around seizure and stockpile procedures. The fact that there are still little legislative and often confusing processes around ivory is stifling individuals from making decisions. However, the aim of the new taskforce as well as the NIAP include section about DNA testing of ivory so a high interest and need for the government to make use of established resources remains.

Output 3 assumptions:

Assumption 3.1: Engaging with our existing partners at the Forestry Administration, and feeding information to Wildlife Alliance will have an impact on improving law enforcement

Comments: Wildlife Alliance undertakes 90% of investigations of wildlife offences in Cambodia through 12 governmental officers under their Wildlife Rapid Rescue Team. Our information has supported seizures of ivory from shops in Phnom Penh and Siem Reap, and led to further investigations of online traders.

Assumption 3.2: Wildlife Alliance will continue to have resources and the will to improve law enforcement.

Comments: We are working closely with Wildlife Alliance and believe there is a strong will to make resources available to improve law enforcement.

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

Our proposed impact is a reduction of the illegal ivory trade in Cambodia contributing to decreased threat to elephant populations from IWT globally. Over the last 3 years we have filled critical knowledge gaps of the status of the ivory trade in Cambodia, and continue to build the capacity of Cambodia to actively reduce the international trade. Before this project, very little was known about Cambodia's place in the international ivory trade, and it was widely considered unimportant. Since then, our data has been referenced in national and international discussions around ivory trade, e.g. an ETIS report and the subsequent CITES Cop 18 discussions, being invited to the UK's Serious and Organised Crime Joint Analysis (SOCJA) team Roundtable at the British Ambassador Residence, as well as international attention in media and discussion pieces (see 13). Our work has attracted more collaborations and has been followed by others carrying out ivory surveys in Cambodia (e.g. TRAFFIC). Within its second year it has supported critical steps by the government in closing legal loopholes, something we only predicted to happen by Year 4. Our research in Year 2 furthermore confirmed that livelihoods of impoverished people are not dependent on the domestic ivory trade, but that the ultimate driver of the trade are wealthy and connected parties that contribute to the widening economic gap between rural and urban areas in Cambodia, something that has been supported by our trader and consumer analysis of our 2019 surveys (see 1.3).

4. Project support to the IWT Challenge Fund Objectives and commitments under the London Declarations and Kasane Statement

The project directly works towards strengthening law enforcement and the role of the criminal justice system in Cambodia, IWT Challenge Fund's 2nd key objective. Through ivory market surveys and surveys on ivory trade routes, the project started building national understanding and evidence of Cambodian ivory markets and trade networks, information that the criminal justice system is still widely lacking, and which is being shared with the government. The establishment and ongoing technical and institutional capacity building of the conservation genetics lab not only supports but amplifies this effort in that it proves the origin of ivory sold in Cambodian markets.

Notable achievements supporting this objective are:

- IWTCF Objective 1: In Year 3 we further supported our Year 2 research findings investigating the relationship of poverty to the illegal wildlife trade in ivory, confirming that wealth is the main driver (see 1.3).
- IWTCF Objective 2: Our past market surveys and online trade surveys have led to enforcement actions of the WRRT;
- IWTCF Objective 3: While our DNA analysis confirming African ivory in domestic markets has supported the action of listing the African Elephant on the national protected species list, ultimately closing this legal loophole in Year 2 of the project, the lab has continued to build a data base for captive Cambodian elephants, ultimately aimed at providing the government with direct measures to protect these remaining individuals;
- IWTCF Objective 4: Grounded in our findings, and in close collaboration with the MoE, we implemented an ivory awareness raising installation at the Phnom Penh airport aimed at reducing the demand for ivory (see 1.4).

We furthermore directly supported TRAFFIC in their national ivory surveys aimed at monitoring regional ivory markets.

As a result, our activities in Year 3 specifically linked to the London Declaration commitments I., V., VII., X., XI., XII., XVII., to the Kasane Statement commitments Number 2, 3 and 5, as well as to the Hanoi Statement commitments A, B, and C.

5. Impact on species in focus

Even though it is hard to quantify the project's impact on a species level, we have taken steps to reduce threats to the global elephant populations. Our goal is to reduce the global trade in ivory, and thus reduce threats to elephants. Our results from the first three years of the project provide a critical first step, as we have begun clarifying the scale of the ivory market in Cambodia and thus its role in driving the global trade. By monitoring the domestic market we can show that Cambodia has grown into an end-user destination for ivory, thus becoming a country that plays a role in driving the international trade in ivory. We will use our data to support the government and other stakeholders to actively reduce the ivory market, thus reducing the threats to elephants globally. The building of capacity in-country for genetic analysis of ivory samples (Indicator 2.1-2.4) and the subsequent development of regional genetic markers as well as the market surveys will lead to an understanding of ivory trade networks in Asia which will in turn safeguard regional elephant populations. (Indicator 1.1-1.4)

We are also actively engaged in monitoring one of the most important wild Asian elephant populations in Indochina, in the Cardamom Mountains. The population is currently stable, and has had no incidences of poaching in over a decade. According to our research there is a clear market preference for Asian ivory over African ivory. Due to the notion of Asian elephant ivory, and especially Cambodian ivory, to be more valuable to traders and consumers due to its perceived uniqueness, quality and rarity, this trade intensifies the threat against the remaining local elephant populations in Cambodia by ivory traffickers. We are actively monitoring any emerging threats, especially the possibilities of poaching driven by the demand for ivory.

Filling those gaps of understanding, will enable as well as press the government to respond to the illegal trade by enforcing laws that disrupt trade networks and reduce Cambodia's role in the transit and marketing of ivory. We have seen a first achievement in the inclusion of the African Elephant on the protected species list of Cambodia, which will help to reduce the threat

of poaching for ivory to elephant populations in African source countries (Indicator 3.2), two prosecutions of ivory traders in Year 2, and the government prioritising national response to the trade (see 3.2 and 3.3) (Indicator 3.1).

6. Project support to poverty alleviation

Primary beneficiaries of the project are the project's government and academic partners, whose capacity is built on collaborative IWT management and enforcement and who will acquire knowledge of ivory trading networks, including links to poverty. Within the RUPP, the two lab technicians are receiving comprehensive in-country trainings as well as ongoing weekly coaching from RZSS. This continuous training does not only include genetic analysis but covers broader subjects such as conservation issues, research skills, and lab management to ensure the long-term sustainability of the lab and the greatest benefit to the University. In addition to direct training, the RUPP is benefiting from improved and established collaborations and communication channels to project partners such as the RZSS beyond the project life cycle. The establishment of a conservation genetics laboratory in RUPP will hopefully have far reaching benefits for (i) the university's knowledge and teaching of conservation issues (ii) the research and analytical skills of staff and (iii) future in country conservation initiatives. Governmental capacity will be built through disseminating key findings from the project and targeted training. This includes staff from the FA concerned with laws and policies regarding forest resources, but is also targeting governmental officials from the MoE who are overseeing the management of protected areas. For example, the project team has held a workshop for Wildlife Alliance and their law enforcement officers on ivory identification during Year 2. In Year 3, we have drafted a National Ivory and Rhino horn Demand Reduction Strategy in close collaboration with the MoE (this is planned to be part of a workshop held in Year 4). It is expected that this capacity will keep growing after the project ends, through dissemination of training materials and end results. Overall this will increase the capacity of the Royal Government of Cambodia to respond to and address wildlife crime, helping them to uphold national laws and meet international commitments (Indicator 1.2).

Our research investigating the relationship of poverty to the illegal wildlife trade in ivory in Year 2 revealed that rarity and expense are the values most associated with ivory among consumers, and that wealth, regardless of nationality, is a shared trait among buyers. This confirms previous research which showed that the demand for high-value wildlife products in Asia is principally driven by wealth. Key findings also indicate that a growing number of Cambodians are buying ivory, alongside the driving Chinese market. While the research did little in revealing a detailed socio-demographic profile of ivory vendors, it suggests that vendors are part of a wealthier and influential network, which is supported by findings from our market and undercover market surveys. Our Year 3 research further highlights this, finding the market being geared towards a prominent affluent Chinese market and indicating a high financial and logistical capacity of traders (See 1.3). This further illustrates that banning of ivory is highly unlikely to impoverish local vendors. Vendors however provided considerable insights into the consumption of ivory in Cambodia in terms of degree and nature of local- and foreign- demand, further highlighting the need that interventions need to include efforts around demand reduction.

Secondary beneficiaries are communities in source countries, including Cambodia. Loss of iconic elephants, and other wildlife species linked to the same trade networks, undermines their livelihood and income opportunities, deteriorates essential environmental services and destroys natural heritage, representing significant opportunity costs in terms of future development options foregone. This project contributes to addressing the global illegal trade in African and Asian ivory, and also to a greater understanding of wider wildlife trade networks, and poor natural-resource dependent communities. To maximise the impact of this project beyond the project location, the project will ensure that findings will be shared widely, both through FFI's global programmes (including critical elephant sites in Africa and Asia) and FFI's global partner network, and shared externally with other partners and programmes through conference attendance and publication of results which were not available before. As such, it indirectly benefits local communities living closest to source populations in Africa, Asia, and in Cambodia specifically. A notable achievement benefitting source countries was the inclusion of the African Elephant on the protected species list of Cambodia, effectively criminalising African Elephant ivory in Cambodian markets.

7. Consideration of gender equality issues

We have documented gender throughout all of our surveys in order to be able to account for gender related issues in IWT. In Cambodia, women often have major roles in running small businesses and household finances but are under-represented in governmental and policy-making roles. Our survey of the online trade of ivory products throughout Year 3 showed that only a very small margin of online shops (approx. 10%) were operated by women and only few online commenters (approx. 5%) were female. This aligns with our online surveys so far where we have seen similar patterns in gender. While we were unable to carry out our physical ivory market surveys during Year 3 (see 1.1.), previous surveys showed that gender was about evenly divided, with slightly more female ivory vendors, which suggests that physical markets have a higher participation of women. These findings will inform any demand reduction strategies going forward.

RZSS continues to highlight International Day of Women and Girls in Science; in 2020 releasing a week of blogs focusing on women partnerships in conservation. Three of the staff working on the IWT project were featured (see [Helen Senn & Regine Weckauf](#); [Jenny Kaden](#)).

Operationally, this project seeks to ensure gender inclusiveness at all levels and ensures a gender inclusive environment in all hiring processes and selection for, and participation in, training opportunities. All interview panels for the RUPP lab technician positions have consisted of a gender mix and each recruitment drive has attracted female and male applicants. While it was planned that the RZSS and RUPP laboratory staff would be entirely female, due to changed commitments of previous staff and fair selection of most suitable candidates, the RUPP project team now consist of male staff, while the RZSS team is 2/3rd female. The IWT project team of FFI consists of 100% female staff.

8. Monitoring and evaluation

The main indicator of our project outcome is the status of the ivory trade in Cambodia. This is being monitored through regular surveys, which still stands as the best approach. As we work closely with law enforcement stakeholders, law enforcement actions made resulting from our work will be documented. As legal documentation of prosecutions is difficult to obtain, we have to rely on enforcement officers statements given to us verbally or documented by the media. We will keep engaging relevant people to improve documentation of official enforcement and prosecution successes.

The FFI Cambodia IWT team meets regularly to discuss progress and needed steps, specifically in regards to sharing information and meeting government officials. The Project lead has quarterly skype meetings with the Senior Technical Specialist IWT of the FFI Conservation Partnerships Team to review the overall project progress and discuss any challenges. The progress is tracked in a project workplan.

RZSS conducts weekly Skype meetings with the RUPP conservation genetics laboratory. These meetings are also used to plan the work schedule and the meeting minutes are circulated to the wider partnership so that the project team is up-to-date with developments and progress (Annex 4.15). This allows evaluation of progress, discussion of questions and plans for the next phase of work. Each week the technicians at RUPP fill out a work plan. A shared dropbox folder that is accessible to RUPP, FFI and RZSS staff on the IWT project allows everyone to keep up to date on the genetic ivory testing process and share relevant literature and data between all members.

9. Lessons learnt

During Year 3 we have had to manage several setbacks for the genetics lab. Having lost our Lab Technician in August 2019, as well as our part-time lab technician (see HYR3), we had to re-recruit both positions which proved difficult and time consuming. Delays in recruiting replacement technicians have also impacted on the transfer of knowledge between trained and untrained staff. Recruiting qualified laboratory technicians has been a major challenge. The skills required for these complex technical roles are extremely rare within Cambodia and we only received two suitable applicants in the most recent recruitment drive. Having re-filled both positions successfully only recently we are now in the process of re-building the lost human capacity and will have to re-build the large number of links with relevant contacts that were built

previously. We are now planning to employ three members of lab staff to provide increased redundancy and guard further against loss of staff in future.

Time taken to complete administrative paperwork in Cambodia has continued to impact the project progress. Completing contracts, payment to staff, access and purchase of equipment often faced large delays. The CITES permit that was sought for the transfer of one sample for whole genome sequencing has yet to be achieved, after 18 months.

Attendance and presentations at the ICCB conference were a key highlight. The first international conservation conference attended by the RUPP staff allowed them to gain huge insight from and interact with conservation practitioners and biologists from across the globe. There was huge interest in the RUPP laboratory's work and links were made with other elephant genetics labs in the wider region. It was a great motivator for the RUPP staff and they came away from it with many ideas and enthusiasm for the future.

The new ivory drilling cabinet that the RUPP Biology department have installed within the lab now provides a much more convenient area for the initial step of processing ivory samples. With its own external fan it also reduces potential contamination of other procedures within the laboratory. It has been used for training this year and to rerun some of the previous samples as controls.

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

We received below two comments on our last year's annual report:

1. A more detailed description of the market survey methodology would be valuable in a future report.

We addressed this in the response letter that formed part of the half year report, outlining our market survey methodology in more detail. We promised evidence of this alongside our Year 3 surveys in form of corresponding semi-informal interview guide, map locations, and resulting data. As we were unable to carry out any surveys during Year 3, we are unable to provide these means of verification now. As mentioned in this report, we are working with TRAFFIC on a publication of all datasets, which will include methodology section.

2. An indication of what if any contingencies will be put in place to account for challenges to future ivory testing.

As mentioned in the response letter, the project has had difficulties obtaining confiscated ivory for testing and has therefore focused more on the development aims of the project. We have held several in-country meetings between the project partners in January and February 2020 to discuss a full contingency plan. However, due to the staff challenges discussed in sections 9, 11, and 12, we will need to prioritise building the limited human capacity needed before being able to predict any future testing capacity. While the capacity is being re-build for ivory testing, staff capacity is also being built on other techniques applicable to illegal trade to allow the lab to diversify to other IWT products. The DNA extraction and PCR techniques are highly transferable to other illegally traded product tests, and as part of the training by RZSS other items have been the focus of some of the protocols, including the identification of the Rhino horn samples. The lab is already conducting testing on Siamese crocodiles and plans are being discussed to test illegally traded marine turtle products as part of USFWS project during 2020.

11. Other comments on progress not covered elsewhere

- Biggest risk is the retention of staff in the RUPP laboratory. Training staff to both understand and conduct the genetic work is a time consuming and laborious process. With such investment, if staff are lost even with the transfer of knowledge it has huge knock-on effects for the completion of work and the future of the laboratory.
- Investments have been made to the laboratory facilities this year. In addition to the ivory drilling cabinet, a new computer has been installed that is now capable of running the power intensive analyses that are required when working with genetic data. In April 2019 there were huge power cuts across the country related to a much more severe drought than usual. This impacted the electricity supply to the lab with freezers defrosting. This was a major concern for the preservation of the genetic material and we are pleased to

say that back-up batteries are now in place to protect key pieces of lab equipment such as the freezers. The lab staff conduct daily freezer checks to keep track of any problems.

12. Sustainability and legacy

There appears to be significant interest in engaging with our project from relevant law enforcement entities. Our survey information has led to prosecutions, and our genetic analysis influenced the move of the Cambodian government to legally protect African Elephants. The Environmental Code also appears on its way to being approved, and the NIAP implementation is now supported by a newly established inter-ministerial taskforce, thus there could be even stronger legal underpinning to support our work. International stakeholders such as UNODC, the US State Department, and CITES/TRAFFIC are also expressing to continue in working closely to stop the ivory trade in Cambodia.

The genetics lab at RUPP has taken strides in their capacity to develop the lab into the future during the first two years. The loss of staff is a critical blow to the sustainability of the lab at the present time, and it is going to take a huge effort to retrain staff so they are able to manage a self-sustaining laboratory in the long term. It is our view that further support is going to be required for a longer period of time than first envisioned. There has been substantial interest in the use of the laboratory by NGOs within the country; the need is still there but the lab expertise now requires investment and growth if they are to meet that demand. During Year 4 we will look into gaining further support from relevant governmental departments, and establishing other partnerships. There is already a secondary project in place on the genetics of Siamese crocodile and projects are in development on the testing of other illegally traded wildlife products. This comes at an opportune time as FFI plans to transfer ownership of a long-term and highly successful University Capacity Building Programme, on which the genetics lab builds on, to RUPP.

13. IWT Challenge Fund identity

The IWTCF were acknowledged as funders as below.

- The ivory awareness installation credited IWTCF on postcards aimed at tourists and potential ivory consumers which was picked up by 1000 travellers (Annex 4.5).
- A corresponding [Facebook post](#) credited IWTCF reaching approx. 14,000 people (Annex 4.5).
- A CITES policy brief distributed and discussed during the CITES CoP18 credited IWTCF (Annex 4.13).
- The Project Lead presented the project during a LTS International led Case Studies Webinar
- During a UK's Serious and Organised Crime Joint Analysis (SOCJA) team Roundtable at the British Ambassador Residence, Phnom Penh, 6 November, attended by the Project Lead.
- A [Facebook post](#) sharing the RZSS article on International Day of Women and Girls in Science (see 7.)
- A poster presented by the RUPP Lab technician at the International Congress for Conservation Biology attended by >2000 international delegates (Annex 4.10).
- RZSS have published two media articles, one that is distributed across the global network of the World Associations of Zoos and Aquaria (Annex 4.16) and the other in the national media (Annex 4.17).
- The RZSS comms team have also set up a [project webpage](#) about the capacity building in Cambodia.

14. Safeguarding

The below Safeguards are in place for all FFI operations. FFI monitors updates in Government and Charity Commission guidance and reviews policies and procedures accordingly. No safeguarding issues have been reported during the reporting year; project specific comments are provided under each heading.

FFI's **Safeguarding Children and Adults at Risk Policy & Procedure** was developed in 2014 and last updated in March 2018. The policy applies to Members of Council and its sub-

committees, FFI employees, temporary staff provided through agencies, volunteers and interns, contractors, consultants, service providers and any third parties who carry out work on behalf of FFI, in partnership with FFI or in conjunction with FFI. The policy demonstrates the organisation’s commitment to safeguarding children and adults at risk and to complying with the United Nations Convention on the Rights of the Child; confirms the arrangements and procedures in place to safeguard children and adults at risk, including FFI’s code of conduct; and provides clear guidance on how to raise, and how FFI responds to, concerns and allegations regarding the maltreatment of children and adults at risk. The policy expressly states that FFI does not tolerate sexual exploitation and abuse of any kind.

The project has not interacted with children or adults at risk.

FFI’s **Anti-bullying and Anti-harassment Policy** was developed in 2018. The policy applies to Members of Council and its sub committees, FFI employees, temporary staff provided through agencies, volunteers and interns, contractors, consultants and any other third parties who carry out work on FFI’s behalf. The stated purpose of the policy is to ensure a safe, welcoming and inclusive working environment, which is free from intimidation, threats, discrimination, bullying or harassment; to communicate clearly FFI’s zero-tolerance of any form of bullying or harassment; to define the terms ‘bullying’ and ‘harassment’ and provide examples, so that there is a clear understanding of the types of conduct that are prohibited; to communicate the importance of reporting incidents of bullying and harassment; and to communicate the procedures in place to manage incidents of bullying and harassment. The policy expressly states that bullying or harassment of any kind against a person or group of people, whether persistent or an isolated incident, will not be tolerated under any circumstances.

All FFI staff has received an induction outlining above policy.

FFI’s **Whistleblowing Policy** was developed in 2013 and last updated in December 2019. The policy applies to FFI employees. The stated purpose of the policy is to encourage employees to report suspected wrongdoing in the organisation as soon as possible, in the knowledge that their concerns will be taken seriously and investigated as appropriate, and that their confidentiality will be respected. It provides guidance on how to raise those concerns and aims to reassure employees that they can raise genuine concerns in good faith without fear of reprisals, even if they turn out to be mistaken.

All FFI staff has received an induction outlining above policy.

FFI’s partner due diligence procedures include checking whether any safeguarding concerns have arisen with the partner concerned and the Safeguarding Children and Adults at Risk Policy & Procedure forms part of contracts and agreements with third party contractors and sub-grantees. We are also currently researching LMS platforms (Learning Management Systems) which would enable online training in policies & procedures.

Due diligence has been carried out for project partners.

In terms of **social safeguards**, FFI has publically available position papers on our approach to [Free, Prior and Informed Consent Position](#), [Gender in Conservation](#), [Displacement and Restrictions on Access to Resources](#) and [Conservation, Livelihoods and Governance](#) (links below). Our specialist Conservation, Leadership and Governance team support regional FFI staff and partners to take a holistic, people-centred approach to biodiversity conservation, and to ensure all project activity is strongly aligned with these principles.

15. Project expenditure

Table 1: Project expenditure during the reporting period (April 2019-March 2020)

Project spend (indicative) since last annual report	2019/20 Grant (£)	2019/20 Total actual IWT 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				

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

N/A

Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2019-2020

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
<p>Impact</p> <p>Reduction of illegal ivory trade in Cambodia contributing to decreased threat to elephant populations from IWT globally.</p>		<p>The third year of the project has seen a continuation of sharing of collected information and new collaboration to inform work to strengthen legislation and law enforcement on the illegal trade in ivory.</p>	
<p>Outcome Effective enforcement of illegal ivory trade in Cambodia, through improved knowledge of Cambodian ivory markets and trading networks, increased national capacity for genetic analysis of ivory, and strengthened legislation.</p>	<ol style="list-style-type: none"> 1. 50% decrease from the 2016 baseline (1,116 pieces) of the recorded amount of ivory available for sale in markets in Cambodia by Y4 2. Legislation in place to close loopholes regarding ivory 3. Authorities begin confiscating ivory, and arresting/fining ivory market vendors by Y4 4. By the end of Y4 airport confiscations of ivory products increase 50% from Y1 baseline 	<ol style="list-style-type: none"> 1. In progress. As predicted, Y3 TRAFFIC surveys showed a 50% 50% reduction in ivory availability in markets when compared to FFI's 2017 market surveys (see 1.1) 2. In progress, to be fully completed by Y4. The loophole for the protection of African Elephants has been closed in Year 2. 3. In progress. Supported first market-level seizures of ivory in Year 2 and governmental warnings to vendors in Year 3 (see 1.4). 4. In progress. Gathering of data has been started. 	<ol style="list-style-type: none"> 1. Continued monitoring of ivory markets in Cambodia. 2. Continued engagement in development of the Environmental Code (see 3.2). 3. Engagement with local police and legal system to capture seizure and prosecution data. 4. Continuing monitoring of market and trade network data. Engagement of airport staff.
<p>Output 1. Improved understanding of Cambodian ivory markets and trading networks – including exploring links between drivers of IWT and poverty – informing policy and interventions to address ivory trade.</p>	<ol style="list-style-type: none"> 1.1 Results of biannual market surveys are shared and discussed with government and NGOs 1.2 Findings of research into ivory trade networks and the links between IWT and poverty are used by key stakeholders (e.g. government, NGOs) to inform policy and intervention 	<ol style="list-style-type: none"> 1.1 Y2 market survey data and Y3 online data has been shared with law enforcement and NGOs. See Section 3.1 and Annex 4.13. 1.2 Ivory market data from Y2 and online trade data from Y3 have been shared with relevant stakeholders. See Section 3.1 and Annex 4.13. 	

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
	<p>1.3 Existing wildlife trade data from government and NGOs are collated annually and mapped</p> <p>1.4 Cambodian elephant population genetics used to develop regional markers and used for law enforcement</p>	<p>1.3 Data has been compiled. See Section 3.1 and Annex 4.4.</p> <p>1.4. Genetic markers to test the origin of Asian elephant ivory have been developed. The reference database is currently being built. See Section 3.1 and Annex 4.8.</p>	
<p>Activity 1.1 Conduct biannual surveys of markets to monitor and quantify ivory 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;</p>		<ul style="list-style-type: none"> • No ivory market surveys were carried out during Y3 (see 1.1), Y2 ivory market surveys results analysis was completed, FFI supported ivory market surveys carried out by TRAFFIC Oct 2019 based on FFI's methodology; • Online trade surveys were repeated for the low and high season during Y3 to evaluate the potentially important and understudied online trade market in Cambodia; • Media surveys were continued from April 2019 – March 2020 to reveal the number of ivory seizures in Cambodia. <p>Evidence provided in section 3.1 and Annex 4.2, 4.3, 4.4.</p>	<ul style="list-style-type: none"> • Continue conducting surveys and mapping of ivory trade hotspots in Cambodia; • Conduct an ivory consumer research; • Updating database of media survey and online survey on ivory seizure for 2020/21.
<p>Activity 1.2 Produce national map of trading hotspots and networks;</p>		<ul style="list-style-type: none"> • Data has been gathered and map is in progress. To be finished by end of project. 	
<p>Activity 1.3 Conduct gendered surveys of consumers and vendors to better understand the links between poverty and the ivory trade;</p>		<ul style="list-style-type: none"> • No market surveys were conducted during Y3 (see 1.1). 	<ul style="list-style-type: none"> • Conduct gendered surveys of ivory trade in Cambodia; • Conduct ivory consumer research.

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
Activity 1.4 Provide intelligence to law enforcement on ivory trade networks to facilitate effective enforcement;		<ul style="list-style-type: none"> Market trade data from Y2 and online trade survey data from Y3 have been shared with law enforcement. <p>Evidence provided in section 3.1.</p>	<ul style="list-style-type: none"> Continue conducting surveys of ivory trade in Cambodia and share with law enforcement.
Activity 1.5 Use existing Asian elephant population genetic data to generate genotype data on a genetic marker system.		<ul style="list-style-type: none"> The mtDNA genetic marker system for Cambodian wild elephants is complete. The SNP genetic marker system is 41% complete. <p>Evidence provided in section 3.1.</p>	<ul style="list-style-type: none"> Complete the SNP genetic marker reference database for the wild Cambodian elephants and expand to other countries within the region. Compare the mtDNA ivory results to available wild elephant genetic data in 8 other range countries.
<p>Output 2. Strengthened national capacity for genetic analysis of ivory and regional collaboration for mapping of ivory trade to inform interventions to address ivory trade.</p>	<p>2.1 By Y2, the origin of an initial 30 independent samples of illegally trafficked ivory is genetically determined</p> <p>2.2 By Y4, there is a genetic knowledge base to trace Asian ivory routes to Cambodia and the wider region by laboratories within the ASEAN Wildlife Forensic Network</p> <p>2.3 By end Y4, two female RUPP lab technicians and one local FFI senior staff are fully trained by RZSS to genetically test collected ivory</p> <p>2.4 By end of Y4, law enforcement officials from FA and Conservation NGOs (e.g. Wildlife Alliance) workers are genetically identifying ivory utilising the lab</p>	<p>2.1 Currently only 15 ivory samples of which 2 are known fakes have been provided to the RUPP laboratory for testing. The species identification of these samples is now complete (9 African, 2 Asian & 2 Woolly Mammoth). Additional testing had to be developed due to two challenging samples, which have turned out to be Woolly Mammoth ivory. More precise geographic origin testing of the Asian samples requires the production of an Asian elephant database which is continuing throughout Y4.</p> <p>2.2 The mtDNA reference database for the Cambodian elephant samples is complete, the lab now has sequences for 320 samples. The SNP based database which will be the more robust method of determining origin is not yet complete. A total of 41% of the genotyping is complete with the rest now to be completed within Y4.</p> <p>2.3 During most of Y2 there was 1 female and 1 male RUPP lab technician training to genetically test ivory. However, the female technician has left her position and has been replaced by a male lab technician. For Y4 it is planned to recruit a third staff.</p> <p>2.4 We have yet to have submissions of any ivory from law enforcement officials' and RUPP staff have conducted an information session for law enforcement officials in Y2. A key focus remains continued communication with enforcement officials to better communicate the benefits of ivory The aim being to produce information on the origins of the ivory to better understand trade networks.</p>	

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
Activity 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);		<ul style="list-style-type: none"> Species provenance has been obtained successfully for the 15 ivory samples provided to the RUPP laboratory 	<ul style="list-style-type: none"> Testing of further samples if obtained.
Activity 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);		<ul style="list-style-type: none"> Access to genetic samples from wild Cambodian elephants in 4 protected areas have been obtained. The mtDNA genetic database for Cambodian wild elephants is complete (n=320 samples). The SNP genetic database is 41% complete. 	<ul style="list-style-type: none"> Complete the SNP genetic database.
Activity 2.3 Investigation of geographic origin of Asian ivory found in Cambodia;		<ul style="list-style-type: none"> The two ivory samples identified as Asian elephant have been tested against the mtDNA database. This test shows that neither sample is an exact match to the Cambodian wild elephant samples. 	<ul style="list-style-type: none"> Compare the ivory samples to the SNP genetic database. Expand the database to include wild samples from other range countries. Expand the mtDNA database to include data from 8 other range countries and run a comparison to the ivory samples.
Activity 2.4 Establishment of individualisation and sexing tests to allow for seizure inventory (SNP-based or microsatellite testing);		<ul style="list-style-type: none"> A sexing test and SNP-based individualisation has been developed by RZSS and has been transferred to the RUPP lab. Sexing tests have been verified with known sex captive elephants and testing conducted on all ivory samples with 7/13 providing successful results. A total of 243 of the wild elephant samples have been sexed. 	<ul style="list-style-type: none"> Sexing tests need to be completed for all wild samples and the ivory samples tested for individualisation.
Activity 2.5 Establishment of seizure sampling, data-basing and chain of custody protocols;		<ul style="list-style-type: none"> Data-basing and chain of custody protocols have been set-up in the laboratory 	<ul style="list-style-type: none"> International audit by forensics expert planned.

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
Activity 2.6 Strengthen professional links of the lab with regional and international wildlife forensics/ elephant genetics network.		<ul style="list-style-type: none"> Attendance at ICCB conference and presentation of results by lab staff. 	<ul style="list-style-type: none"> RUPP technician international visit to conservation genetics/forensics labs planned
Output 3. National legislation regarding ivory is in place and effectively enforced	<p>3.1 By Y3, the official report to Government incorporating data and evidence gathered on ivory trade to support law enforcement is disseminated through workshops to authorities, and utilised within 12 months from that point</p> <p>3.2 By end of Y4, government legislation makes the sale and buying of Asian and African ivory illegal</p> <p>3.3 By end of Y4, 50% increase of ivory seizures at the airports from 2017 baselines</p> <p>3.4 By end of Y4, arresting and/or fining wildlife criminals for ivory related crimes is effectively carried out</p>	<p>3.1 Results from Y2 and Y3 have been shared with the government. See section 3.1.</p> <p>3.2 The government has made the sale and buying of Asian and African ivory illegal in Y2. Engagement continues with the Ministry of Environment on the Environmental Code. See section 3.1 and 3.2.</p> <p>3.3 No airport seizures in 2019. Ongoing monitoring of seizures and engagement with airport authorities planned. See section 3.1.</p> <p>3.4 Currently only data is gathered to inform activities related to strengthening law enforcement. It is planned to engage with local police and legal system to capture seizure and prosecution data going forward.</p>	
Activity 3.1 Produce official report to the government with results from Outputs 1 and 2 highlighting the need for laws banning the sale of ivory;		Results from Y2 and Y3 have been shared with the government. See section 3.1.	Workshop is planned for Y4.
Activity 3.2 Engage with the Ministry of Environment to ensure that laws banning the sale and purchase of ivory are incorporated into the development of legislation;		We are collaborating with other NGOs in Cambodia and the Secretariat of the Technical Working Group to input to the Environment and Natural Resources Code (ENR Code).	Continuing our input to the ENR Code in Y4.
Activity 3.3 Work with the Forestry Administration/CITES Management Authority to encourage implementation of the National Ivory Action Plan, and close legislative loopholes to facilitate arrest and prosecution of ivory traders;		We have engaged with FA in their delivery of the NIAP. Our findings have encouraged MAFF (FA) to close the loophole that existed around African Elephants in Y2.	Continuing our engagement, supporting a FA-led workshop on CITES Cop18 implementation in Y4.

Project summary	Measurable Indicators	Progress and Achievements April 2019 - March 2020	Actions required/planned for next period
Activity 3.4 Engage and train airport border controls and the Forestry Administration/CITES Management Authority to improve airport screening for ivory products entering and leaving Cambodia.		To be commenced in the next period	

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

N.B. if your application’s logframe is presented in a different format in your application, please transpose into the below template. Please feel free to contact IWT-Fund@ltsi.co.uk if you have any questions regarding this.

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Impact: Reduction of illegal ivory trade in Cambodia contributing to decreased threat to elephant populations from IWT globally.			
Outcome: Effective enforcement of illegal ivory trade in Cambodia, through improved knowledge of Cambodian ivory markets and trading networks, increased national capacity for genetic analysis of ivory, and strengthened legislation.	<ol style="list-style-type: none"> 1. 50% decrease from the 2016 baseline (1,116 pieces) of the recorded amount of ivory available for sale in markets in Cambodia by Y4 2. Legislation in place to close loopholes regarding ivory 3. Authorities begin confiscating ivory, and arresting/fining ivory market vendors by Y4 4. By the end of Y4 airport confiscations of ivory products increase 50% from Y1 baseline 	<ol style="list-style-type: none"> 1. Market survey reports 2. Official legislation 3. Law enforcement records and CITES reports 4. Official airport seizure records and CITES reports 	<ul style="list-style-type: none"> - The market surveys capture the actual existing ivory market, i.e. do not miss large underground components which might grow as enforcement tactics tighten. (Market surveys will include monitoring and evaluation of available underground information throughout the project.) - The government and enforcement authorities are open to creating and enforcing strengthened laws concerning ivory trade. (Governmental relationships and the political environment will be analysed and monitored throughout the project.) - The government and airport authorities release ivory confiscation figures. (Awareness, capacity, and relationships will be built and monitored throughout the project.)
Output 1. Improved understanding of Cambodian ivory markets and trading networks – including exploring links between drivers of IWT and poverty – informing policy and interventions to address ivory trade.	<ol style="list-style-type: none"> 1.1 Results of biannual market surveys are shared and discussed with government and NGOs 1.2 Findings of research into ivory trade networks and the links between IWT and poverty are used by key stakeholders (e.g. government, NGOs) to inform policy and intervention 1.3 Existing wildlife trade data from government and NGOs are collated annually and mapped 	<ol style="list-style-type: none"> 1.1 Survey and data mining reports, meeting and workshop minutes, final report 1.2 Survey report, final report, statements from stakeholders 1.3 Map of wildlife trade network, workshop reports, presentations, records of law enforcement 	<ul style="list-style-type: none"> - Potentially sensitive information is shared. (The project will carefully build on the existing trust between project partners and monitor relationships to react and adapt to changes.) - Government supports strengthened law enforcement. (Capacity will be built and monitored throughout the project.)

	1.4 Cambodian elephant population genetics used to develop regional markers and used for law enforcement	1.4 Publications, conference presentations, records of law enforcement	
Output 2. Strengthened national capacity for genetic analysis of ivory and regional collaboration for mapping of ivory trade to inform interventions to address ivory trade.	<p>2.1 By Y2, the origin of an initial 30 independent samples of illegally trafficked ivory is genetically determined</p> <p>2.2 By Y4, there is a genetic knowledge base to trace Asian ivory routes to Cambodia and the wider region by laboratories within the ASEAN Wildlife Forensic Network</p> <p>2.3 By end Y4, two female RUPP lab technicians and one local FFI senior staff are fully trained by RZSS to genetically test collected ivory</p> <p>2.4 By end of Y4, law enforcement officials from FA and Conservation NGOs (e.g. Wildlife Alliance) workers are genetically identifying ivory utilising the lab</p>	<p>2.1 DNA analysis reports and publications</p> <p>2.2 Reports and publications</p> <p>2.3 Training and work protocols of genetic lab</p> <p>2.4 Meeting and workshop reports, training materials</p>	- Government is open to continued testing of ivory. (Awareness, capacity, and infrastructure and networks are built to ensure sustainability of the project.)
Output 3. National legislation regarding ivory is in place and effectively enforced	<p>3.1 By Y3, the official report to Government incorporating data and evidence gathered on ivory trade to support law enforcement is disseminated through workshops to authorities, and utilised within 12 months from that point</p> <p>3.2 By end of Y4, government legislation makes the sale and buying of Asian and African ivory illegal</p> <p>3.3 By end of Y4, 50% increase of ivory seizures at the airports from 2017 baselines</p> <p>3.4 By end of Y4, arresting and/or fining wildlife criminals for ivory related crimes is effectively carried out</p>	<p>3.1 Project report, workshop and meeting reports</p> <p>3.2 Draft legal proclamation</p> <p>3.3 Data on ivory seizures at airports</p> <p>3.4 Data on prosecutions</p>	<p>- Engaging with our existing partners at the Forestry Administration, and feeding information to Wildlife Alliance will have an impact on improving law enforcement. (The project will build on and monitor existing relationships and capacity)</p> <p>- Wildlife Alliance will continue to have resources and the will to improve law enforcement. (The project will build on and monitor existing relationships)</p>

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 biannual surveys of markets to monitor and quantify ivory 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;

1.2 Produce national map of trading hotspots and networks;

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

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

1.5 Use existing Asian elephant population genetic data from 250-300 previously collected quality-screened DNA faecal samples to generate genotype data on a genetic marker system, which will enable Cambodian elephant population-level data to be used as a reference resource by laboratories within the ASEAN Wildlife Forensic Network (Asian elephant SNP marker data currently available for the region was developed with the assistance of the RZSS staff named on this project).

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);

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);

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

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

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

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

3.1 Produce official report to the government with results from Outputs 1 and 2 highlighting the need for laws banning the sale of ivory;

3.2 Engage with the Ministry of Environment to ensure that laws banning the sale and purchase of ivory are incorporated into the development of legislation;

3.3 Work with the Forestry Administration/CITES Management Authority to encourage implementation of the National Ivory Action Plan, and close legislative loopholes to facilitate arrest and prosecution of ivory traders;

3.4 Engage and train airport border controls and the Forestry Administration/CITES Management Authority to improve airport screening for ivory products entering and leaving Cambodia.

Annex 3 Standard Measures

N/A

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

Checklist for submission

	Check
Is the report less than 10MB? If so, please email to IWT-Fund@itsi.co.uk putting the project number in the subject line.	X
Is your report more than 10MB? If so, please discuss with IWT-Fund@itsi.co.uk about the best way to deliver the report, putting the project number in the subject line.	
Have you included means of verification? You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	X
Do you have hard copies of material you want to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number. However, we would expect that most material will now be electronic.	n/a
Have you involved your partners in preparation of the report and named the main contributors	X
Have you completed the Project Expenditure table fully?	X
Do not include claim forms or other communications with this report.	