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A FOCUS ON IVORY, RHINO HORN, TIGER, AND PANGOLINS

STUAL OF TRADE AND CONSUMER

ILLEGAL WILDLIFE TRADE AND CONSUMER DEMAND REDUCTION EFFORTS IN THAILAND

Vasan Narang Stephen Watson

TRAFFIC REPORT

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PROJECT SUPERVISOR

Gayle Burgess

PROJECT MANAGER

Dararat Weerapong

LEAD AUTHORS

Vasan Narang and Stephen Watson

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DESIGN

Marcus Cornthwaite

COVER IMAGE

An exorcist's knife for sale in Bangkok. The handle and sheath are made from Ivory. Photo: WWF/James Morgan

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ACRONYMS

CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
DNP	Department of National Parks, Wildlife and Plant Conservation
GEF	Global Environmental Facility
IFAW	International Fund for Animal Welfare
IWT	Illegal Wildlife Trade
NRECD	Natural Resources and Environmental Crime Division
SBCC	Social and Behavioural Change Communication
UNDP	United Nations Development Programme
WARPA	Wild Animal Reservation and Protection Act
WWF	World Wildlife Fund/World Wide Fund for Nature

EXECUTIVE SUMMARY

Within the GEF funded project "Combating Illegal Wildlife Trade in Thailand, Focusing on Ivory, Rhino Horn, Tiger and Pangolins", TRAFFIC is responsible for physical and online market assessments and for the design and implementation of social and behaviour change interventions to reduce the demand for illegal wildlife products. The objective of this document is to create an evidence base to use in the design of these activities. The document has been prepared by reviewing existing research into illegal wildlife trade in online and physical markets, research of consumers of illegal wildlife products in Thailand, and previous demand reduction campaigns.

In Thailand, wildlife products are purchased for a variety of reasons including consumption for food, traditional medicines, luxury accessories and decorations, spiritual items, and pets. Research conducted for WWF by GlobeScan in March 2020 revealed that 15% of 1,000 Thai respondents (representative of the general population for age and gender) had personally bought, or knew someone who had bought, wildlife products in an open wildlife market in the previous 12 months, most likely as pets, food or for use in traditional medicine.

Wildlife trade, both legal and illegal, in Thailand and globally was previously conducted mostly in physical markets, but since 2010 the internet has rapidly evolved to become a key channel facilitating the trade with thousands of live animals, parts and products. Facebook has experienced huge user growth in Thailand since 2010 and is now not only one of the biggest social networks in the country but also one of the most commonly used platforms for illegal wildlife trade online.

The most important piece of legislation governing wildlife trade in Thailand, the Wild Animal Reservation and Protection Act (WARPA) was enacted in 1960 and applies to both terrestrial and aquatic species of wild animals. The WARPA was revised in 1992 and again in 2019 when an additional component was included to tackle illegal online wildlife trade by making it a criminal offence. Penalties, both fines and prison terms, were also been increased for several offences. DNP is considering to include 50 non-native species listed in the appendices of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) into a new category, "Controlled Species". These controlled species will be subjected to regulation for possession, breeding, and trade. The implementation of the law will be overseen by a committee for wildlife conservation and protection chaired by the Ministry of Natural Resources and Environment. In addition to the WARPA, there is a law regulating elephant ivory, the Elephant Ivory Act B.E. 2558 which was passed in 2015. Research found that while Thai people are aware that not all wildlife trade is legal. they are not fully aware of the laws and regulations governing the wildlife trade in Thailand.

Law enforcement agencies are increasingly active in the monitoring, enforcement, and prosecution of those involved in illegal wildlife trade. In April 2017, the Thai government established the "Yiew Dong" (Wild Hawk) Task Force under the Department of National Parks, Wildlife and Plant Conservation (DNP). The task force is dedicated to tackling online wildlife crime and is authorised to search, make seizures, and arrest individuals who illegally possess and trade wildlife in Thailand. Analysis of law enforcement activities revealed that most of the seizures and arrests in Thailand related to illegal wildlife trade have been focused on the supply-side of the trade and very few have targeted those purchasing, using or consuming illegal wildlife products.

Analysis of existing reports and publications from multiple organizations about illegal wildlife trade in Thailand, and monitoring of physical and online markets, indicates that there is domestic demand for ivory and tiger parts. On the other hand, domestic demand for pangolins and rhino horn in Thailand appears to be negligible. Even though the number of seizure incidents involving pangolins appears to be high, most of them involve attempts to export to other countries, using Thailand as a processing and transit hub. Analysis of the limited data available for rhino horn indicates that there is neither demand for nor supply in the Thai market.

Physical market surveys revealed that live animals including small mammals, birds and

reptiles are bought as pets, and the pet trade is facilitated by the existence of open markets such as the popular Chatuchak weekend market in Bangkok. Online market monitoring found large numbers of live animals (otters, tortoise and freshwater turtles, snakes and lizards) and wildlife products (ivory and hornbill products) offered for sale in Thailand on Facebook. Many of these species are covered by the WARPA and therefore may be being sold illegally.

A study by GlobeScan for USAID Wildlife Asia in 2018 (n=1,000, representative of the general population) showed that 2% of Thais own ivory products and 1% own tiger products. The typical consumers of ivory and tiger products tend to be affluent and 40 years or older. The "spirituality" linked to the products as well as the depiction of social affluence were the main motivations for both ivory and tiger part consumers. Women are the main consumers of ivory products sported as jewellery or amulets, while primarily men own amulets and spiritual items made from tiger parts. Both groups share concerns about the authenticity of their products, the legality of owning and trading them, and the possibility of the products being cursed because of the way they were harvested.

There have been several awareness-raising and social and behaviour change communication (SBCC) campaigns in Thailand since 2013 led by WWF, WildAid and USAID Wildlife Asia in partnership with the government. Most of the campaigns that took place between 2013 and 2016 focused on raising awareness of the threats of illegal wildlife trade to the population of the species, whilst more recent campaigns have addressed the underlying motivations of the buyers, particularly targeting aesthetic and social values and addressing the belief in these products' spiritual properties. Most campaigns so far have targeted consumers of ivory, and a few from USAID Wildlife Asia and WildAid also targeted tigers and other species.

Although there have been multiple campaigns to reduce the demand for ivory and Tiger parts, they are still widely traded, so it is recommended that such campaigns should continue. In addition, there is a need for demand reduction campaigns targeting other uses of illegal wildlife products, including as exotic pets (particularly the species for which high trade volumes have been recorded, such as, Red-whiskered Bulbul Pycnonotus jocosus (Protected species), Otters (some species are Protected species), Sunda Slow Loris Nycticebus coucang (Protected species), Indian Star Tortoise Geochelone elegans (controlled species) and Burmese Star Tortoise Geochelone platynotan (controlled species), wild meat and as ingredients in traditional medicine. It is therefore recommended that additional research should be conducted to identify and understand the consumers, tendency to purchase, purchase channels, motivations, and deterrents. Once the consumer profiles for these products are known, targeted demand reduction and SBCC campaigns can be developed.

It is also recommended that the DNP and NGOs working on wildlife trade in Thailand should produce additional communication materials aimed at increasing awareness of the WARPA to promote better understanding of the laws and regulations of wildlife trade in Thailand. The DNP and Natural Resources and Environmental Crime Division (NRECD) should also work with the media to highlight news of seizures, arrests and prosecutions. This will demonstrate that efforts are being made to enforce the laws so that purchasers and consumers will consider that the risks of being punished are high and will be deterred from illegal wildlife trade and trafficking.

INTRODUCTION

The illegal wildlife trade in Thailand, involving both native and non-native species, has been well documented (e.g. van Dijk and Palusawan, 2000; Shepherd and Nijman, 2008; Todd, 2011; Chng, 2014a; D'Cruze *et al.*, 2015; Phelps, 2015; Phelps and Webb, 2015; Krishnasamy *et al.*, 2016a). Wildlife products are purchased for a variety of reasons, including food and medicine; recreation and companionship; jewellery, accessories, decorative and collectibles; and for spiritual purposes.

Trade in wildlife products was previously conducted in physical markets, but the internet has rapidly evolved to become the key channel facilitating trade in wildlife specimens (legal and illegal) with thousands of live animals, parts and products offered for sale (Chng and Bouhuys, 2015; Phassaraudomsak and Krishnasamy, 2018). The shift of the trade from physical markets to online markets is a global phenomenon (Xiao and Wang, 2015). Facebook has experienced huge user growth in Thailand since 2010 (Yee, 2011) and it is now not only the biggest social media network but also a leading platform for the online illegal wildlife trade both in Thailand and globally.

Law enforcement agencies in Thailand have become increasingly active in the monitoring, enforcement, and prosecution of those involved (WCS, 2015; Anon, 2016; Samart, 2016; The Nation, 2017). In addition to the "Phaya Suea Task Force" that was established to tackle illegal possession and trade of wildlife and its products, the Thai government established a dedicated task force to tackle online wildlife crime in April 2017. This unit, locally known as "Yiew Dong Task Force" or the Wild Hawk Task Force, is a specialised taskforce under the Department of National Parks, Wildlife and Plant Conservation (DNP). It is authorised to search, make seizures, and arrest individuals linked to illegal possession and trade of wildlife in Thailand.

Thailand's legislative framework has evolved in recent years; however, some gaps remain worth considering among the variety of legal documents currently in use. For example, the national ivory law still allows for ivory from domesticated Thai elephants to be sold legally.

This provides the opportunity for ivory from other elephants to be laundered in the Thai market. The country's legal domestic trade has stimulated demand from tourists, especially those from mainland China and Hong Kong Special Administration Region (Stiles, 2009). Illegal ivory is smuggled in (Bangkok Post. 2018), laundered, crafted into carvings, ornaments, and jewellery, and sold in the market as legal domestic ivory. The legal framework should be complemented by periodic monitoring of both physical and online markets to detect and act upon illegal trade.

The analysis of available data indicates that whilst there is demand for ivory and tiger parts in Thailand, domestic demand for pangolins and rhino horn is negligible. There have been very few reported seizures of rhino horn, indicating that there is neither demand for nor supply of rhino horn in the Thai market. However, Thailand may be a geographic point of transaction within rhino horn trafficking chains as evidenced by the seizure of 12.5 kilograms of rhino horn from South Africa that led to the arrest of the Bach Family Syndicate in Thailand (Mongabay, 2018; The ASEAN Post, 2018). Meanwhile, seizures made during transit shows that smugglers still use Thailand as a transit hub for pangolins, as evidenced by the seizure in March 2017 at Bangkok airport (BBC, 2017). An interview with officials from the Mekong Riverine Unit 1 in January 2017 suggested that while the scales were exported across the border, meat was consumed in Thailand for food (not medicine) but now the price is too high for such purpose and meat is no longer consumed domestically.

Previous consumer research projects have focused on those purchasing ivory and tiger products. Research revealed that there is demand for ivory and tiger products in Thailand, although more than 90% of those surveyed said that they were unlikely to purchase either of the products (USAID, 2018) and more than 70% supported a total trade ban (GlobeScan and National Geographic, 2015). Data shows that 2% of Thais own ivory products and 1% own tiger products, although 3% would like to buy ivory and/or tiger

¹ The interview was carried out during the baseline data collection.

products in the future. Ivory owners and purchasers, especially of jewelry and accessories, are more likely to be female, while those who own ivory and tiger amulets and "spiritual" products are mostly male (USAID, 2018). Both ivory and tiger products users tend to be 30 to 49 years of age, primarily affluent people such as business owners and merchants. Ivory owners believe that it gives them a positive social image, consider ivory to be beautiful and that ivory has spiritual value in bringing good luck. Tiger product users believe that it offers protective powers against harm. Both groups have concerns about the authenticity of their products, the legality of owning and trading them and the possibility of the products being cursed because of the way they were harvested.

This situation analysis summarises market availability and seizure data to identify frequently traded wildlife species for which targeted demand reduction campaigns can be developed in future, in addition to elephant ivory and tiger products demand reduction campaigns. It also looks at consumer profiles, tendency to purchase, purchase channels, sources of information, motivations, and deterrents of existing and potential consumers of wildlife products in Thailand. Lastly, it considers previous demand reduction and SBCC campaigns to identify some learnings to support the development of future campaigns to reducing the demand for illegal wildlife products.

PURPOSE AND OBJECTIVES

The objective of this document is to create an evidence base for TRAFFIC to use in the design of physical and online market assessments to be conducted as part of the GEF funded project "Combating Illegal Wildlife Trade in Thailand, Focusing on Ivory, Rhino Horn, Tiger and Pangolins". TRAFFIC will conduct assessments of market availability for CITES-listed species in Thailand and the system for monitoring of market responses before and after the implementation of the revised 2019 WARPA legislation. The learnings will also be used in the design and implementation of social and behaviour change interventions to reduce the demand for illegal wildlife products as part of the same project. It has been prepared by reviewing existing research into the prevalence of illegal wildlife trade in online and physical market locations and consumers of illegal wildlife products (profiles and motivations) in Thailand, and with reference to previous demand reduction campaigns.

Preparing the situation analysis involved desk research of the IWT market and consumers of IWT products in Thailand, as well as a review of previous demand reduction campaigns in Thailand.

METHODOLOGY

The Situation Analysis was conducted by reviewing and consolidating reports and publications from TRAFFIC and other organizations which have documented aspects of the illegal wildlife trade in Thailand. The analysis initially focused on the four priority species of the project and then explored other species of interest according to the findings. It also incorporates some of TRAFFIC's internal data and data from TRAFFIC reports that have not been published. The literature review focused on identifying what is being bought and sold, who is buying it, what their motivations are and where purchases were made from. Contemporary public outreach campaigns were also reviewed to identify some key learnings and facilitate the development of effective behaviour change campaigns targeting demand in the most important commodities and the priority target audiences.

LIMITATIONS

Due to the outbreak of the COVID-19 pandemic, additional physical market assessments, inperson surveys and interviews were postponed. Therefore, data on physical markets included in the situation analysis were obtained from previously published reports and unpublished internal data collected prior to the outbreak. Follow-up consultations with DNP and other project partners will be pursued to consider the most up-to-date and accurate information.

LEGISLATIVE FRAMEWORK

The Wild Animal Reservation and Protection Act 1992

Thailand's main piece of legislation governing wildlife trade, the Wild Animal Reservation and Protection Act (WARPA) was enacted in 1960. The WARPA applies to both terrestrial and aquatic species of wild animals. Meanwhile the Plants Act is applicable to plant and timber species, and the Elephant Ivory Act is applicable to ivory. Within the WARPA, 15 species are listed as rare animals for which trade is not allowed. The WARPA however had some loopholes, particularly concerning its lack of coverage of domestic trade in many non-native species, irrespective of whether they were listed in the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), to which Thailand became a Party in 1983. Therefore, many CITESlisted species (including products and derivatives) were effectively neither protected nor subject to any regulation once they were smuggled inside

National Ivory Action Plan

In January 2015, the Elephant Ivory Act B.E 2558 (2015) was enacted to govern the regulation of Thailand's domestic ivory trade. The Act still allows for ivory from domesticated Thai elephants to be sold legally (DLA Piper, 2016). There is a traceability system to monitor this process from the source (individual registered elephants) to the sale of ivory in shops certified by the government. However, vigilance is needed to prevent African ivory (or any illegally sourced Asian elephant ivory) being unlawfully laundered through registered Thai outlets.

Following the enaction of the law, Thailand conducted a nationwide registration process, with more than 40,000 people registering 670,984 ivory

The updated WARPA (2019)

In 2019 the WARPA was revised to replace the former WARPA Act B.E.2535 (1992), B.E. 2546 (2003) and B.E.2557 (2014). The revised law

2 https://www.mof.go.th/home/pr/customs07-03-60.pdf

the national boundaries of Thailand (TRAFFIC, 2009; Moore et al., 2016; TRAFFIC, 2016).

The WARPA was amended in 1992, 2003, 2014 and 2019 (see below for separate section on the 2019 revision). The Ministerial Regulation Prescribing Wildlife as Protected Species, B.E. 2546, issued in 2003, listed 1,305 species, both native and non-native, as either reserved or protected species. Asian Elephants, Tigers, rhinos and pangolins were all covered under this amendment. The 2014 amendment added the non-native African Elephant Loxodanta Africana to the list of protected species. The WARPA effectively prohibited trade in all reserved and protected species, unless the animals were captive bred in compliance with government regulations, in which case trade was allowed through a permit system.

products, weighing a combined 200,358 kg (totals as of August 2015). The average weight of the worked ivory registered as commercial stock was only 9.31 grams per piece, indicating that most finished products for sale were extremely small items (Krishnasamy et al., 2016b). The government recorded that from 2016 to March 2017 there were 10 cases of illegal ivory seizures-823 pieces worth a total of THB 90 million² (approx. USD 3million). Officials seized 930 items of ivory weighing 22 kilograms from a Vietnamese national attempting to smuggle the items into Thailand from Laos through the Khammuan-Nakhon Phanom border crossing in December 2018 (The Laotian Times, 2018).

came into effect on November 25, 2019. The implementation of the law will be overseen by a committee for wildlife conservation and

protection chaired by the Ministry of Natural Resources and Environment. An additional component was included to tackle illegal wildlife trade on online platforms, which is considered a criminal offence. Penalties have increased to a maximum of THB 1 million (approx. USD 32,000) and or up to 20 years imprisonment, compared with THB 40,000 (approx. USD 1,300) and or up to four years imprisonment. A new category "Controlled Species" which covers 50 non-native species listed in the CITES appendices, has been added. These controlled species will be subjected to regulation for possession, breeding and trade. However, thousands of other CITES-listed nonnative species were excluded from coverage, including many of which are frequently smuggled into Thailand and still do not receive any protection under Thai legislation.

The major changes under the new act are:

- **Expanded definitions:** Trade includes advertising via any computer system and media for commercial purposes, the so-called 'online trade'. Export includes re-exporting, and transit covers transhipment in alignment with custom laws.
- New and improved definitions for categories of wildlife³:
 - **Reserved Species**: rare or endangered species that need to be strictly preserved and conserved. There are currently 19 reserved species. Hunting, possession, captive breeding and trade of any reserved species is prohibited with maximum penalties of up to THB 1 million (approx. USD 33,000) fine and 15 years imprisonment.
 - Protected Species: species that are important in maintaining the integrity of the local ecosystem. Decrease in the population size of such species may affect the ecosystem. There are currently 1,315 protected species. DNP will only issue licenses to own protected species if they *can* be bred in captivity and licenses are only issued for individuals born from captive breeding facilities. Licenses will not be issued for wild caught individuals or any protected species. Of the 1,315 species, only 60 have been successfully bred in captivity; ownership licenses are only being issued for these 60 species (only if they have been bred in captivity). No ownership license will be issued for the other 1,255 species. Failure to follow the guidelines and procedures means that the possession, captive breeding and trade of a protected species is illegal and can result in a maximum of THB 1 million (approx. USD 33,000) fine and up to 10 years imprisonment.
 - Controlled Species: species listed by CITES that require appropriate control measures. There are provisionally 50 controlled species, but they have not yet been confirmed. They are non-native species which have been included from CITES appendices I and II. Possession, captive breeding and trade (including import and export) of controlled species is illegal, unless necessary permits/licenses have been obtained from the DNP and carries a maximum fine of up to THB 300,000 (approx. USD 10,000) and up to 4 years imprisonment.
 - **Dangerous Species:** poisonous or venomous species that may cause harm to human as well as other species. Also includes invasive, pests and vector species.
- The status of four marine species was updated from protected to reserved species: Bryde's Whale (*Balaenoptera edeni*), Omura's whale (*Balaenoptera omurai*), Leatherback sea turtle (*Dermochelys coriacea*), and Whale Shark (*Rhincodon typus*. The new act outlined the increased level of protection and specifies that those who have any of these four species in their possession must inform the Department of Fisheries within 90 days after the act is implemented.

³ Complete list of reserved, protected and controlled species valid as of 22 February 2021 can be found at:

https://trafficinternational.sharepoint.com/:x:/r/gef/_layouts/15/Doc.aspx?sourcedoc=%7BB7CF1C51-B933-45FE-AFD0-9854FF6A2987%7D&file=Reserved%20Protected%20Controlled%20Species.xlsx&action=default&mobileredirect=true

Penalties⁴

- New Offences: There are new offences for illegal trading, possession, and captive breeding of controlled species, and for possession and release of dangerous species. The penalties for the release of reserved, protected, and controlled species into nature are a fine of up to THB 50,000 (approx. USD 1,667) and up to 6 months imprisonment.
- Increase in penalties: Illegal trading, import, export and hunting of reserved species attracts a fine of between THB 300,000 1 million (approx. USD 10,000 33,000), and an imprisonment term of 3-15 years. For reserved species there is a maximum fine of THB 1 million (approx. USD 33,000) for hunting, possession and trading, and up to 15 years of imprisonment for hunting and trading.
- **Commercial import and export**: allowed only for protected and controlled species (which has been approved and licensed) that can be bred. Import and export of reserved and protected species are permissible only for zoos.
- **Captive breeding:** Only captive breeding of protected and controlled species is allowed, for species that can be bred in captivity. A permit for captive breeding of protected or controlled species is required. Only animals with license can be bred legally, wild caught individuals cannot be legally bred in captivity. Fines for illegal captive breeding have increased to a maximum of THB 300,000 (USD 10,000).

Although the WARPA has been implemented and revised several times, most of the Thai population are still unaware of the law and many still have some misunderstandings and confusion. A study by USAID Wildlife Asia on consumption of ivory and tiger products in 2018 identified that "Thai people are generally confused about the legality of the ivory and tiger trade", and that 80% of Thais are not aware that trade of ivory from domesticated elephants is legal and 8% think that even ivory from Africa is legal. Likewise, 30% of Thais believe it is legal to trade in tiger parts if the tiger is domesticated while 9% believe it is legal if the tiger parts come from other countries (USAID, 2018).

Since the new law has been enacted, DNP has begun communicating about the major changes of the new law such as the four new reserved marine species, the increase in penalties, the illegality of online trade, and new categorisation of wildlife (reserved, protected, controlled, and dangerous species). Current campaign strategies may need to be reviewed in terms of their limited reach and the need to simplify messaging to enable the public to understand the most important points in order to increase the likelihood of impact.

Consumer research shows that around half of potential consumers are not aware of, nor familiar with, the various laws and policies related to wildlife ownership and trade in Thailand (GlobeScan and National Geographic, 2015; USAID, 2018). Therefore, there is still a need for additional effort to create awareness of the various laws, and a campaign to increase awareness of the revised WARPA 2019 will be conducted as part of Component 3 of this project.

In addition to low awareness of the laws, relatively weak enforcement could also be a factor that encourages illegal wildlife trade to continue. TRAFFIC's rapid assessment of the use of Facebook to trade wildlife in Thailand (2018) suggested that there is "a perception that the WARPA is weak in Thailand, which could therefore be a motivating factor in sending a message that these animals can be traded easily with few repercussions". Furthermore, awareness and the fear of legal penalties among traders and traffickers is relatively low based on the small number of reported convictions.

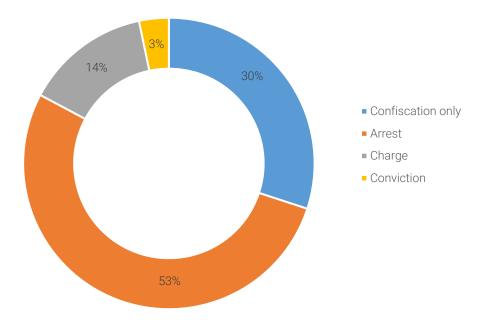
Numerous shipments of elephant ivory, pangolin carcasses and scales, and rhino horn have been seized in Thailand between 2010 and 2019, especially at the Suvarnabhumi International Airport in Bangkok and various border crossings. While these high-profile seizures are to be praised, the criminals involved are rarely convicted (USAID, 2019). TRAFFIC's internal data for the period 2010 to 2019 shows that of all the 546 incidents analysed, 30% resulted in only confiscation, 53% resulted in an arrest, but just 14% led to a charge and only 3% resulted in a conviction (See Figure

⁴ Penalties applicable for ownership and trade of reserved, protected and controlled species also extends to the eggs, carcasses and body parts of the species.

1). Even though prosecutions take time and convictions are delayed, a lack of media reporting, which may be at least partly due to law

enforcement agencies not sharing updates on convictions, leads to a general perception that wildlife crime is relatively low risk.





Source: TRAFFIC internal data from open sources.

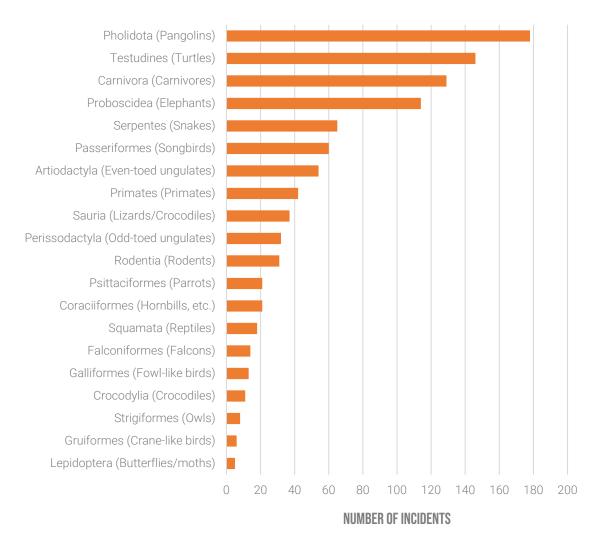
To address this, additional efforts need to be made, including the use of the full range of relevant legislation (for example, anti-money laundering statutes) to highlight that wildlife crime is serious and to improve the chances of successful prosecution. There is also a need for the DNP and the NRECD to ramp up their enforcement collaboration with the Royal Thai Police and other relevant government agencies (e.g. members of Thai-WEN). In addition, they should increase engagement with media to highlight news of seizures, arrests and prosecutions to demonstrate that law enforcement efforts are being made so that purchasers and consumers consider that the risks of being caught and punished are high.

OVERVIEW OF THE ILLEGAL WILDLIFE TRADE IN THAILAND

A review of reports and publications from TRAFFIC and other organizations, as well as of past physical and online market surveys and of some seizure reports, was carried out to determine which species are most frequently offered for sale (including parts/products derived from them) in Thailand.

Figure 2 shows the wildlife taxa which appear most frequently in incidents associated with Thailand, based on records of reported seizures in the period 2010–2019 (TRAFFIC internal data from open sources) regardless of how they were seized, the size of the seizure whether parts, products, and whole animals whether live or dead. Incidents include all open-source reports of confiscations, seizures, arrests, and convictions related to wildlife in Thailand held by TRAFFIC, regardless of whether they are being imported, exported, or whether Thailand is the final destination. Incidents involving Pholidota (pangolins), Testudines (tortoises and freshwater turtles), Carnivora (carnivores including tigers, leopards, civets, otters) of which tigers made up 33% of the total, Proboscidea (elephants), Serpentes (snakes), Passeriformes (songbirds including bulbuls, mynas), Primates (langurs, loris, macaques) and Sauria (lizard, crocodiles) were reported as the most frequent.





Source: TRAFFIC internal data from open sources.

Table 1 shows the number of incidents and number of specimens involving the four focal taxa from 2010 to 2019. While the number of incidents of Pholidota (pangolins) appear to be higher than

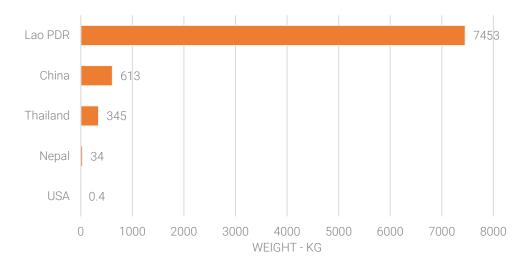
other taxa, they are also trafficked to other countries with Thailand serving as a point of transit between the source and destination countries.

Table 1: Incidents involving Elephants, Tigers, pangolins and rhinos in Thailand and the number of specimens reported

SPECIES		NUMBER OF INCIDENTS									
	Total	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Elephant	50	5	5	4	5	6	8	3	6	6	2
Tiger	30	4	2	10	3	3	2	2	2	2	0
Pangolin	141	20	26	33	18	17	5	5	12	3	2
Rhino	13	0	0	0	3	2	1	0	5	2	0
					NUMBE	R OF SPE	CIMENS				
	Total	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Elephant	4694	641	370	33	137	644	1323	90	455	963	38
Tiger	244	10	6	44	4	12	1	153	2	12	0
Pangolin	6112	674	997	1118	1060	845	310	233	597	155	123
Rhino	137	0	0	0	20	14	5	0	63	35	0

Source: TRAFFIC internal data from open sources.

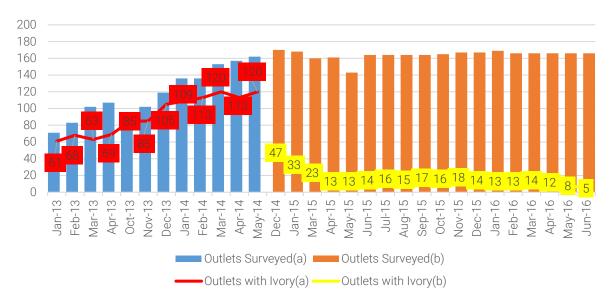
While the number of incidents of Pholidota (pangolins) appear to be higher than other species, most of them involve attempts to illegally export, or re-export, to other countries, often using Thailand as a transit country from sources elsewhere in Asia (and in recent years, also Africa) and the destination countries. This highlights that enforcement is weak on intercepting illegal imports to the country. TRAFFIC's internal data based on reported incidents shows that most pangolin scales seized in Thailand are intended to be exported to other countries including Lao PDR (88%) and China (7%), with only 4% remaining in Thailand (see Figure 3). Live pangolins enter Thailand through various entry points (Mekong Eye, 2019) and are either transported to other countries or are processed before being exported. There is no evidence of pangolin meat being consumed on a significant scale, although indication that it may have been in the past. Furthermore, data show that the number of reported seizure incidents each year involving pangolins has declined. However, without understanding whether enforcement effort and reporting effort has changed this decline cannot be assumed to reflect illegal trade in pangolins overall. Figure 3: Reported destination of trade routes involving Thailand and pangolin scales, 2010 - 2019 (by weight - kg) Source: TRAFFIC internal data from open sources.



Physical market availability

A series of monthly market surveys found an average of more than 10,000 ivory products being traded (see Figure 5) in more than 100 outlets (see Figure 4) within 10 major markets in Bangkok between late 2013 and early 2014, with more than 14,500 items on sale during its peak in December 2013 (Doak, 2014). Following the National Ivory Action Plan (add date here please), the number of outlets and ivory products for sale in Bangkok gradually dropped to less than 300 products in only 5 out of 166 outlets survey in June 2016 (Krishnasamy et al., 2016b).





Source: (a) Polishing off the Ivory Trade: Surveys of Thailand's Ivory Market (Doak, 2014), (b) In Transition: Bangkok's Ivory Marketing (Krishnasamy et al., 2016b)

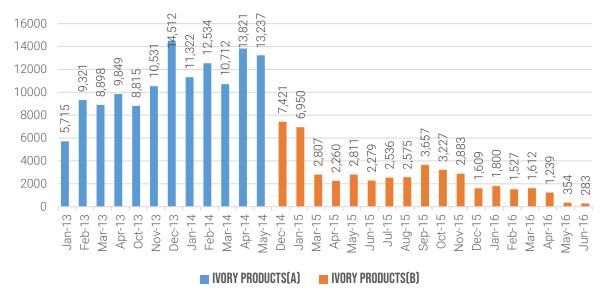


Figure 5: Number of ivory products for sale observed in Bangkok 2013 - 2016

Source: (a) Polishing off the Ivory Trade: Surveys of Thailand's Ivory Market (Doak, 2014), (b) In Transition: Bangkok's Ivory Marketing (Krishnasamy et al., 2016b)

TRAFFIC's most recent ivory market survey conducted in 2019 (TRAFFIC, in prep.) showed that ivory is still available in physical markets in Thailand. The survey counted 7,341 ivory products and 6,381 other elephant products offered for sale in about 150 outlets⁵ across nine provinces in Thailand (Ayutthaya, Bangkok, Chiang Mai, Chiang Rai, Chonburi (Pattaya), Nakhon Sawan, Phuket, Surin and Uthai Thani). Although this is much lower than in 2014 (Figure 4), continued monitoring and enforcement is necessary to ensure that all products offered for sale are legal.

In addition to ivory, TRAFFIC's surveys in the past five years in Chatuchak Market have found large numbers of birds, tortoises, freshwater turtles, other reptiles and small mammals. Surveys of the pet markets have been limited to Bangkok and there is a need to carry out more systematic surveys of pet markets outside Bangkok, particularly in areas where animals can be caught in the wild.

TRAFFIC researchers counted 1,271 birds of 117 species in 45 shops or stalls during a survey at Chatuchak Market on 28th and 29th March 2015 (Chng and Eaton, 2016)⁶. Of the total, 709 individuals from 61 species were native to

Thailand and are on the list of protected species, most specimens were considered to be wild caught and thus illegal to own or trade. Nine of the species are listed as threatened on the IUCN Red List and eight species listed as Near Threatened. Among them was the native and nationally protected Red-whiskered Bulbul Pycnonotus jocosus, a popular competition songbird in Thailand and the second most numerous species recorded in the inventory. Of note was the presence of four Critically Endangered, Yellow-crested Cockatoos Cacatua sulphurea, an internationally protected (CITES Appendix I) non-native species that has not yet been included in the list of controlled species under the WARPA. Although domestic sale may not be prohibited under WARPA, its import for commercial reasons would have been illegal.

TRAFFIC teams surveyed Chatuchak 12 times between November 2004 and December 2013 (Shepherd and Nijman, 2014)⁷, to record all species and quantities of tortoises and freshwater turtles openly for sale. In total, 2,667 individuals from 55 species were observed, with 3% of the individuals belonging to species native to Thailand and in the list of protected species.

⁵ TRAFFIC is working with the DNP to cross-check the outlets surveyed that have been certified to legally sell ivory products.

⁶ See Annex 1

⁷ See Annex 2

None of the protected species observed have been successfully bred in captivity, therefore having them in one's possession is prohibited by WARPA as the DNP does not issue license/permits to own or breed them. More recent market surveys have shown that trade of tortoise and freshwater turtles in physical markets is still ongoing, although part of it has moved to online markets (Chng and Bouhuys, 2015; D'Cruze et al, 2015).

TRAFFIC conducted a series of surveys focusing on lizards and snakes at the Chatuchak Market in April, May and August 2016 (TRAFFIC, unpublished). A total of 850 specimens of 33

Online market availability

Regular monitoring of Facebook and other online platforms has demonstrated that a significant proportion of the illegal wildlife trade in Thailand has moved online. Over the years, availability of both live animals (such as birds, mammals and reptiles) as well as parts and products (such as ivory and hornbill products) has been documented.

Monitoring of 42 profiles or groups on Facebook and Instagram accounts by TRAFFIC between June and July 2016 identified at least 232 unique individuals offering 2,550 ivory products for sale (Krishnasamy et al., 2016b). The number of products is almost the same as the number of products found on sale during the physical market survey conducted during the same period in 2015 and much higher than the 283 products in found in June 2016. This serves to support that market shift from the physical marketplace to online platforms, as has been the case in China (Xiao and Wang, 2015). snake species (excluding four species only identified to genus level) and 2,261 specimens of 45 lizard species were observed for all three surveys combined. A maximum of 35 stalls were recorded to be selling reptiles. Three out of 78 species are native to Thailand and are listed as protected species in the WARPA: Burmese Python *Python molurus bivittatus*, Reticulated Python *Python reticulatus* and Common Water Monitor *Varanus salvator.* Species listed on CITES appendices have also been observed. While domestic sale for the CITES species are not prohibited under WARPA, their import must be in accordance with CITES regulations.

A rapid assessment of wildlife trade on Facebook also found 1,521 live animals from at least 200 species being traded online between June and July 2016 (Phassaraudomsak and Krishnasamy, 2018). These were recorded over a 23-day period for just 30 minutes a day, from a total of 765 Facebook posts. While groups generally focused on single species or product, or species groups, some offered a broader variety.

Table 2 shows that mammals accounted for the largest proportion of individual animals advertised (516 individuals), though the highest number of species advertised were birds. Of note were 139 individuals of the protected Sunda Slow Loris *Nycticebus coucang*,115 individuals of the controlled African Spurred Tortoise *Centrochelys sulcata* and 33 individuals of the protects Red-whiskered Bulbuls *Pycnonotus jocosus* were the most traded species within their categories.

	Individuals	3	Species	Posts			
	Listed*	Not listed*	Total	Listed*	Not listed*	Total	
Bird	389	113	502	74	21	95	268
Mammal	282	234	516	21	28	49	328
Reptile	107	386	493	13	39	52	164
Amphibian	0	10	10	0	4	4	5
TOTAL	779	742	1,521	108	92	200	765

Table 2: Animals offered for sale on Facebook in Thailand in 2016 and whether they are listed in WARPA.

Note: *Animals that are listed or not listed in WARPA

Source: Rapid Assessment of Wildlife Trade occurring on Facebook in Thailand (Phassaraudomsak and Krishnasamy, 2018)

Fifty four percent of the species offered for sale are protected by law in Thailand under the WARPA B.E. 2535 (1992), while the remaining species were neither protected nor regulated by law at the time. Two Critically Endangered species, the Helmeted Hornbill and Siamese Crocodile were recorded, both of which are protected by law in Thailand and listed in Appendix I of CITES. Five non-native CITES Appendix I-listed Black Pond Turtles *Geoclemys hamiltonii* were also recorded for sale; this species is currently experiencing higher levels of illegal poaching and trade levels globally but does not receive any protection under Thai laws.

Nine Facebook groups and six Facebook pages of Thai shops selling reptiles were monitored twice a week for eight weeks in May and June 2016 (TRAFFIC, in prep.). During the eight-week survey period, a total of 3849 animals of 86 species were observed for sale in 968 unique advertisements on Facebook, most of which were lizards (50 species, 3162 specimens). Of all species offered for sale, 89% were not native to Thailand, and can therefore be traded legally as none of them were on the list of protected species, and the controlled species were not proposed until 2019. For 367 animals, it was claimed they were bred in captivity, and for 3,481 animals, no source was mentioned. Of all species, two are listed in CITES Appendix I, the non-native Rhinoceros Rock Iguana Cyclura cornuta (currently listed as a controlled species) and the native Clouded Monitor Varanus nebulosus (listed as a Protected species). Thirty species were listed in CITES Appendix II but are not on the list of protected nor controlled species under WARPA.

A study conducted by TRAFFIC (Gomez and Bouhuys, 2018) analysed a minimum of 560 online advertisements for otters in four countries (Indonesia, Malaysia, Thailand, and Viet Nam) during a four-month period January–April 2018. The study found 80 adverts, averaging 204 otters for sale in Thailand. All otters advertised were listed as protected species under the WARPA, therefore possession and trade of otters without a permit is illegal.

Online surveys conducted from February 2017 to January 2019 found 261 individual birds from 17 species offered for sale across eight Facebook groups surveyed (Siriwat and Nijman, 2020). All birds of prey offered for sale were native to Thailand and listed as protected species under the WARPA. Using geographic information, when available, it was found that most of the posts originated from Yala province in southern Thailand followed by Bangkok.

A six-month online survey conducted exclusively on Thai language groups and pages, from 22nd October 2018 to 19th April 2019 found a minimum of 236 Facebook posts offering a minimum of 546 hornbill parts and products in 32 of the 40 groups surveyed (Phassaraudomsak et al., 2019). These were posted over a period of 64 months, spanning June 2014 to April 2019. Nine species of hornbills were recorded in this survey, all are protected species which cannot be captive bred, so ownership is illegal under Thai national legislation as well as under CITES (Table 3). The availability of hornbill commodities on Facebook peaked in 2016. Since then, trade activity appeared to reduce, however, it is unclear if this is a result of shifting patterns of demand away from hornbill parts and products, or a result of traders moving to new groups or platforms that are more difficult to detect, or other reasons. Products from the Critically Endangered Helmeted Hornbill Rhinoplax vigil constituted 83% of the commodities recorded during this period. Eight main types of commodities were offered: whole casques, pendants, belt buckles, rings, necklaces, bracelets, taxidermy items and other individual pieces.

Table 3: Number of items and sale posts for each hornbill species being offered for sale on Facebook (2014 - 2019)

Species	IUCN Red List	CITES	Items	Sale Posts
Helmeted Hornbill <i>Rhinoplax vigil</i>	Critically Endangered	Appendix I	452	173
Great Hornbill <i>Buceros bicornis</i>	Vulnerable	Appendix I	61	38
Rhinoceros Hornbill Buceros rhinoceros	Vulnerable	Appendix II	9	7
Oriental Pied Hornbill Anthracoceros albirostris	Least Concern	Appendix II	8	6
Wreathed Hornbill <i>Rhyticeros undulatus</i>	Vulnerable	Appendix II	6	5
Bushy-crested Hornbill Anorrhinus galeritus	Near Threatened	Appendix II	3	1
Wrinkled Hornbill <i>Rhabdotorrhinus</i> <i>corrugatus</i>	Endangered	Appendix II	3	3
Plain-pouched Hornbill <i>Rhyticeros subruficollis</i>	Vulnerable	Appendix I	3	2
White-crowned Hornbill Berenicornis comatus	Endangered	Appendix II	1	1
TOTAL			546	236

Source: Trading Faces: Online Trade of Helmeted and other hornbill species on Facebook in Thailand (Phassaraudomsak et al., 2019)

Despite the recent seizures and arrests of some traders in Thailand, following online advertisement posts, by the Wild Hawk Task Force (Matichon, 2019) and the Great Tiger Task Force (Thairath 2020; Thai PBS, 2020), illegal wildlife trade is still thriving on online platforms and have been picked up during ongoing surveys and marketing monitoring of Facebook and other online platforms in Thailand.

Following a discussion with the DNP in February 2020, TRAFFIC will be conducting training on Online Marketing Monitoring for the Wild Hawk Task Force and other DNP staff to enable them to monitor and take necessary actions against people who offer illegal wildlife products for sale on Facebook and other online platforms. There is a dire need for online platforms like Facebook and Instagram to step up their content filtering to disallow people from offering illegal wildlife products for sale on these platforms. However, this is an issue that requires action from law enforcement agencies and platforms like Facebook, which has joined the Global Coalition to End Wildlife Trafficking Online⁸ and is working with TRAFFIC and partners IFAW and WWF to address the issue.

The ongoing trade on online platforms highlights the need for raising awareness of the new WARPA (which now covers illegal wildlife trade on online platforms) and especially behaviour change campaigns to address the ongoing demand.

WILDLIFE PRODUCT CONSUMERS AND CONSUMPTION PATTERNS

Research conducted in March 2020 for WWF by GlobeScan revealed that 15% of 1,000 Thai consumers who participated in the research had personally bought, or knew someone who had bought, wildlife products in an open wildlife market in the previous 12 months, most likely as pets, as food or for use in traditional medicine. Of the 146 consumers, 59% claimed to have purchased live birds, 37% snakes, 30% bats, and 27% turtles. In addition, 7% of the respondents

⁸ https://www.endwildlifetraffickingonline.org/

claimed that they are very likely/likely to buy wildlife products in open markets.

Wildlife products are purchased for four main reasons:

• Consumed as food or medicines. In rural areas, eating wild meat is believed to promote good health and increase lifespan (Awaiwanont et al., 2014). Animals are sold to restaurants that offer special local recipes or to "jungle restaurants" that specialise in exotic cuisines (The Straits Times, 2018). These restaurants attract both Thai and foreign customers. While there are farms which specifically breed wild animals like crocodile, deer and ostrich (The Straits Times, 2018), hunters and poachers are also known to offload their kill to restaurants that serve wild meat (Awaiwanont et al., 2014). The most consumed wildlife meats are monkey, langur, bear, wild pig and boar, gaur, banteng, water buffalo, tiger, deer, monitor lizard, crocodile, squirrel, civet, terrapin, snake, and various birds. A Thai man was arrested in Pa Bon, Phatthalung as police found carcasses of a pangolin, four Asian palm civet, nine Bengal monitor lizards, two tortoises, three soft-shelled turtles and wild boar meat in his car. The suspect admitted that he bought the animals from Narathiwat to supply to exotic food restaurants in Phatttalung (Ban Muang, 2020).

Tiger bones and fangs are used to prepare traditional medicines and concoctions to relieve aches and pains, and heal wounds (USAID, 2018). Parts of numerous other species are used in traditional medicines but comprehensive research into the topic specific to Thailand has not been found.

- To be kept as pets. Live animals including small mammals, birds and reptiles (Nijman and Shepherd, 2014) are kept as pets for various reasons including companionship and for recreation (show/contest animals) among others. As reported in the physical market monitoring section, the Chatuchak market is a popular hub for the pet trade. Online market monitoring has also uncovered large number of live animals offered for sale on Facebook and other platforms. Consumer data for these groups of users is not available.
- For spiritual reasons. Research has shown that among those who own tiger and ivory products, 95% and 88% respectively claim that they use these products for perceived spiritual reasons while 51% say they bought ivory for its aesthetic value (USAID, 2018). Ivory accessories and jewelry are more often owned by women while ivory and tiger spiritual products are mainly owned by men. Ivory and tiger products are purchased as spiritual items in the form of amulets and are available at temples and amulet markets, while ivory jewelry and accessories can be purchased from ivory markets and jewellery stores. Many shops do not display ivory or tiger products openly and only allow serious buyers access to their inventories; some even require personal recommendations. Amulet worshippers and patients seek advice from monks and traditional healers who either offer amulets or medicine made from wildlife parts or suggest where they can get hold of the products. Some Buddhist radio and television channels also discuss medicinal and magical properties of wildlife products and provide means for people to contact them to request details and places to buy certain products.
- For use as jewellery and decoration. Ivory and helmeted hornbill products are often purchased as jewellery or accessories, figurines or other decorative items, and as collectables.

Table 4 summarizes the demographics, tendency to purchase, motivations, source of information and concerns of different user groups of wildlife products.

Table 4: Summary of demographics, motivations, source of purchase and concerns of consumers of wildlife products in Thailand by reason for consumption

REASON	GROUP	DEMOGRAPHIC	TENDENCY TO BUY	MOTIVATIONS TO CONSUME/PURCHASE	SOURCE	DETERRENTS TO CONSUME/PURCHASE
nption	Food		7% likely to buy and consume [1]	Emotional (crave exotic tastes) [2]/ Nutritional (rural areas)	Markets/ Specialist restaurants [2]	Health concerns [1,3]
Consumption	Medicine	Older people [3]		Medicinal [3]	Markets/ Traditional Medicine Shops [3]	Limited Knowledge, Effectiveness [3]
	Ivory jewellery, and collectables (pendants, bangles)	Owned by 2% of population Women (30 years old+) Affluent [3,4]	3% for non-owners & 75% for owners [3]	Emotional (Beauty)/ Social/ Spiritual (luck) [3]	Jewellery Shops/ Ivory Markets/ Some receive as gift/ Online [3,4,5]	Legality, Authenticity, Curse [3]
ories	Hornbill jewellery and collectibles (pendants, rings)			Emotional (Beauty) / Social	Markets/ Online [6,7]	
Accessories	Decorations and collectibles including figurines (Ivory, bones, Hornbill)	Middle aged Affluent Somewhat superstitious [3,4]	3% for non-owners (ivory and tiger) & 69% (tiger) and 75% (ivory) owners [3]	Emotional (Beauty) / Social / Spiritual (luck) [3]	Markets/ Ivory Markets/ Temples/ Online [3,4,5,6,7]	Legality, Authenticity, Curse (Ivory) [3]
	Large Pieces (Tusk, Head, Skin, Skull)	Middle aged Wealthy [3,4]		Social [3]	Personal Networks/ Some receive as gift/ Family heirlooms [3]	Legality [3]
<u>_</u>	Tiger Amulets	Owned by 1% Men (30+ years) Superstitious [3]	3% for non-owners/users & 69% for owners/users [3]	Spiritual (protection) [3]	Amulet Markets/ Temples/ Monks & Healers/ Online [3]	Legality, Authenticity [3]
Spiritual	Ivory Amulets	Owned by 2-5% Women (40+ years) Superstitious [3,4,5]	3% for non-owners & 75% for owners [3]	Spiritual (luck and protection) / Emotional (Beauty) [3]	Jewellery Shop/ Ivory Markets/ Amulet Markets/ Online [3]	Legality, Authenticity, Curse [3]
	Birds (Bulbul, Myna, Hawks, etc.) [8]			Emotional / Social (Exotic), Recreational	Markets (Chatuchak)/ Online/ Pet Store [6,7,8]	
Pets	Mammals (Loris, Monkeys, Otters, Squirrel, etc.) [9]			Emotional / Social (Cute "Kawaii" & Exotic), Recreational	Markets (Chatuchak)/ Online/ Pet Store [8,9]	
	Reptiles (Tortoises, Freshwater Turtles, etc.) [10,11]			Emotional / Social (Exotic), Recreational	Markets (Chatuchak)/ Online/ Pet Store [8,10,11]	

Source: 1 GlobeScan for WWF, 2020, 2 Bangkok Post, 2017, 3 USAID, 2018, 4 WildAid, 2015, 5 GlobeScan for National Geographic, 2015, 6 Chng & Eaton, 2016, 7 Phassaraudomsak et al., 2019, 8 Phassaraudomsak and Krishnasamy, 2018, 9 Gomez and Bouhuys, 2018, 10 Shepherd and Nijman, 2008, 10 Nijman and Shepherd, 2014

REVIEW OF AWARENESS RAISING AND DEMAND REDUCTION CAMPAIGNS

There have been several demand reduction campaigns since 2013 by NGOs such as WWF and WildAid and by USAID Wildlife Asia in partnership with the government, as summarised in Table 5. Most campaigns have addressed the demand for ivory products, and a few have addressed the demand for other animals like tigers and sharks.

A review of the campaigns shows that most of those conducted in the period 2013-16 focused on raising awareness of the threats of illegal wildlife trade to the population of the species. Some of the more recent initiatives have addressed the underlying motivations of the buyers with the objective of achieving lasting behaviour change. There is a need for continued initiatives to reduce the demand for these products, and to consider the potential to tackle motivational clusters for consumption, which will be conducted as part of Component 3 of this project (Reduced demand for illegal wildlife products and targeted awareness actions to support law enforcement).

So far, demand reduction initiatives have been mostly focused on Bangkok. Some of the campaigns utilised offline media such as special events and out-of-home media including posters placed at BTS stations, airports, and football stadiums⁹ in Bangkok, but most campaigns utilised primarily online channels and social media and therefore tended to reach primarily younger, urban audiences.

The campaigns aiming to raise awareness of the laws had long messages referring to the details of the laws and it is therefore unlikely that they resonated with the primary target audiences. Importantly, campaign elements did not incorporate examples of law enforcement such as seizures or convictions and were therefore less likely to deter the behaviour as consumers perceive only a low risk of being caught and punished.

It is therefore proposed that for future campaigns the motivations of the buyers should be identified, such as aesthetical values, social image or the spiritual properties of the commodities, and messages developed to address these motivations and thereby deter buyers. Campaigns should also incorporate consumers' concerns and use them as potential deterrents in the messaging.

Effective law enforcement could be an effective deterrent and incorporated in campaigns, for example as part of a twin-track approach, incorporating general messaging about regulations and enforcement together with targeted messaging which addresses underlying motivations to change individual behaviours.

9 http://www.wildaidthai.org/news/tony-jaa-thai-national-football-team-coach-players-call-thais-go-ivory-free

Table 5: Summary of Wildlife Trade Demand Reduction Campaigns in Thailand

Organization & Campaign	Species	Target Audience	Channel	Key Message	Outcomes
Freeland (Fin Free) 2013	Shark fin	General public Hotels, Restaurants, Supermarkets	Videos with message for campaign ambassadors. Website and Social Media Walk rally and Flash mobs T-shirts and other merchandise	Stop serving and eating shark fin because of environmental impacts, health risks, and brutal and inhumane harvest methods. "No fin in the bowl, more fins in the ocean"	Change.org campaign with more than 3000 supporters Hotels and restaurant received approval stickers for display 'Blue List' of businesses that pledge to be fin free
WWF (Hands off my Parts) 2013	Elephants, Rhinos, Tigers	General public	Social Media Campaigns, YouTube Video, Celebrity endorsements, t-shirts and other products, Publicity event at Central World	"Hands off my parts" with focus on ivory, rhino horn and tiger parts. Animals are being killed to get these items.	Online petition launched asking PM Yingluck Shinawatra to kill the trade that kills the elephants.
WildAid & USAID Wildlife Asia (Ivory Free) Since 2014	Elephant Ivory	General public	Social media campaign (upload and share photos), support from more than 100 celebrities, sportspersons, politicians, artists and religious leaders	The "I am #IvoryFree," campaign's goal is to mobilize Thais to pledge to never buy, own or use ivory.	Social media posts received several million views with thousands of likes, comments and shares. The success of the campaign led to several follow-up campaigns by WildAid and partners.
B. Grimm & WWF (Thais for Tigers) 2015 THAIS FOR FOR FIGER Su ^{Trulija1UIJa}	Tigers (along with four other species in the stamp collection)	School Kids, also attracted general public	Exhibition during the <u>World Tiger Day 2015</u> Social Media Campaigns <u>Save the</u> <u>Tiger Roadshow</u>	Create awareness and ensure that tiger preservation becomes part of the Thai consciousness and that every effort is made to protect the endangered creatures.	More than 2 million supporters on social media. Launched a set of commemorative stamps featuring important wildlife species in Thailand.

Freeland (iThink) 2015	Wildlife products, including elephant ivory, rhino horn, shark fin, big cats, exotic pets.	General public	Online and offline campaigns (social media, YouTube, panel discussions), Support from known celebrities, wildlife experts (veterinary and marine biologist)	Inform, share, and empower people to say no to buying endangered wildlife and wildlife products	Series of YouTube videos received several thousand views. 62% of people surveyed post-campaign said they have seen the PSAs
WWF (Chor Chang Can Save Elephants) 2015	Elephants	General public	Offline and online campaigns (social media campaigns encouraging public participation) celebrity endorsements	People removed "Chor Chang", a common letter in the Thai alphabet, similar to "E for elephant" from their names.	Reached over one million Thai people including top decision makers. Boon-Chuay, a 2m wooden elephant with skin made of photos of campaign participants was put on display.

WildAid, WWF, African Wildlife Foundation & Save the Elephants (Ivory Free) 22016	Elephant Ivory	General public	Two videos featuring Tony Ja and Coach Zico TV Ads Out-of-home media placement Social media placement	Primary objective: raising awareness of plight of elephants to meet the demand in Thailand. "Never buy, own or accept ivory as gift. Secondary objective: Question those who purchase ivory for beliefs and encourage hard-work as an alternative.	Tony Ja PSA gained 3.2 million views Elephant warriors PSA gained 416K+ views Video Ads aired on 25 Skytrain station, 222 screens/day, aired 18 times a day for 43 Days. MUPI ads at 30 locations reached 6.3 Million people The PSAs also aired on six TV Channels 23 News coverages
WildAid (<u>Elephant never forget</u>) 2016 *Part of Ivory Free*	Elephant Ivory	General public Mothers Women age 25+	Video starring Mam McIntosh launched on World Elephant day Social media placement with #PickMomUp Out-of-home media placement	Never buy, own or accept ivory as a gift. Say no to ivory before all that's left for our children is the stories about elephants	6 million reach 6 Million impressions +91,000 people engaged on social media 13 News coverages
ASEAN Working Group on CITES and Wildlife Enforcement (Save Elephants & Stop Illegal Wildlife Trade Campaign) 2017	Elephants, Tigers, Monkeys,	Foreign and local tourist (target <u>Chatuchak market</u> and <u>Pattaya</u>), Children, General public	Exhibition booths at Chatuchak market, Pattaya and other tourist areas. Activities for 2017 New Year celebration and <u>Children's day</u>	Save Elephants do not buy ivory. Had several educational activities for kids during the children's day celebration to increase awareness	Received a lot of attention from tourists. Provided postcards to tourists. Gave out souvenirs to kids. Gained a lot of press coverage but limited presence in social media

WCS (Pride Campaign) 2017	Tiger and its prey (banteng, deer, gaur, wild boar)	Wild meat consumers, restaurant and food shop owners and market stall owners	Community outreach, Mass media activities, Billboard, buttons, bumper stickers, posters, t-shirts, Capacity building workshops, Radio programs	Informed the biodiversity value of the ungulate, wildlife conservation law, and risk to health from wild meat Messaged included: "Food on the dish is your food but outside of the dish is the Tiger's prey." "Best Thai Food does not need wild meat/ No wild meat in our shop" "Buying and selling wild meat are illegal, help report whenever you see."	Formed networks of volunteers to educate people about the problems with consumption of wild meat. Conducted training for teachers and students to increase their awareness of the issue
WildAid (Business Leader – Ivory Free Pledge) 2017 *Part of Ivory Free*	Elephant Ivory	Government Business Sector General public Elites who purchase ivory as status symbol	Newspaper Ads Opinion-Editorial Social Media placement Offline event	End Ivory Trade in Thailand – request for government to reconsider its stance and gradually end the domestic ivory trade. Targeting elite who purchase ivory as status symbol.	35 News Stories including online, print and TV coverage. 14,000 people engaged and 1.3 million people reached on social media
WildAid (Shark fin Demand in Thailand, report launch) 2017	Shark Fin	Media General public Male-Female age 25++ (Survey findings)	Press launch Social Media	Shark fin consumption in Thailand shows worrying signs.	Local and International News coverage following report launch. Infographics from infographic Thailand was shared by 14,000 people.

USAID Wildlife Asia (Digital Deterrence Campaign) Phase 1: 2018-2019	Illegal Wildlife Trade (Elephant, Pangolin, Rhino, Tiger)	People who searched for illegal wildlife products online	Google AdWords, Search Engine Optimized landing pages, Social ads	Google Ads targeting keyword searches in four languages, showed one of four different messages based on keywords used to deter those using the keywords from purchasing illegal wildlife products.	560,470 searches related to wildlife products were served the google deterrence ads (94 % of total searches), of which 17,410 (3.11 %) searches clicked to the landing page sponsored by the Department of National Parks, Wildlife and Plant Conservation (DNP).
WildAid (<u>Celebrate with</u> <u>#NoSharkFin #อลองไม่อลาม</u>) 2018 Phase 1	Shark Fin	General public Male-Female 25+	Offline event Television Ads Social Media placements and engagements Out-of-home media placements. Speak for Sharks PSA was aired on six TV Channels. 17 billboard panels inside Suvarnabhumi International Airport (in partnership with JCDecaux who displayed the digital banner beyond the campaign period) Engaged 10 social media bloggers/ cartoonists.	Raise awareness of the issue,and tackle consumption at social gatherings - "Say no to shark fin soup – Celebrate without fins". #NoSharkFin #ออองไม่ออาม	Speak for Sharks PSA reached more than 310,000 people, was viewed more than 271,000 times across DMCR and WildAid platforms and shared by close to 4,800 people on Facebook. At least 17 news stories mentioning the campaign in Thai online and TV media platforms. Total 10 number of posts were designed by bloggers/cartoonists were shared more than 2118 times and over 20,000 engagements on Facebook.

WildAid (Celebrate with #NoSharkFin #อองไม่ออาม) 2018 Focus on weddings	Shark Fin	Male-Female age 25+ Couples and wedding guests	Offline event, Television Ads, Website Ads Social Media placements and engagements Out-of-home media 30-second video message, "Making of a Wedding," starring Pong Nawat Kulrattanarak together with a testimonial video from Master Viroj Tangvarnich, an expert on Chinese culture.	Let's not make an auspicious occasion inauspicious by serving shark fin soup. (Survey found people consume/serve shark fin for auspiciousness) #NoSharkFin #ธลองไม่ธลาม	The campaign message (the PSA and video testimonial) reached 2.47 million people on Facebook, engaged more than 421,000 people and was shared 10,000 times. 13 News coverage by three TV channels
WWF Thailand (Travel Ivory Free) 2018	Elephant Ivory	General public and Chinese tourists	Resin sculpture of mother and baby elephant on display at the Bangkok Art & Culture Center Press Release and Social Media coverage	"Travel Ivory Free – be a responsible tourist" Transnational wildlife crime is as serious as arms, drug and human trafficking. Encourage people to aware of Illegal Ivory Trade and promote a sustainable tourism.	Visitors were invited to take photos with sculpture of mother and baby elephant. On the ground activity to reach individual travellers who visited Thailand during Golden Week 2018.

WildAid (Ivory Free) 2018 *Part of Ivory Free*	Elephant Ivory	General public	Social media campaign (upload and share photos), support from more than100 celebrities, sportspersons, politicians, artists and religious leaders.	The "I am #IvoryFree," campaign's goal is to increase the social unacceptability of ivory by mobilizing Thais to pledge to never buy, own or use ivory. Never to buy, use or give ivory as gifts. How can ivory bring good fortune when it comes from killing? Ivory is beautiful only on elephants. How can ivory from elephants that were left lifeless and powerless bring power?	Social media posts received 120 million impressions with more than 1.1 million engagements More than 15,000 Thais created their own "Ivory Free" photos and shared them on their social media accounts. Over 30 news coverage.
WildAid & JCDecaux (Partnership for the Wild) 2018	Elephant Ivory and shark fin	Chinese travelers	Billboards at Suvarnabhumi Airport	IVORY: Responsible tourists don't buy ivory and it is illegal to take ivory in or out of country SHARK: Protect our oceans, say no to shark fin. Up to 73 million sharks are killed each year for shark fin soup.	33 billboards, for period of 3 months as per contract. However, Yao Ming's billboard in some locations got extended for almost a year reaching millions of visitors.
WildAid (Ivory is beautiful only on elephants2018 **Part of Ivory Free*	Elephant Ivory	Women age 20+ who purchase ivory for beauty as drivers General public	New video and billboard series featuring leading actress and international fashion icon 'Mai' Davika Hoorne TV Ads Social media Out-of-home media placements	Ivory is beautiful only on elephants. Please never buy, use or accept ivory as a gift. New version of the popular children's Elephant song.	Aired on 4 TV Channels, 16 billboards around Suvarnabhumi airport and Bangkok. 19 Online and TV news stories

USAID Wildlife Asia (Digital Deterrence Campaign) Phase 2: 2019-2020 คำแต่อน! เนื้อหาที่คุณค้นหา อาจเข้าข่าย <u>เมิดกฎหมาย</u> อาจเข้าข่าย <u>เมิดกฎหมาย</u>	Illegal Wildlife Trade (Elephant, Pangolin, Rhino, Tiger)	Retarget those captured from phase 1 and people who has the same demographic profile as the target audience	Google AdWords, Search Engine Optimized landing pages, Social ads	Key messages aligned with Digital Deterrence Phase 1 and Beautiful Without Ivory Campaign Materials: Creative graphic for social media ads and Google Display banner ads	The Campaign reached 8, 083,000 through the online platforms.
British Embassy 2019 (#ElephantsAreLikeUs)	Elephants	General public	Social Media, Press Release, Sales of t- shirts and other items, celebrity endorsements, exhibition booths at universities	#ElephantsAreLikeUs	Released a video about three rescued elephants which received 980,000 views
WildAid (Celebrate with #NoSharkFin #อองไม่ออาม) 2019 Focus on Lunar New year	Shark Fin	Male-Female age 25+	Social Media video from TCM lecturer and Chinese Culture Specialist	#NoSharkFin #ฉลองไม่ฉลาม	Testimonial video featuring Chinese culture expert and TCM lecturer. The video reached 46,400 people, engaged more than 2,600 people including 165 shares. Over all nine social media contents were posted reaching more than 116,000 people and engaging more than 7,500 people

WildAid (Celebrate with #NoSharkFin #ฉลองไม่อลาม) 2019 World Shark Day Focus on Weddings	Shark Fin	Male-Female 25+ Weddings	Out-of-home media Social media	Shark fin is always the worst choice #NoSharkFin #ธลองไม่ธลาม	Nine items of news coverage Campaign message reached 467,668 people per day and 14,030,040 per month. Shared 8 posts on WildAid Thailand's Facebook page with campaign key visuals and motion graphics. The content reached over 63,200 people and engaged 4,600 people.
USAID Wildlife Asia & WildAid, endorsed by DNP (A Good Life is Free of Killing) S Spiritual Beliefs Phase 1: 2019 - 2020	Elephant ivory and tiger parts	Ivory and Tiger product owner/users or potential buyer	Online and offline campaign endorsed by three Influencers - Thai actor /director, actress and prominent Buddhist monk. Video questioning spirituality and beauty of products produced through murder of wildlife. Video interviews available online.	"How can amulets that come from taking another being's life be considered as auspicious or a source of good karma?" "There is no beauty, no sacredness, no value in products that come from killing" Materials: Key visual, main 60-sec video, three 30-sec videos of each campaign influencers.	Social Media Channels (Facebook, Instagram) received 1 million views and 1.4 million engagements (likes, shares, comments) Out-Of-Home media (Print ads, bus shelters and mupi ads) earned an estimate reach of 22.88 million people. USAID Wildlife Asia 2020 Survey found that those who agree to the benefit that ivory and tiger products bring good luck decreased, respectively from 86% in 2018 to 54% in 2020 and from 62% in 2018 to 49% in 2020, among those exposed to the campaign and those who

					agree to the concern that ivory and tiger's spiritual powers are unfounded increased, respectively from 28% in 2018 to 47% in 2020 and from 28% in 2018 to 48% in 2020 among those exposed to the campaign.
USAID Wildlife Asia (Beauty without Ivory) 2019 -2020 สวยที่ใจ ไม่ใช่ที่งา เกินใช่ที่งาก เกินใช่เกินเดยม อับรลย ๏	Elephant ivory	Women	Online and offline campaign by five fashion/lifestyle influencers with large social media followings to promote a lifestyle that rejects the use of ivory since it is not beautiful and never socially acceptable.	"True Beauty Does Not Need Ivory" "Ivory Is Never Beautiful and Never Acceptable" Materials: key visual, main 45-sec video, 30- sec video and other short variations of the main videos.	Social Media Channels (Facebook, Instagram and YouTube) received 12.7 million views. Out-Of-Home media (posters in MRT stations, ads in Praew magazine), had an estimated reach of around 7 million. USAID Wildlife Survey 2020 found that those who agree that ivory makes people feel beautiful decreased from 67% in 2018 to 48 % in 2020 among those exposed to the campaign.

USAID Wildlife Asia and Golden Triangle Asian Elephant Foundation (No to Ivory Souvenirs and Gift) 2019	Elephant ivory	Guests who stay at 25 hotels operated by the Minor Group and 4 Sukosol Hotels in Thailand	In-room channels show 60-seconds video animation highlighting the negative impacts of illegal wildlife trade.	"No to Ivory Souvenirs and Gifts" Material: 60-sec video animation	Informed tourists about the laws on bringing ivory in and out of Thailand, and called on them to stop buying ivory souvenirs and gifts
WildAid (Kung Fu Panda) 2019 Follow up Activity Inducestric and the second seco	Illegal Wildlife Trade (focused on tigers and ivory)	Visitors at Chiang Mai, Khao Kheow Open Zoo, Khon Kaen, Korat Zoo, Songkhla and Ubon Ratchathani Zoo. General public Children and Youth	Offline and social media placements and school outreach activity to raise awareness and build social unacceptability of these products among youth	Kung Fu Panda's friends need help, say no to wildlife products. When the buying stops the killing can too. -Say no to ivory, shark fin and tiger parts -When the buying stops, the killing can too.	Tens of thousands of youth and families who visit the zoo visited six schools reaching 600 students
WWF Thailand (Travel Ivory Free) 2019	Elephant ivory	Chinese outbound tourists traveling to Thailand	1. Training provided for tourist guides (primarily working with Chinese tourists) 2. Offline and online campaign such as troops at tourist attractions/ campaign installations at hot spot areas (airports, Thai Airways' cargos in China, Golden Triangle), flight announcement in Thai Airways flights/ social media platforms	Promote legal consequences to the target audiences. Bringing ivory out of the country has legal implications, regardless of the size and value of the product" – to promote new penalties under the new wildlife law.	Campaign reached tens of thousands of travellers with message about legal implications of transporting ivory. Engaged more than 50 tourist guides during workshop to raise awareness of ivory trade. Conducted quantitative survey in five tourism hotspots among Chinese tourist in Bangkok

 USAID Wildlife Asia & DNP (No
 Ivory No Tiger Amulets) Spiritual
 Ivory and Tiger
 product owner/users
 product owner/users

Online and offline campaign endorsed by prominent Buddhist monk. Video questioning spirituality of products (perceived protection from harm) produced through a slice of life of a man having an accident despite having the amulets.

The key message of this Campaign is: "Can ivory / tiger fang really protect you?" "Stop buying, stop using products made from tiger parts and elephant ivory.

Materials: Key visual, main 60-sec video, 30sec video and other short variation of the main videos; Key Visual Social Media Channels (Facebook, Instagram) received 2.6 million views.

Out-Of-Home media (Tuktuks and billboard n areas near amulet markets,) achieved an estimated reach of 1.9 million

USAID Wildlife Asia 2020 survey revealed that those who agree that ivory and tiger products protect from harm decreased, respectively, from 80% in 2018 to 48% in 2020 and from 62% in 2018 to 52% in 2020 among those exposed to the campaign. Those who agree to the concern that ivory and tiger's spiritual powers are unfounded increased respectively from 28% in 2018 to 47% in 2020 and from 28% in 2018 to 48% in 2020, among those exposed to the campaign.

Implications for future campaigns

Most of the campaigns during the period 2013 -2016 were designed to address the low levels of awareness of issues related to IWT and provided information about the declining population of the respective species and the cascading effects that poaching and IWT can have. More recently, some campaigns have been designed to address the underlying consumer motivations that lead to the consumption of wildlife products with the objective of achieving lasting impact. Examples include USAID Wildlife Asia's Digital Deterrence Campaign, "Beauty without Ivory", "A Good Life is Free of Killing" and the "No Ivory, No Tiger Amulet" campaigns which targeted specific motivations and target audiences. The USAID Wildlife Asia survey to assess the impact of these campaigns in July 2020, revealed that these campaigns succeeded in changing attitudes as well as social norms and intentions to use ivory and tiger products in the future.

To have maximum impact, future campaigns should identify priority behaviours and consumer segments and target the underlying motivations for purchasing the illegal wildlife products. In addition to campaigns which target consumers of specific products, there is a need for campaigns that focus on tackling the demand for wild animals as pets and the use of illegal wildlife products for food, both of which account for significant trade volumes.

Multiple options will be developed and evaluated with groups of target consumers during campaign pre-test and pilot test phases. Table 6 presents a few examples of potential behaviour change campaigns to reduce consumption of wildlife products in Thailand by reason for consumption. In addition, additional campaigns highlighting the updated WARPA are also necessary to raise the low level of awareness and understanding surrounding Thailand's laws. Table 6: Examples of potential behavioural change campaigns to reduce consumption of illegal wildlife products in Thailand by reason for consumption

REASON	MOTIVATION/ Deterrent	EXAMPLES OF MESSENGERS	EXAMPLES OF KEY MESSAGES (TO BE TESTED)	COMMUNICATION CHANNELS		
ption	Health Risks	Doctors, Nutritionists	Wild meat may carry pathogens that can cause zoonotic diseases in humans. Consumption of farmed animals is healthier and safer.	Billboards at Markets Posters in Hospitals & Clinics Social Media posts (DNP &		
Consumption			Traditional medicines incorporating wildlife products may not be scientifically proven nor effective, or even harmful, and there are better alternatives.	Partners) + Hospitals & Clinics Informative Workshop in areas with high consumption. Social media platforms.		
	No longer Fashionable	Celebrities, Models, Famous Women	Jewellery and Accessories made from animal parts are symbols of cruelty and out of date, people like us no longer want to be seen with them.	Billboards at Airports and Markets (especially jewellery and accessory markets)		
Accessories	No longer symbol of Success	Successful Business Owners	Accessories and decorations made from animal parts are not a symbol of success but a symbol of shame and cruelty.	Short Video Clips 4 panel comics for social media, newspapers and as posters		
Acc	No longer acceptable as Gift	Business Owners, Celebrity Couples	More and more people are rejecting jewellery, accessories and decorations made from animal parts. Buying, wearing and giving these products may cause you to lose face.	TV advertisements Social Media posts (online platforms and DNP & Partners)		
	Not Auspicious or Spiritual	Monks, Religious Leaders, Business owners	There is nothing Auspicious or Spiritual about items that are made by killing other beings	Posters at Temples and Amulet Markets		
Spiritual	Do not bring good fortune	Monks, Religious Leaders	Life is sacred, does killing animals for their body parts really bring spiritual benefits, or could it bring curses?	Short Video Clips Radio and TV advertisements Social Media posts (online platforms and DNP & Partners) + Religious channels.		
Pets	Hard to take care	Veterinary, Youth Icons, Young Celebrities	Exotic animals may spread zoonotic diseases. They have special needs that can be hard to meet in home environments. They may also fall sick if not cared for properly and treatment can be costly	Billboards at Markets Posters at Pet and pet supply shops Short Video Clips TV advertisements		
Å	Not cool	Youth Icons, Young Celebrities	Keeping pets caged in limited spaces is cruel and not cool, wild animals should live in the wild.	Social Media posts (online platforms and DNP & Partners)		
	Forcefully taken from parents	Park Rangers, Youth Icons, Young Celebrities	Most young animals are forcefully taken from their parents and often that results in them being killed			

CONCLUSION AND RECOMMENDATIONS FOR THE WORK UNDER THIS PROJECT

Indicator Species

Taking into account market monitoring data and incident data, it is proposed to monitor (elephant) ivory and tiger parts as initially planned in the project design. In addition, the project will focus on Helmeted Hornbill *Rhinoplax vigil*, the casques of which are used in accessories, jewellery and collectables, Red-whiskered Bulbul *Pycnonotus jocosus*, Otters, Sunda Slow Loris *Nycticebus coucang*, Indian Star Tortoise *Geochelone elegans* and Burmese Star Tortoise *Geochelone platynota* that are kept as pets, and also protected and controlled species¹⁰ that are consumed as wild meat. It is not proposed to include pangolins nor

Market Assessment Framework

Due to the COVID-19 pandemic, physical market surveys will not be feasible in the short term. However, when the situation changes, it is proposed to carry out physical and online market surveys of the above indicator species at key markets to record the number of outlets trading those commodities and the number of specimens. This includes monitoring ivory markets in Bangkok, Surin, Nakhon Sawan and Chiang Mai provinces, monitoring tiger products at selected temples, businesses and amulet markets known to deal in tiger products, and the Chatuchak market for live animals used as pets (birds, turtles, small mammals). Additional surveys at the Pengjan village markets in Nong Khai province that borders with known wildlife markets in Lao PDR, and the Sadao border

rhino horn because available data indicate that Thailand11 is not a significant demand market for these species. This selection will enable key species to be monitored, and will also provide a cross-section of mammals, birds, and reptiles.

With the current COVID-19 pandemic, the project should also use the opportunity to assess availability, geographic locations and relative demand for animals that are consumed as wild meat or kept as pets that may be potential vectors for zoonotic diseases.

checkpoint in Songkhla province near the Thai-Malay border are also recommended as they are the demonstration sites for this project and one of the main entry and exit points for illegal wildlife products in Thailand.

Meanwhile, it is proposed to assess the online market by monitoring selected groups on Facebook, Instagram, Line and other channels to record illegal wildlife trade taking place. In addition to monitoring what is offered for sale, sharing data gathered during online surveys will also be useful for regular updates to DNP's Wild Hawk Task Force and other agencies to take enforcement actions, since online trade of wildlife that is now an illegal activity under the revised WARPA 2019.

Campaign to raise awareness of the WARPA

It is proposed to develop a campaign to be executed online and offline to raise awareness of the revised WARPA 2019 since levels of awareness and understanding remain low. Online campaigns through the DNP website and those of other relevant organizations, and in social media, are proposed to target internet users. Potential

purchasers in physical markets can be reached by placing outdoor messaging at various markets such as Chatuchak. In addition, messaging can be placed at airports and other key mass transport locations to raise awareness among tourists, whether domestic or foreign.

¹⁰ Formative research will be carried out to determine the focal species.

" Both pangolin and rhinos can be mentioned when targeting traditional medicines that use illegal wildlife products as ingredients.

Social and Behavioural Change Campaigns

While there have been several campaigns aimed at reducing demand for wildlife in Thailand, most of them focused on ivory with only a few that focused on other species. Many of the earlier campaigns were designed to raise awareness of the threats to the species. In some of the more recent campaigns, behaviour change methodologies have been utilised. It is recommended that the project uses SBCC approaches to develop demand reduction campaigns that target specific consumer groups by identifying the consumer profiles, addressing their motivations and leveraging their concerns and deterrents to come up with relatable and effective campaign messages.

Research Gaps of Situation Analysis

While extensive research has been done around the ivory and tiger parts that are mostly used for spiritual or aesthetic purposes, very little is known about the motivations of those who keep wild animals as pets, consume wild meat and use traditional medicines that contains wild animal parts as ingredients. Therefore, additional research is needed to probe into these user groups and fill the following research gaps:

- Information about people who keep wild animals as pets. There is a need to conduct research to understand their (a) profiles (gender, age, education, financial status, etc.) (b) purchase history & tendency, (c) motivations for purchase/ownership of pets (companionship, recreational, social status, etc.), (d) purchase channels & sources of information (e) concerns and deterrents, including links to zoonotic diseases and legality of ownership.
- Information about people who consume wild meat. There is a need to conduct research to
 understand their (a) profiles (gender, age, education, financial status, etc.) (b) purchase history &
 tendency, (c) motivations to consume wild meat (traditions/beliefs, desire for exotic tastes,
 sustenance, etc.), (d) purchase channels & sources of information (e) concerns and deterrents,
 including links to zoonotic diseases and legality of consumption.
- Information about people who use traditional medicine with wild animal parts as ingredients.. There
 is a need to conduct research to find out their (a) profiles (gender, age, education, financial status,
 etc.) (b) purchase history & tendency, (c) motivations for using traditional medicines that use wild
 animal parts as ingredients (certain traditions/beliefs do not trust modern medicine, modern
 medicine not available, etc.), (d) purchase channels & sources of information (e) concerns and
 deterrents, including effectiveness, linkages to zoonotic diseases and legality of use.

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ANNEX 1

Birds Recorded in Chatuchak weekend market, Bangkok, Thailand, 28-29 March 2015.

Birds recorded in Chatuchak weekend market, Bangkok, Thailand, 28–29 March 2015.

Key: * = species native to Thailand, NT = Near Threatened, VU = Vulnerable, CR = Critically Endangered, EN = Endangered

Species		No. of shops	Species		No. of shops
* Zebra Dove Geopelia striata	182	5	* Asian Blue Quail Synoicus chinensis	12	3
* Red-whiskered Bulbul Pycnonotus jocosus	93	8	Salmon-crested Cockatoo Cacatua moluccensis VU	10	6
* Eastern Spotted Dove Spilopelia chinensis	78	7	Turquoise Parrot Neophema pulchella	10	1
Grey-capped Greenfinch Chloris sinica	73	1	Grey Parrot Psittacus erithacus VU	10	4
Sun Parakeet Aratinga solstitialis EN	67	6	Maroon-bellied Parakeet Pyrrhura frontalis	10	2
Red-billed Leiothrix Leiothrix lutea	50	6	* Black-winged Kite Elanus caeruleus	9	3
* Red-breasted Parakeet Psittacula alexandri NT	46	6	Chinese Grosbeak Eophona migratoria	9	3
* Greater Necklaced Laughingthrush Garrulax pectoralis	5 34	1	Red-and-green Macaw Ara chloropterus	8	6
Long-tailed Finch Poephila acuticauda	32	2	* Black-throated Laughingthrush Garrulax chinensis	8	1
* Black-headed Greenfinch Chloris ambigua	30	2	Blue-and-yellow Macaw Ara ararauna	7	5
* Streaked Weaver Ploceus manyar	27	1	Violet-necked Lory Eos squamata riciniata	7	2
* Brambling Fringilla montifringilla	24	2	Blue-faced Parrotfinch Erythrura trichroa	7	1
Red-billed Starling Poliopsar sericeus	24	2	Indian Peafowl Pavo cristatus	7	2
* White-rumped Munia Lonchura striata	23	2	Lady Amherst's Pheasant Chrysolophus amherstiae	6	2
* Garganey Anas querquedula	18	1	Coleto Sarcops calvus	6	4
Azure-winged Magpie Cyanopica cyanus	18	4	* Eurasian Hoopoe Upupa epops	6	1
Red-winged Laughingthrush Trochalopteron formosur	n 18	1	* White-breasted Waterhen Amaurornis phoenicurus	5	2
European Goldfinch Carduelis carduelis carduelis	16	1	Yellow-crowned Amazon Amazona ochrocephala	5	3
Sulphur-crested Cockatoo Cacatua galerita triton	15	7	* Common Hill Myna Gracula religiosa	5	3
Eclectus Parrot Eclectus roratus roratus	15	6	Black-headed Parrot Pionites melanocephalus	5	3
Vinous-throated Parrotbill Sinosuthora webbiana	15	1	Dusky Parrot Pionus fuscus	5	2
Chestnut-fronted Macaw Ara severus	13	3	Long-tailed Parakeet Psittacula longicauda NT	5	1
* Spotted Owlet Athene brama	13	5	Coconut Lorikeet Trichoglossus		
* White-rumped Shama Copsychus malabaricus	13	4	haematodus haematodus	5	1
Elliot's Laughingthrush Trochalopteron elliotii	13	1	Yellow-crested Cockatoo Cacatua sulphurea CR	4	2
Golden Pheasant Chrysolophus pictus	12	3	* Grey-capped Emerald Dove Chalcophaps indica	4	1

Species		No. of shops	Species	No. of birds	No. of shops
Northern Bobwhite Colinus virginianus NT	4	1	* Stripe-throated Bulbul Pycnonotus finlaysoni	2	2
Blue-streaked Lory Eos reticulata NT	4	1	White-eared Bulbul Pycnonotus leucotis	2	1
Chattering Lory Lorius garrulus morotaianus VU	4	2	Channel-billed Toucan Ramphastos vitellinus VU	2	1
Monk Parakeet Myiopsitta monachus	4	1	Eurasian Siskin Spinus spinus	2	1
* Black-naped Oriole Oriolus chinensis	4	1	* Chestnut-tailed Starling Sturnia malabarica	2	1
Eurasian Magpie Pica pica	4	1	Reeves's Pheasant Syrmaticus reevesii VU	2	1
* Blue-winged Pitta Pitta moluccensis	4	1	* Red-tailed Laughingthrush Trochalopteron milnei	2	1
* Lineated Barbet Psilopogon lineatus	4	1	Black-chinned Yuhina Yuhina nigrimenta	2	1
* Alexandrine Parakeet Psittacula eupatria NT	4	1	* Oriental Skylark Alauda gulgula	1	1
* Brown-breasted Bulbul Pycnonotus xanthorrhous	4	1	* Puff-throated Bulbul Alophoixus pallidus	1	1
Lilac-crowned Amazon Amazona finschi EN	3	2	White Cockatoo Cacatua alba EN	1	1
* Oriental Magpie Robin Copsychus saularis	3	1	* Blue-winged Leafbird Chloropsis cochinchinensis	1	1
Galah Eolophus roseicapilla	3	2	* Lesser Green Leafbird Chloropsis cyanopogon NT	1	1
* Collared Scops Owl Otus lettia	3	2	* Greater Green Leafbird Chloropsis sonnerati	1	1
* Black-crested Bulbul Pycnonotus flaviventris	3	1	* Racket-tailed Treepie Crypsirina temia	1	1
Collared Finchbill Spizixos semitorques	3	1	* Common Flameback Dinopium javanense	1	1
* Green Broadbill Calyptomena viridis NT	2	1	Yellow-throated Bunting Emberiza elegans	1	1
* Greater Racket-tailed Drongo Dicrurus paradiseus	2	1	* Lesser Necklaced Laughingthrush Garrulax monileger	1	1
Red Lory Eos bornea	2	1	* Orange-headed Thrush Zoothera citrina	1	1
Tricoloured Parrotfinch Erythrura tricolor	2	1	* Eared Pitta Hydrornis phayrei	1	1
* White-crested Laughingthrush Garrulax leucolophus	2	2	Mongolian Lark Melanocorypha mongolica	1	1
Masked Laughingthrush Garrulax perspicillatus	2	2	* Blue-winged Minla Minla cyanouroptera	1	1
* White-browed Laughingthrush Garrulax sannio	2	1	* Oriental Scops Owl Otus sunia distans	1	1
* Eurasian Jay Garrulus glandarius leucotis	2	2	* Cinereous Tit Parus cinereus	1	1
* Asian Pied Starling Gracupica contra floweri	2	1	* Ashy Minivet Pericrocotus divaricatus	1	1
* Asian Fairy Bluebird Irena puella	2	1	Green Pheasant Phasianus versicolor	1	1
* Silver-eared Mesia Leiothrix argentauris	2	2	* Hooded Pitta Pitta sordida	1	1
Black-capped Lory Lorius lory	2	2	Black-streaked Scimitar Babbler Pomatorhinus gravivo.	x 1	1
* Siberian Rubythroat Luscinia calliope	2	2	* Blue-rumped Parrot Psittinus cyanurus NT	1	1
* Black Kite Milvus migrans	2	1	Eurasian Bullfinch Pyrrhula pyrrhula	1	1
* Spot-breasted Parrotbill Paradoxornis guttaticollis	2	1	* Dusky Thrush Turdus eunomus	1	1
* Scarlet Minivet Pericrocotus speciosus	2	1	* Eyebrowed Thrush Turdus obscurus	1	1
Senegal Parrot Poicephalus senegalus	2	1	Total 1,	271	
* Coppersmith Barbet Psilopogon haemacephalus	2	1			

Source: Chng, S. C. L. and Eaton, J.E. (2016). Snapshot of an on-going trade: an inventory of birds for sale in Chatuchak weekend market, Bangkok, Thailand. BirdingASIA 25: 24–29.

ANNEX 2

Globally threatened species offered for sale at Chatuchak market, Bangkok, Thailand, in the period Nov 2004–Dec 2013, showing volumes observed and the number of surveys (out of 12) during which they were observed.

Species	IUCN status	CITES appendix	Number (surveys)
Radiated tortoise Astrochelys radiata	CR	Ι	320 (8)
Burmese star tortoise Geochelone platynota	CR	Ι	16 (3)
Spider tortoise Pyxis arachnoides	CR	Ι	11 (3)
Ploughshare tortoise Astrochelys yniphora	CR	Ι	3 (3)
Asian narrow-headed softshell turtle Chitra chitra	CR	II	1 (1)
Black-breasted leaf turtle Geoemyda spengleri	EN	II	17 (2)
Assam roofed turtle Pangshura sylhetensis	EN	II	11 (2)
Reeves' turtle Mauremys reevesii	EN		3 (1)
Yellow-headed tortoise Indotestudo elongata	EN	_	2 (1)
African spurred tortoise Geochelone sulcata	VU	II	536 (12)
Spotted pond turtle Geoclemys hamiltonii	VU	Ι	55 (7)
Pig-nosed turtle Carettochelys insculpta	VU	II	51 (11)
Alligator snapping turtle Macroclemys temminckii	VU	-	42 (9)
Aldabra giant tortoise Geochelone gigantea	VU	II	40 (8)
Pancake tortoise Malacochersus tornieri	VU	II	37 (6)
Malayan snail-eating turtle Malayemys subtrijuga*	VU	II	32 (3)
Asiatic softshell turtle Amyda cartilaginea	VU	II	27 (2)
Horsfield's tortoise Testudo horsfieldii	VU	_	14 (2)
Southeast Asian box turtle Cuora amboinensis	VU	II	13 (2)
Burmese eyed-turtle Morenia ocellata	VU	I	4 (1)

* van Dijk et al. (2014) considered *M. subtrijuga* to comprise of two distinct species; here the Malaysian and Indo-chinese forms are treated as one

Key: IUCN status, CR critically endangered, EN endangered, VU vulnerable

Source: Nijman, V. and Shepherd, C.R. (2014). Analysis of a decade of the trade of tortoises and freshwater turtles in Bangkok, Thailand. Biodivers Conserv.

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TRAFFIC is a leading non-governmental organisation working globally on trade in wild animals and plants in the context of both biodiversity conservation and sustainable development.

For further information contact:

TRAFFIC Global Office David Attenborough Building Pembroke Street Cambridge CB2 3QZ UK

+44 (0)1223 277427

traffic@traffic.org traffic.org

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45 SITUATION ANALYSIS