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PILLAGERS IN PARADISE

The trafficking dynamics of the Palawan pangolin

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CONTENTS

Executive summary	vi
Methodology	2
Background	3
Pangolin trafficking supply chain	
Structure of trafficking supply chains	
Trafficking routes	
Prices and laundering	18
Increasing number of networks	19
Challenges facing the state response	21
National legislation	22
Challenges facing law enforcement in Palawan	24
Challenges facing law enforcement in Manila and national level responses	28
International cooperation	29
Civil society and development agencies	30
Conclusion	31
Recommendations	32
Notes	3/1



The Palawan pangolin (Manis culionensis). The illicit trade in this species has dramatically increased in recent years. © Gregg Yan

n recent years, several studies have raised alarm at the illicit trade pressure on the Philippines' endemic pangolin species – the Palawan pangolin. Between 2018 and 2019, seizures of Palawan pangolins increased more than ninefold compared with the previous 18 years.¹ Around 20 live pangolins have been 'retrieved' in and around Metro Manila, a several hundred kilometres boat ride away from their natural habitat, the province of Palawan – also known as the Philippines' 'last ecological frontier'. Recent studies have estimated that as many as 26 784 pangolins may be illegally hunted on the islands of Palawan per year,² with much of the meat and most of the scales making their way to buyers based either in Manila or abroad, making this a national problem driven by international demand.

In light of these indications of burgeoning illegal trade, this report was undertaken with three aims in mind: 1) to understand the broader context of drivers and factors that shape pangolin trafficking dynamics; 2) to shed light on the nature of networks driving the trade; and 3) to identify challenges and gaps in the state response. It is intended to complement work undertaken under the rubric of a broader project by the Zoological Society of London and six other organizations, namely 'Combating Palawan pangolin trafficking: Empowering community-based protection and proactive enforcement', funded by the UK Department for Environment, Food and Rural Affairs. The primary components of this project focus on community-based responses to illegal hunting, but also seek to improve the government response at various levels of the trade chain.

The report sets out how trafficking of the Palawan pangolin has grown over the last two decades, with what appears to be a sharp acceleration from around 2016. This rise has been linked both to shifts in the broader illicit economy in the Philippines, burgeoning links between pangolin consumer populations and the country, and global shifts in the patterns of illicit trade. We also describe the challenges facing the Filipino government agencies charged with responding to wildlife trafficking, which have created gaps in the state response that trafficking networks have profited from.

Methodology

This research report is the culmination of fieldwork, desk research and manual internet searches. Desk research involved the review of academic papers, government reports, civil society research, journalist articles, national legislation and international treaties.

The field research was conducted in the Philippines in March 2022, with a particular focus on Metro Manila and the north of Palawan province, both of which are known hotspots for the Palawan pangolin trade. This research consisted of semi-structured interviews of interested parties, including government officials from national, regional and local levels; police and enforcement officers; individuals involved in the trade and academics and journalists. In total, 27 key informants were interviewed, with a total of 58 people reached when focus group discussions with law enforcers are included.

To complement the findings of the fieldwork and desk research, the project called upon the experience of the Global Initiative Against Transnational Organized Crime's Market Monitoring and Friction Unit to determine the extent of the online trade in the Palawan pangolin and its parts within the Philippines. Manual internet searches of social media platforms and e-commerce sites in the Philippines were performed using English and Tagalog search terms and other local names for pangolin to test of evidence of the online trade. However, these searches did not reveal any notable presence of pangolins or pangolin-part products on Filipino sites.



he Palawan pangolin (*Manis culionensis*) is endemic to the Philippine archipelagic province of Palawan, situated between the South China Sea and the Sulu Sea. It is protected by both international and domestic laws (see box) and is recognized as an iconic national species in need of protection in government policy.³

Despite this legal protection, there remains strong global demand for Palawan pangolins, including as a luxury food sold in restaurants or for their scales as an ingredient for traditional Chinese medicine (TCM). Although there is no baseline population measurement,⁴ the significant volume of seizures within Palawan suggests that the trade of pangolins from the province onto local and international markets involves thousands of individuals each year. This represents a severe pressure on this limited island population, which reproduces slowly and faces other threats, such as habitat loss.

As we will describe, over the last two decades illegal hunting of the species has increased, with a possible steep acceleration in the last six to eight years, linked to the development of local trafficking networks. This has arisen in the context of increased international investment and foreign travel to Palawan from within the region on the back of the tourism boom and persistent local poverty.

In 2001, a successful marketing campaign, 'WOW Philippines 2002', targeted tourists from Europe, Asia, Australia and North America.⁵ This resulted in a peak of Chinese tourism between 2010 and the start of the COVID-19 pandemic in early 2020.⁶ Since then, Palawan has experienced substantial development to cater to the increasing numbers of tourists visiting the province and its islands, creating an economic windfall.⁷ In 2018, tourism revenue dwarfed that from large-scale industries: PHP83 billion (US\$1.66 billion) compared with PHP3.2 billion (US\$64 million).⁸ However, this tourism boom has not translated into a widespread alleviation of poverty. The poverty rate in Palawan increased from 16.2% in 2018 to 21.4% in 2021.⁹ Although the COVID-19 pandemic is understandably a major contributor, the 32.1% increase in poverty in Palawan was almost three times the national rate, which saw a 12.3% increase in the same period (from 21.1% in 2018 to 23.7% in 2021).



FIGURE 1 The province of Palawan, Philippines.

This boom also established links between Palawan's rare and valuable natural resources and new consumer markets, as well as with development that encroached on natural areas. Municipalities such as El Nido and Coron built new hotels and tourism facilities to cater to the increasing demand.¹⁰ This surge in tourism led to the permanent settlement of a number of Chinese nationals who had arrived as tourists and were later encouraged to establish businesses in

the country under a foreign investor visa scheme.¹¹ Some investors have created illicit income streams from trading in environmental commodities, either to complement their licit businesses or simply using them as fronts. Interviewees also claim that there has been a diversification of the nationality of people commissioning pangolin hunting or purchasing whole pangolins or their scales from inland villages between 2013 and 2014.

Legal protections for the Palawan pangolin

The Palawan pangolin has the most restricted range of the eight species, ¹² with evidence of distribution stretching from Busuanga Island in the north of Palawan to Balabac in the south. ¹³ The Palawan pangolin has been classified as 'Critically Endangered' by the International Union for Conservation of Nature (IUCN) since 2019. ¹⁴

The Palawan pangolin is protected by strict international and national legislation that prevents its hunting and trade. In 2016, the parties to the Convention on International

Trade in Endangered Species of Wild Fauna and Flora (CITES) voted to transfer all eight pangolin species to Appendix I of the convention (effective from 2017), thus establishing an international ban in wild-caught pangolins and their parts from being traded for commercial purposes. The CITES agreements are implemented through the Philippine Wildlife Resources Conservation and Protection Act (Republic Act no. 9147), also known as the Wildlife Act of 2001, which also outlines the various offences and associated penalties for violations.

In 2016, the political administration under former President Rodrigo Duterte also implemented new policies that affected pangolin trafficking dynamics. This administration sought to attract Chinese foreign direct investment through a combination of tax incentives and relaxed migration controls, which resulted in an increase of the Chinese migrant community in the Philippines, most notably within Metro Manila. A favourable legal framework also allowed for the expansion of Chinese online gambling firms (OGFs) around 2016. Before the COVID-19 pandemic, there was an estimated 300 000 workers in the online gambling industry in the Philippines, lured by the promise of high wages. 17

The growth of the OGF industry, together with the new consumer market created by the influx of foreign consumers, not only brought in considerable tax revenue (PHP7.4 billion in 2018 alone¹⁸) but also led to a rise in illicit activity in Manila. OGFs have been linked to kidnapping,¹⁹ drug-dealing networks, sex and

labour trafficking, large-scale money laundering and the illegal pangolin trade, for which a market directly arose among wealthy OGF employees (and, allegedly, tourists visiting Manila's brick-and-mortar casinos). Other impacts were indirect: an expansion of the activity in the illicit economy, which implies more illicit services (e.g. laundering, intimidation, etc.) on offer to traffickers. A spokesman for the National Bureau of Investigation, speaking after the rescue of six victims of human trafficking in 2019, said that 'when you bring a lot of them [OGFs] here, these syndicates cater to their needs'.20 The presence of OGFs was, however, severely curtailed in 2020, partly owing to a number of scandals, but primarily because of the strict restrictions in movement imposed by Beijing following the outbreak of the COVID-19 pandemic. This meant that workers faced the prospect of being indefinitely separated from their family or being forced into gruelling quarantines if they went back and forth, leading to many choosing to return to China.

Casinos, tourism and the illegal wildlife trade

WWF has highlighted how, following domestic bans such as those on ivory, markets catering to Chinese tourists sprung up or grew in places that attracted Chinese tourism.²¹

In addition, casinos in the region have been linked repeatedly – and in diverse ways – to environmental crime. The rapid boom of the offshore gambling sector in the Philippines follows a regional pattern, driven by Chinese wealth. Beijing forbids gambling in mainland China and countries in South East Asia have jostled to offer extraterritorial opportunities to gamble – and more. Each country that has established casinos – often in borderland and special economic zones – has seen a host of criminal problems arise, with casinos forced to relocate to more permissive environments following criminal investigations and political pressure. This is part of a trend that dates back decades and

has propelled a domino effect, firstly from the United States to Macau, and from there to Cambodia, the Philippines and beyond.²²

Tourist-driven demand is one of four key risk factors that make casinos conduits or facilitators of environmental crime in South East Asia (the others are related to weak or absent regulation, proximity to porous borders and personal connections between wildlife traffickers and casino operators).²³

More broadly, Alvin Camba, a political scientist at the University of Denver, argues that many offshore gambling outfits in the Philippines are transnational money laundering scams: rich Chinese clients would arrange to 'lose' massive amounts in bets, which casino owners would then funnel to offshore accounts for them or launder through other black markets.²⁴



Casinos in the region have been linked to environmental crime. © Dondi Tawatao via Getty Images

External factors have also put the Palawan pangolin at risk. Globally, the need for pangolin scales to manufacture traditional medicines is believed to be the main driver behind international pangolin scale trafficking.²⁵ Within China, the trade in pangolin derivatives is allowed to operate under certain conditions, such as the sourcing of scales from a verified government stockpile.²⁶ But poor traceability and transparency of stockpile management are documented problems and create pervasive opportunities for illegally sourced scales from Africa and Asia to be laundered into the stockpiles.²⁷ It is therefore suspected that illegally procured pangolin scales ultimately make their way to China and other countries with TCM-using populations. Over the past 30 years there has been a sustained increase in the price of both scales and whole pangolins, driven by upturns in international demand.²⁸ The decline in pangolin populations in China and surrounding source countries has caused traders to seek out new supplies in the Philippines and other South East Asian countries to meet demand.²⁹ As supplies in these new source countries contract owing to over-poaching, as believed to be happening in the Philippines, these prices are likely to increase even further.

In addition, the global trend towards the increased use of mobile phones and digital communications has created an environment where it is easier to coordinate shipments, facilitate harvesters³⁰ to arrange the collection of pangolins or for traffickers to coordinate meetings at sea as well as alerting potential buyers of the availability of pangolins to purchase.³¹ This has made the networks more fluid and reactive, allowing for certain roles to be cut and so leading to smaller and more secure networks.³²

Operating procedures have been further simplified with the increased availability of money transfer services in the Philippines, which has removed the need for large volumes of cash to be passed down the supply chain. This makes it simpler for intermediaries to pay for the pangolins and to hire transport to consolidate the product, thus removing the need for other intermediaries. Although the use of financial systems and mobile phone communication may expose the traffickers to possible detection by law enforcement agencies, this does not currently appear to be a concern, at least at low and middle levels of the trade.

The last eight years have been a period of dynamism in the political economy of pangolin trafficking in the Philippines. This has encompassed not only increased legal protection for the species but also economic, social and political shifts and advances in technology, which have enabled the number of trafficking networks to grow and so leading to an increased threat of harm from the pangolin trade.

Impact of the COVID-19 pandemic

The Philippines' quarantine was one of the longest and strictest in the world, with severe restrictions on movement, enforced curfew hours and shuttered businesses.³³ These restrictions directly impacted the Philippine trade in pangolins on both the demand and supply sides, as restaurants and transport closed, tourism ceased, migrant consumers returned home and a general fear within indigenous communities led them to close their villages to outsiders, including pangolin traders.³⁴

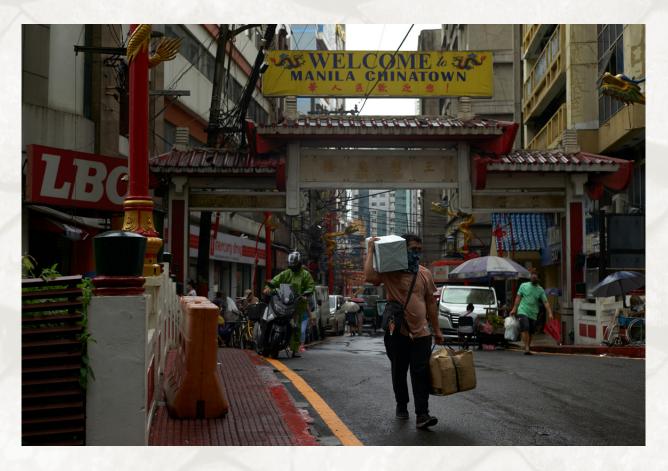
Although demand at a significantly lower volume continued, this reduction made it harder for traffickers to sell pangolins in the Metro Manila area, with an ex-trader explaining that, prior to the pandemic,

pangolins that were landed in the morning were bought before the afternoon, but that it now takes substantially longer, with prices for a whole pangolin having to be lowered from PHP5 000 (US\$98) to PHP3 000 (US\$59)³⁵ per kilogram to ensure a sale.³⁶ Harvesters who had previously hunted pangolins reportedly moved into the timber and charcoal trades during the pandemic owing to the increased difficulty of sourcing, stockpiling and smuggling pangolins during the quarantine restrictions.³⁷

With the pandemic abating and quarantine being lifted, pangolin poaching is expected to rebound as the demand for exotic food returns in line with an increase in tourism.³⁸



his section describes the trafficking supply chain for Palawan pangolins, highlighting where the social, economic and political changes described earlier have led to the emergence of new criminal networks and markets, adaptation of smuggling routes and the development of new techniques to evade detection. It progresses from hunting of the endangered species to consolidation, transport and outward trafficking. At times it diverges between the trade in live animals and the trade in dried scales. Conversations with known traffickers suggest that although there is overlap between these trades, they appear to exist independently of each other, or ultimately diverge, as they serve different markets.³⁹



Manila, September 2021. The COVID-19 pandemic impacted the Philippine trade in pangolins, but poaching is expected to rebound as restrictions are lifted. © *Jes Aznar via Getty Images*

Structure of trafficking supply chains

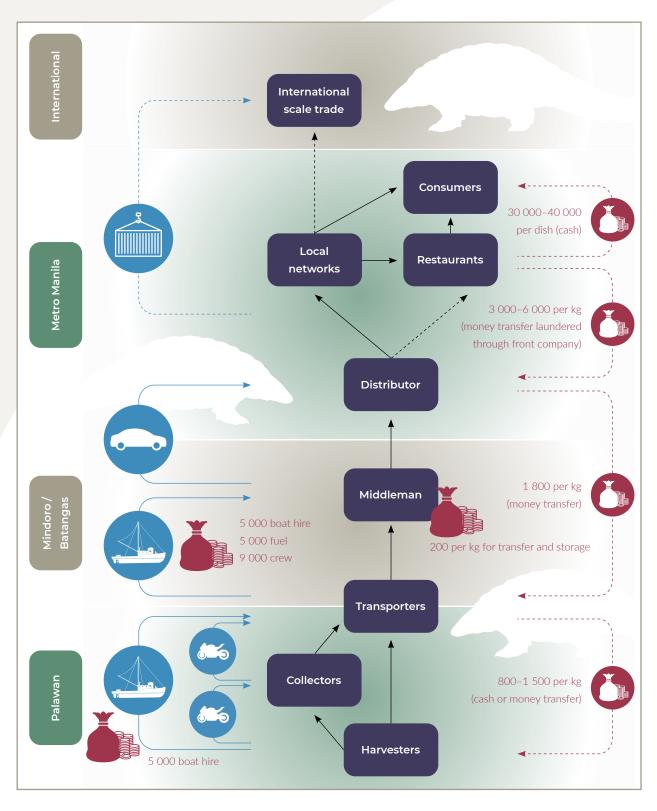


FIGURE 2 Structure of trafficking supply chains for live pangolins in the Philippines.

NOTE: Prices in Philippine pesos.

Harvesters

It is prohibited to hunt, trap or kill Palawan pangolins, but it was a historic – and, it appears, largely opportunistic – practice of subsistence harvesters among indigenous communities on Palawan until the rise of a commercial trade around 20 years ago, when the number of networks sourcing scales and pangolin meat began to grow.⁴⁰

Past research has identified the complex dynamics of how hunting pangolins on Palawan is connected to the illegal trade in meat and scales. This research has demonstrated that harvesters can poach pangolins opportunistically or operate as specialized pangolin hunters, even travelling across the province to collect animals for collectors and other buyers.⁴¹

The high poverty rates within Palawan have meant that local communities have low resilience to offers of greater income for poaching pangolins. Harvesters come from a variety of backgrounds and income levels, which include poor and marginalized rural people living in absolute poverty, where income from selling an opportunistically poached pangolin can equate to several months' earnings, to those living in relative poverty who poach pangolins as a way of supplementing their income.⁴² The latter is especially true in both the farming and fishing industries. During the off season, the farmers and fishermen generate no income and although some of them may qualify for monthly state grants available throughout the year, these are not enough to sustain them.⁴³ It is during this time that they look for alternative sources of income, as labourers, workers at tourist resorts or within the illicit economy.44

If a pangolin is killed in Palawan for the trade in scales, it is unclear what happens to the animal's meat, although it is likely to be consumed by hunters or their relatives. ⁴⁵ If a pangolin is hunted for the live meat trade, it must be moved quickly as pangolins are difficult to keep alive in captivity.

Collectors

The first level of the trafficking chain after harvesters are collectors (some collectors may also hunt pangolins themselves, so there is not always a neat division).⁴⁶ Trafficking networks typically demand that shipments be aggregated into sizes that are most profitable to transport without detection. In the case of live animals

being trafficked to Manila, participants in the trade claimed that the number fluctuates between 10 and 20 pangolins at a time.

For example, one consolidator who had been operating in Palawan until 2019 would use a motorbike to travel around the island, stockpiling pangolins, and would then be contacted by mobile phone by the harvester when 10 live animals were ready for collection.⁴⁷ However, he stopped collecting in January 2020 after a man who was standing in for him was arrested that month in El Nido during a joint operation between the Department of Environment and Natural Resources (DENR) and the armed forces. They seized 20 live pangolins stored in crates and plastic drums originating from harvesters located in El Nido, Roxas and Taytay.⁴⁸ The consolidator reportedly worked for a trafficker based in Quezon in southern Palawan, who was sending a boat to collect the pangolins the following day.⁴⁹

Transporters

After aggregation of live pangolins or scales, shipments are moved off the island of Palawan. This section focuses on the transport of live pangolins and scales from Palawan to Luzon.

Two ex-traffickers told us that consolidated pangolins are transferred from small fishing boats to larger fishing vessels located outside the municipal limit, 15 kilometres off the coast.⁵⁰ The transfer occurs at night, which reduces both the risk of detection and the stress on the pangolins.

In one case, this marks a change in modus operandi due to the arrest in El Nido mentioned earlier. For this network, the collectors are informed via mobile phone of the position of the fishing vessel but are not aware of the identities of the crew on board nor the destination of the vessel. However, it is suspected that the vessel navigates around the island meeting various harvesters before returning to its home port, which is believed to be on Mindoro, located between the north-east coast of Palawan and the south-east coast of Luzon.⁵¹ It is unclear whether the catch is unloaded on Mindoro, which is a major transhipment point for illegal wildlife,⁵² or if this is done at another port on Luzon.

It is unlikely that fishing vessels operating in this manner will attract attention, as it is normal for larger fishing vessels to remain outside of Palawan's provincial waters,



Seagoing fishing vessels impounded by the Philippine National Police Maritime Group. These are similar vessels to those used in the trafficking of pangolins. © Alastair MacBeath

as they lack the necessary permits to enter the area.⁵³ To meet the fishing vessel, the harvesters will hire a small fishing boat. This can cost up to PHP5 000 (US\$98.50)⁵⁴ plus fuel,⁵⁵ but can vary depending on the person and the distance. To ensure money is available, payment for the pangolins is made prior to the harvesters hiring the boat by using a money transfer service called Palawan Pawn Shop/Palawan Express.⁵⁶ Loading then takes place at unofficial docks, which are less likely to be monitored than the larger passenger ports.⁵⁷ The risk of detection at sea is deemed to be low owing to many boats fishing for squid at night and few patrols conducted by the police and coastguard.⁵⁸

Another network operating on Palawan also capitalizes on the ease of hiring fishing boats and the low risk of detection at sea by shipping pangolins directly from Taytay to Batangas, located about 95 kilometres south of Metro Manila. A middleman based in Calamianes has reportedly been operating on Palawan since 2008 and no longer uses a dedicated consolidator. Instead, the middleman sends men hired to crew the fishing boat to collect the pangolins and bring them to the dockside where they are loaded onto the fishing boat.

For this network, a shipment consists of around 20 to 40 pangolins, each weighing between 2.5 and 6 kilograms, with two shipments leaving Taytay per week before the COVID-19 pandemic.⁵⁹ Therefore, if

an average weight of four kilograms per animal is used, each shipment carries 80–160 kilograms of pangolins, equating to between 160 and 320 kilograms of pangolins shipped per week. As these fishing boats are not well suited to rough seas and strong winds, they do not sail during the typhoon season between June and September. Therefore, each year between 1 560 and 3 120 pangolins are estimated to be trafficked this way.

The rental for the boat is PHP3 000 (US\$59)⁶⁰ and fuel costs PHP5 000 (US\$98.50). Each boat has three crew, who get paid PHP3 000 (US\$59) each. The total cost of a shipment therefore comes to PHP17 000 (US\$335) per trip.⁶¹ The crew of the boat are usually fishermen who do not receive a percentage of the sale, only their wages for crewing the boat. The money is transferred to them using a traditional money transfer service or mobile money transfer service (e.g. Gcash), although payments were previously done in cash. The collectors are also paid this way.

Despite the fishing boats having the appropriate paperwork to bring fish from Palawan to Batangas, no fish is loaded onto the boats for the journey as the police cannot search vessels without proper cause. They will leave Taytay in the afternoon and will arrive in Batangas the next morning, during which the pangolins are kept in a net bag and occasionally submerged in a bucket of water to keep them hydrated. In particularly

hot weather they will use air conditioning to keep the pangolins cool and reduce the risk of dying.⁶³

Middlemen and distributors

On Luzon, middlemen and distributors arrange for the payment of transport crews and delivery of the product to 'buyers' or directly to restaurants and private homes.

When the shipment arrives in the Batangas area, a local contact will journey out by boat to meet the incoming vessel. The pangolins will then be transferred at sea before being taken into Batangas and temporarily stored so that arrangements can be made for their sale in Metro Manila. The local contact is paid PHP200 (US\$3.94⁶⁴) per kilogram for collecting and storing the pangolins.

Arrangements for the sale are made by a middleman who will alert his contacts that pangolins are available. In turn, they will tell their buyers, who, if interested, will meet the middleman's people in a convenient public place so as not to reveal each other's identity, place of work or residence. After arrangements for the sale are confirmed, the pangolins are transferred to a private car for the two-hour drive to Metro Manila, where the sale will take place.⁶⁵

A participant in one network said:

The financier does not touch the pangolin. He just makes calls to the collectors and arranges payment. He will then send someone to collect them for him, so his name is not associated with the trade. [...] He used to be a fisherman, but he was encouraged into the trade to increase his income and eventually he became the only person [operating as a middleman in Metro Manila]. It is competitive – the others lost [their access to Chinese buyers] and just gave up. He is the only one who talks to the buyers now.

For Chinese consumers, pangolin meat is considered a luxury food and has come to demand a high price when served at a restaurant, where it reportedly sells for around PHP30 000–PHP40 000 (US\$591–788)⁶⁶ per dish.⁶⁷ In recent years, there have been reports of pangolin meat being available to purchase from at least four restaurants in Metro Manila's Chinatown, in addition to restaurants in Puerto Princesa and Coron in Palawan.

Previously, frozen pangolins were traded between Palawan and Metro Manila to supply restaurants, but the preference has changed to live pangolins so that the blood and bile can be extracted. The blood is believed to have curative properties and is mixed with rice while the bile is drunk raw⁶⁸ or mixed with wine. To ensure maximum freshness, a pangolin is presented live at the table of the diners, then slaughtered in front of the customers by having its throat cut before being cooked in its blood or soy sauce.⁶⁹

Workers at these restaurants know the activity is illegal and are therefore reluctant to discuss it with outsiders. Indeed, even if you wanted to consume pangolin at a restaurant and were willing to pay, you would have to be either known to the owner or be able to demonstrate your credibility through a recommendation by a trusted customer. The pangolin would then be consumed in a private room, away from other guests.

Networks involved in the international trafficking of scales

It appears that there are also several networks involved in the trafficking of scales, some of which overlap with the live pangolin trade. Some of these networks may be based entirely out of Palawan and organize shipments of scales for direct international shipment (as per the routes discussed in the next section). Although there have been only two largescale seizures of pangolin scales in the Philippines recently, they give an insight into the possible level the trade is operating at. One seizure, in 2017, involved 854 kilograms of scales hidden in a 40-foot container in Cagayan de Oro City in Mindanao, destined for Guangdong, a coastal province in China that borders Hong Kong.⁷⁰ The other seizure was in Puerto Princesa City, during which 1 154 kilograms of scales were seized - equating to an estimated 3 979 individual pangolins having been killed. A molecular study confirmed that these scales were from the Palawan pangolin. A similar study was not conducted on the Mindanao seizure; however, if the scales were also from the Palawan pangolin, that would amount to an estimated total of 6 820 individual pangolins over both seizures.71 This demonstrates why accurate identification of pangolin species is critical for trade regulation and law enforcement.⁷²

Other networks may be based in or connected to actors in Manila. It is unclear what happens to the scales of the animals used in the luxury meat trade when they are slaughtered in Manila; for example whether they are disposed of, kept for personal use or sold for profit for use in traditional medicines.⁷³ One of the ex-traffickers interviewed for this research reported that they were sold, although local demand in the Philippines does not appear to be sufficient.⁷⁴ However, it is possible that the scales may be consolidated in Metro Manila before

being dried and shipped out to mainland China. They could also be stockpiled.

Chinese nationals often rent houses in gated communities with strict public access policies in Metro Manila. It is believed that criminal groups also rent houses in these areas to minimize suspicion and conceal their activities, including the storage of pangolin scales. These premises may therefore be used to consolidate pangolins or their parts before forward shipment to China.⁷⁵



Traditional Chinese medicine suspected of containing pangolin scales, available to purchase in Manila's Chinatown. © Alastair MacBeath

Trafficking routes

The archipelagic nature of Palawan means that pangolins can be smuggled out of the province only by air or sea. A variety of smuggling routes have been identified over the years, including the use of private aircraft, vehicle ferries, fishing vessels and privately hired boats leaving from either northern or southern Palawan. Figure 3 illustrates the different trafficking routes for both whole pangolins and their scales.

Our research primarily concerned the northern municipalities of Palawan, focusing on Puerto Princesa City, Roxas, Taytay, El Nido and Coron (Busuanga Island), as they have had significantly higher sighting probabilities than municipalities in southern Palawan⁷⁶ and the greatest level of seizures in Palawan between 2018 and 2019, both in terms of incidents and volume.⁷⁷ These routes primarily concern the trade in live pangolins.

The trafficking route for live pangolins from Palawan to Metro Manila consists of three distinct parts, namely the route between the poaching site to the seaport or airport, then across to a landing site on Luzon or Mindoro before being transported to Metro Manila.

Past seizures and interviews show that trafficking activity has also occurred out of southern Palawan and that this route is suspected to still be active despite the pangolin population being reportedly larger in northern Palawan. An investigation conducted by a national law enforcement agency discovered a house in southern Palawan owned by Chinese nationals who kept live pangolins in barrels and under baskets, while dead pangolins were having their scales removed.⁷⁸ It is therefore believed that Chinese nationals are involved in the trafficking activity from southern Palawan.

It is likely that the southern exit routes are primarily used for trafficking scales rather than for meat. This is due to the distances involved in the international trade and the logistical challenges involved in moving live pangolins. As a premium is placed on the freshness of pangolin meat, traders prefer to deal in live animals over frozen ones. However, this means that traffickers not only have to evade detection but also keep the pangolins alive for a prolonged period. As pangolins are notoriously difficult to sustain in captivity and tend to lose significant weight when they do not eat or drink, the increased risk and reduced profits make the international or long-distance trade in live pangolins less feasible.⁷⁹

It is not clear how the scales are smuggled out of the country, but there have been reports of scales being hidden under fish and smuggled in small boats to Malaysia.⁸⁰ It is therefore possible that the trafficking route for Palawan pangolin scales converges with those of the Sunda and African pangolins through Malaysia and on to China. There are existing maritime smuggling routes between the two countries and law enforcement consider it plausible (though no such seizures have been made) that wildlife from the Philippines could fill craft destined for Malaysia, with the returning ferries occasionally used to smuggle legal commodities, including fuel and cigarettes, into the Philippines.⁸¹



FIGURE 3 National and international trafficking routes for Palawan pangolins.

Prices and laundering

Prices mentioned in interviews varied significantly, which could be due, among other factors, to seasonal and regional variations and price increases over time. However, the escalation in price between harvesters, intermediaries and consumers was clear and highlights the significant profits being made throughout the supply chain. Prior to the COVID-19 pandemic and the contraction of the live pangolin trade, a seller could make a gross income of PHP60 000 (US\$1 182) per shipment of 30 pangolins (at an average of 4 kilograms each). For the same trade, the main financier could earn up to PHP500 000 (US\$9 850)83 per shipment. As mentioned previously, at the height of the trade, one trafficking network could ship between 1 560 and 3 120 live pangolins per year between Taytay and Manila.

An adult male will yield about 300 grams of dried scales that will have a value of about PHP7 000 (US\$138)⁸⁶ per kilogram for the harvester.⁸⁷ Traffickers interviewed for this report explained how the scales' quality dictates its value, with uncracked, full scales demanding higher prices. However, since the scales are either crushed into powder for use in TCM or fried prior to consumption, the demand for uncracked scales appears to be a negotiating tactic by the buyer to ensure a lower price. There are also reports of buyers offering considerably less for quantities under a pre-agreed amount.

Most reports of known front companies informing this research (obtained from either illicit trade participants or law enforcement) concerned the seafood industry. As one ex-transporter explained:

Because it [the payment for the aggregated shipment from Palawan] is a large amount of money, and they do not have a business permit to justify it, the main financier has a relative who has a seafood business, and they give them a cut to launder the money. They will declare that the payment is for fish.⁸⁸

Payments will also be remitted through a commercial money remittance service provider to the main financier. The amount would be broken into smaller amounts of PHP50 000 at a time (US\$985) to avoid detection. 89

		Harvesters	Intermediaries	Consumers
Live pangolins	PHP	800; 1 200	1 800	4 500; 5 000; 6 500
(per kg)	US\$	16; 24; 59	35	89; 99; 128
Pangolin	PHP	2 000; 7 000	7 000; 10 000	No data
scales (per kg)	US\$	39; 138	138; 197	

FIGURE 4 Prices of live pangolins and scales at different levels of the trade.

NOTE: Figures are as obtained from interviews; foreign exchange rate for 1 January 2020: PHP1 = US\$0.0197

Increasing number of networks

It is not clear how many pangolin trafficking networks are moving pangolins or scales off the islands of Palawan, but there is no evidence of market consolidation. Interviewees talk about what appear to be a number of different 'lines' operating out of Palawan.

With easier access to mobile phones and improved signal coverage, there has been less physical interaction between different members of the trade, who rarely know each other's details. ⁹⁰ In addition, networks appear to be unaware of one another, which has led to people mistakenly claiming that a single trafficker operates within Palawan. This is seen in reports that refer to a single Filipino actor controlling all the trafficking of pangolins until 2013 and with whom others did not compete, supposedly out of respect. He stopped trading in 2013 to protect his family following the arrest of his wife. ⁹¹ However, interviews with ex-traffickers reveal that at least one other network has been operating since 2008. ⁹²

Since 2013, the number of networks within Palawan appeared to have increased and diversified, with some consisting of solely Filipino nationals, others a combination of Filipino and Chinese nationals and some being exclusively Chinese nationals. This increase in Chinese nationals involved in the pangolin trade corresponded with a 24% growth in Chinese tourists to the Philippines between 2014 and 2015, which was the largest increase out of any visitor market. This growth accelerated following the regulation and expansion of the OGFs in 2016 described earlier, which gave rise to a new consumer market in Metro Manila and nearby provinces.

The tourism boom also led to a new community of Chinese investors who established businesses in the Philippines, some of which are known front companies used in the trade of pangolins and other wildlife. These front companies are a combination of legitimate and illegitimate businesses primarily based around the import or export of goods and seafood and are used to conceal the nature of the shipments and to launder the proceeds from the trade into the licit economy. The businesses established within Palawan by these Chinese migrants are reportedly grocers, restaurants, hardware stores and general merchants.

The growth in the number of actors in the trade appears to have been enabled by state authority protection, although it is not entirely clear at what level this occurs and what the underlying mechanisms are. Some interviewees claimed that fines were used as bargaining chips by corrupt officials to extract bribes from businessmen implicated in crimes such as buying illegal timber, which then also led them to establish broader illicit business relationships. Civil society interviewees also believed that entrepreneurs were able to buy lenience: The response is not very systematic – if it is easy, it gets done. But if it is complicated, or if it involves influential people, it doesn't happen ... When it concerns wildlife trade, influential people are usually foreign businessmen.

The growth in the number of actors in the trade appears to have been enabled by state authority protection.

Changes to the drivers of the consumer market directly affect both the traffickers and the harvesters, as they adapt to meet fluctuations in demand. This was seen during the COVID-19 pandemic, during which the demand for pangolin meat within Metro Manila significantly dropped following the exodus of Chinese migrants and tourists as countries closed their borders.

Although the Philippines has reopened its borders to international tourists, the Chinese government's zero-COVID policy still places severe restrictions upon the ability of Chinese nationals to travel abroad, meaning that the Chinese migrant population in Metro Manila, which is believed to constitute a considerable consumer market for pangolin meat, is currently unable to return. However, the seizure of six live pangolins in Pasay City in December 2021 suggests that despite the reduction in new Chinese migrants, there remains a demand for live pangolins from long-term Chinese residents in Metro Manila. 100

It is not clear whether demand for pangolin scales from the Philippines decreased during the COVID-19 pandemic, although seizure reports for 2020–2021 and anecdotal evidence suggests this to be the case. ¹⁰¹ Law enforcement officials and traffickers interviewed during this research reported that harvesters continued to operate in the Philippines albeit at a reduced volume. It is unclear whether this was due to a reduction in demand or to the effects of lockdown.



Rangers perform a night patrol in a protected forest. Foot patrols in the Palawan forests help enforce laws against illegal gathering of natural commodities. © Jes Aznar via Getty Images

Ithough the transfer of all eight pangolin species to CITES Appendix I in 2017 vastly simplified the legal status of the species, the convention alone cannot defeat the organized criminal networks fuelling the international trade. Instead, it relies on member countries taking adequate measures to combat the various driving forces within their jurisdictions, including, ideally, robust national legislation enacting the CITES provisions and recommendations enforced by adequately resourced national law enforcement agencies that prioritize environmental crimes. Such legislation and enforcement must act as a deterrent to all levels of the illegal trade and not focus solely on the lower end where arrests are easier to achieve but ineffective at disrupting networks.

The DENR and the Palawan Council for Sustainable Development (PCSD) are the two principal government agencies in the Philippines tasked with protecting the country's terrestrial environment and natural resources. The DENR operates at the national level, with jurisdiction over the whole of the country, except Palawan, where jurisdiction is held at the provincial level by the PCSD. The Biodiversity Management Bureau (BMB), which is the CITES management authority for the Philippines, forms part of the wider DENR and is responsible for the management of protected areas and endangered species of flora and fauna. The support of the support of the management of protected areas and endangered species of flora and fauna.

However, despite several agencies within the Philippines being committed to the fight against wildlife trafficking, the domestic law enforcement response has been hindered for several years by issues such as a lack of political priority, low resourcing, inadequate intelligence gathering and problems arising from the legal or institutional frameworks. Although changes are on the horizon, with new legislation in process that would address some of these issues, this is the context in which trafficking networks have multiplied and intensified their efforts in the past decade. This section sets out the challenges that law enforcement actors have faced and the opportunities that exist to strengthen the response.

National legislation

In the Philippines, the Wildlife Act outlines the various offences and the associated penalties for violations, determined by the conservation status of the species involved. Owing to there being no requirement for the Wildlife Act to follow the classifications of the IUCN, separate government agencies classify the conservation threat to species differently. The PCSD, which has authority for all terrestrial animal species in the province, has classified the Palawan pangolin as critically endangered since 2015, whereas the DENR, which has jurisdiction over the remainder of the Philippines, classified it as endangered in 2019. As the Wildlife Act prescribes different penalties depending on classification, the offences conducted outside of Palawan incur lower penalties than those within the province, as seen in Figure 5. This is significant, because, as outlined, a large amount of the higher-level trafficking activity takes place outside Palawan, particularly on Luzon.

Offence under Wildlife Act	Endangered	Critically endangered
Killing and destroying wildlife species	Imprisonment of four years and one day up to six years and/or a fine of P50 000-P500 000	Imprisonment of at least six years and one day up to 12 years and/or a fine of P100 000-1 000 000
Inflicting injury that cripples and/or impairs the reproductive system of wildlife species	Imprisonment of two years and one day up to four years and/or a fine of P30 000-200 000	Imprisonment of at least four years and one day up to six years and/or a fine of P50 000-500 000
Trading wildlife	Imprisonment of one year and one day up to two years and a fine of P2 000-200 000	Imprisonment of two years and one day up to four years and/or a fine of P5 000-300 000
Collecting, hunting or possessing wildlife, their by-products and derivatives; gathering or destroying active nests, nest trees, host plants and the like	Imprisonment of one year and one day up to two years and a fine of P20 000-200 000	Imprisonment of two years and one day up to four years and/or a fine of P30 000-300 000
Maltreating and/or inflicting other injuries not covered by the preceding offences	Imprisonment of three months and one day up to six months and a fine of P20 000–50 000	Imprisonment of six months and one day up to one year and a fine of P50 000-100 000
Transporting of wildlife	Imprisonment of three months and one day up to six months and a fine of P20 000-50 000	Imprisonment of six months and one day up to one year and a fine of P50 000-100 000

FIGURE 5 Offences and penalties under the Wildlife Act for Endangered and Critically Endangered Species.

SOURCE: Wildlife Resources Conservation and Protection Act 2001, Rep. Act No. 9147 (30 July 2001) (Phil.), https://www.officialgazette.gov.ph/2001/07/30/republic-act-no-9417/

Several law enforcement interviewees complained that the option to apply a fine instead of a custodial sentence dulled the Wildlife Act's effectiveness – only poorer harvesters are unable to pay bail fees or fines, which are small compared to traffickers' profits. ¹⁰⁵ In addition, the penalties prescribed by the legislation are not relative to the severity of the offence, meaning that there is no deterrent to trading in higher volumes owing to the same penalty being imposed as those trading in lower volumes. This means that a poacher transporting small numbers of pangolins will be liable to the same penalty as a trader dealing in hundreds of pangolins. This lack of additional risk means that traffickers may as well 'go high' when deciding what quantities to smuggle. ¹⁰⁶ The law as it stands therefore fails to make adequate distinctions between participants' levels of involvement or importance to criminal networks involved in the trade.

Local researchers report that there is a lack of knowledge within the indigenous communities regarding the legal consequences of poaching, which would limit the deterrence factor of the Wildlife Act at the gathering level. ¹⁰⁷

This has all fed into growing calls to amend and strengthen the Wildlife Act, which is now over two decades old, having been passed in 2001 and coming into effect in 2004. Since then, the illegal wildlife trade has become more sophisticated and organized, with criminal actors exploiting legal loopholes owing to the law's vague

language.¹⁰⁸ The proposed amendments currently before the Philippine congress significantly increase the sentences and allocates PHP50 million annually jointly to the DENR, PCSD and the Department of Agriculture.¹⁰⁹ The proposal also partly addresses the issue of lenient sentences for severe offences by prescribing that twice the maximum penalty will be imposed if the smuggling was committed at a large scale (defined as over 30 wildlife specimens) and/or by a syndicate of three or more people.

Furthermore, the proposed bill leaves the discretion to the presiding judge to impose a custodial sentence or a fine and, in serious violations, both a fine and a custodial sentence. Although this is an improvement on the current legislation, it is unlikely to act as a deterrent in practice as those sentenced to less than six years imprisonment will still be eligible for probation, which is usually unsupervised owing to law enforcement lacking the necessary manpower.¹¹⁰

However, the new legislation fails to address capacity and procedural issues in the judiciary, which delay the issuing of search warrants to law enforcement agencies who have identified illegal trades. Although it is standard procedure in the Philippines to apply for a search warrant at a court in a different area from the address intended to be searched owing to the risk of information leaks, 111 the process can take over a week because of limited time available for hearings in court. 112 When a hearing date is fixed, warrants are usually issued on the same day and have to be served within 10 days. These delays present considerable challenges for officers, as the wildlife products are likely to have been either shipped or disposed of by the time the warrant is served. 113

Despite these shortcomings, several law enforcement respondents stated that the law itself is still useful and could form the basis of good investigations. Instead, they identify the problem as a lack of enforcement due to the limited resources and capacity of law enforcement and government agencies for dealing with the issue, which itself stems from low political priority.

It is also important to consider not only legislation directly targeted at wildlife trafficking but also the laws – or legal gaps – that enable the illicit economy. Gaps in frameworks to counter money laundering and corruption are two areas in which deficiencies can have system-wide consequences for enabling illicit trade and organized crime. In the GI-TOC's Global Organized Crime Index, the Philippines ranked fifth out of 11 countries within South East Asia for its ability to implement legal, regulatory and operational measures for combatting money laundering. For government transparency and accountability, which is an indicator of a state's efforts to reduce corruption though increased oversight, the country ranked eighth out of 11.¹¹⁴

In the case of the Philippines, it is important to note the policies and governance issues raised here, which have seen various illicit markets grow in recent years. In June 2022, the Financial Action Task Force (FATF) retained the Philippines on its 'grey' list of 22 countries¹¹⁵ with serious deficiencies in their measures to counter money laundering and threat finance. ¹¹⁶ Although the FATF complimented the Philippines on steps taken towards increasing the resources of its Financial Intelligence Unit, it stressed that better anti-money laundering measures for the casino sector and information sharing and coordination between its financial institutions were necessary.

Challenges facing law enforcement in Palawan

Geography

The sheer size, geography and biodiversity of Palawan pose considerable challenges to those tasked with protecting its environment. At over 14 600 square kilometres, it is the largest province in the Philippines, covered in dense mountainous rainforest that is

home to a vast array of flora and fauna. The situation is further complicated by the various indigenous communities who make a living from the natural environment but with whom local law enforcement have a troubled relationship. In addition, the existence of armed insurgents from the New People's Army and



Forest guards face an increasing risk of violence from suspected wildlife harvesters. © Jes Aznar via Getty Images

Muslim rebel groups has resulted in 'no-go' areas due to safety concerns, further limiting the effectiveness of enforcement agencies.

To help enforce laws against illegal gathering of natural commodities in the forests, a major plank of the Palawan enforcement approach is on foot patrols across the difficult inland terrain. The primary focus for enforcement action on Palawan has been illegal timber cutting, meaning that foot patrols are usually conducted during the day.¹¹⁷ Numerous teams of forest guards reported in interviews that they have not had encounters with active pangolin hunters; however, this may partly be explained by pangolins being poached at night owing to their nocturnal behaviour.

There may also be a more systemic constraint: the limited numbers and resources of the forest rangers severely restrict their ability to maintain a meaningful presence that will deter those engaged in illegal gathering or hunting. For example, in Roxas there are 20 forest rangers patrolling in teams of four with a jurisdiction of 2 390 square kilometres. This means that each group is responsible for an area of 478 square kilometres. Depending on the gradient of the terrain and the density of the forests, rangers can cover between 4–10 kilometres per patrol, averaging around 31 kilometres per week.¹¹⁸ If all 20 forest rangers were patrolling, this would equate to 155 kilometres – only 6.5% of the total area.

The situation is similar on the smaller islands in the archipelago. In Coron, 15 enforcement officers are responsible for 192 islands, but without a boat, it is extremely difficult for law enforcement to monitor the pangolin population across the islands and to react to reports of criminal activity. Instead, they must either borrow a boat or use their personal ones when they are required to respond to a report at sea.

This need for rangers to use personal equipment or pay to hire equipment is also an issue on the main island, where officers will often use their own motorbikes to travel between locations. This is reportedly impacting morale within the teams, as they struggle to get reimbursed owing to budget constraints.¹²¹

The lack of resources available to enforcement agencies focusing on environmental crimes has resulted in a significant gap in implementing their respective aims and may also have led to some environmental crimes, predominantly illegal cutting, being prioritized at the expense of others.

There have been no interdictions of live pangolins moving between northern towns of Palawan and Luzon or pangolin scales being transported at sea. Neither the DENR nor the PCSD have the assets for such patrols. Maritime enforcement falls to the Maritime Group of the Philippine National Police, as the Coast Guard is primarily mandated to deal with coastal safety. The military also patrols in certain locations and has the

equipment to do so, but although it may pass on intelligence linked to wildlife crime it is not involved in enforcement activities. 122

Although the Maritime Group has seized several shipments of other endangered wildlife in the past, such as turtles and parrots, they have not intercepted any pangolin shipments. This is despite turtle smugglers appearing to use a similar modus operandi to that of pangolin networks (collecting shipments of set sizes, transferring at sea and concealing animals among licit seafood products) and are also believed to ship internationally. The Maritime Group uses information collected from informants in coastal barangays¹²³ to make its interdictions.¹²⁴

The challenging terrain of Palawan does pose serious challenges to enforcement actors and criminal networks have also proved to be adaptable, with networks having used airports, sea transport and various means of collection on land to ship their products.

Increased risk of violence in Palawan

Forest guards also face an increasing risk of violence from both suspected wildlife harvesters and those involved in illegal cutting. Three forest rangers have been shot in Palawan by homemade firearms, two in 2017 and one in 2019. The motives of the attacks appear to be to inflict fear among the forest rangers to stop their patrols, thus allowing the perpetrators to conduct their activities without confrontation. These homemade firearms are traditionally used to hunt wild pigs and use compressed gas to fire a marble-sized object, made of either glass or metal, up to 30 metres. 126

Since the murder of the forest ranger in El Nido in 2019, the forest rangers in that area have reduced their enforcement activities from fear of attack. ¹²⁷ In Roxas, the rangers patrol in teams of four for safety, ¹²⁸ while in Taytay they patrol in teams of eight owing to the high risk of being attacked if the harvesters outnumber them. ¹²⁹ This has resulted in the area for which a single patrol is responsible ranging from 50 to 500 square kilometres, depending on the jurisdiction. ¹³⁰ In situations where the rangers believe apprehending a suspect may be necessary, they will request a support team for assistance. ¹³¹ They are also more cautious about responding to reports of illegal activity owing to the risk of being ambushed by harvesters who have been arrested previously. ¹³²



Homemade rifles confiscated by the DENR in Puerto Princesa City. © Alastair MacBeath

The attacks in 2017 led to growing calls for forest rangers to be armed with firearms and the proposed wildlife bill will permit the carrying government-issued firearms. However, interest groups are concerned about having armed rangers, warning that this could lead to increased casualties and the harassment and oppression of local communities. Although this is a concern about arming law enforcement agencies in general, in the Philippines it is especially poignant owing to the militaristic approach used by law enforcement during Duterte's war on drugs. Therefore, the arming of forest rangers may further distance enforcement agencies from the needs of local communities.

In addition, the forest ranger murdered in El Nido in 2019 was carrying his own .45-calibre gun when he was attacked.¹³⁴ The carrying of personal firearms is legal in the Philippines if the national police have issued the appropriate permit. It has therefore become standard practice for rangers to carry their personal firearms when on patrol despite it not being sanctioned by enforcement agencies.¹³⁵ This does not appear to have improved collective safety.

Lack of coordination

The DENR and the PCSD are the two government agencies in the Philippines tasked with protecting the country's terrestrial environment and natural resources. The DENR operates at the national level, with jurisdiction over the whole country except Palawan, where jurisdiction is held at the provincial level by the PCSD. ¹³⁶ Despite this difference in jurisdiction, the two agencies have offices throughout Palawan and have achieved notable successes, such as seven separate seizures on Palawan since 2018, including the 1 154 kilograms of scales retrieved in Puerto Princesa City.

Despite these successes, the agencies' overlapping mandates have led to administrative and operational weakness because of poor coordination, lack of resources and over-worked staff. This in turn has led to wildlife cases going unprosecuted owing to disagreements about jurisdiction and lack of communication between the agencies. Although cooperation between the agencies has been improving recently, there are calls for a formal agreement to give clarity to the issues surrounding jurisdiction.

Challenges deriving from the political economy of Palawan

Challenges to effective law enforcement also derive from the political economy of Palawan, in two main respects. Firstly, as poverty is a significant factor driving members of the local community into the illegal trade, arrests do not address a widespread and powerful driver of participation in illegal hunting. (In 2021, 264 400 people – 21.4% of the province's population – were deemed to be living in poverty. This also has an impact at the judicial level, as judges have been hesitant to hand down harsher sentences that may result in the poacher's family going hungry.

Secondly, there are anecdotal reports that businessmen involved in the trade – as consolidators, traffickers or financiers – are protected by their relationships with local politicians, which tends to result in investigations being prevented or stalled. Indeed, one senior law enforcement official in Palawan complained about repeated political interference in his unit's environmental crime enforcement work, which came via a superior officer.¹⁴¹

Limited intelligence gathering

These challenges show that enforcement agencies cannot rely solely on foot patrols to detect and deter poaching. At current staffing levels, the problem is just too big and spans too great an area for them to be effective. Strategies based on consistent intelligence gathering may be more effective, as they allow resources to be used in a more targeted and effective way.

However, the threat of violence against forest guards epitomizes the generally fractious relationship between local communities and authorities. The private nature of some of the communities and their reliance on the natural environment for income and sustenance make them reluctant to share information, particularly when it might result in the arrest of a neighbour or friend. Indeed, there have been incidents where people who have shared information have been reprimanded by their communities. Although officers at both the PCSD and the DENR report that they do sometimes receive tip-offs from the local communities, there does not appear to be an adequate basis of trust, or a sense of shared objectives or applications of sanctions deemed fair by the community, to facilitate more effective information sharing.

The PCSD recognizes the need for such an intelligence-led strategy to counter wildlife trafficking and has recently withdrawn their enforcement teams to focus instead on surveillance and intelligence gathering with the aim of determining how the traffickers operate and who the stakeholders are.¹⁴⁴

Challenges facing law enforcement in Manila and national level responses

Although a substantial number of the illegal activities described in the Wildlife Act occur in Palawan (e.g. illegal hunting, destruction of the species, transport), the trade itself is driven by networks that are connected, if not substantially based, in trafficking nodes or consumption markets outside the province. Metro Manila is a key site for law enforcement in relation to pangolin trafficking, as there has been a substantial trade of live pangolins to the city for local consumption. There are also unanswered questions about whether networks involved in the international trafficking of pangolin scales have a presence in Metro Manila.

Low political priority placed on the pangolin trade

However, interviews with some enforcement agencies in Metro Manila showed a lack of awareness of the problem, especially about the region being a significant consumption destination.¹⁴⁵

This is seen with the BMB, whose understanding of pangolin trafficking is that it is not of any great concern, believing that they are traded in low volumes, especially when compared to other wildlife, particularly turtles and birds. ¹⁴⁶ 'For pangolin seizures, you can count them on your fingers. Other species – sea turtles, parrots – are much more popular. The magnitude of the trade is not the same as for other species,' one official told us.

This is worrying, as coordination and capacity building between national and international agencies and foreign governments are part of the responsibilities of national management authorities for CITES. Therefore, if the BMB does not recognize the true extent of pangolin trading in the Philippines, the likelihood of improved collaboration between the relevant parties is constrained.

Law enforcement engagement regarding pangolin trafficking is further diminished because environmental crimes are regularly treated as 'second-class crimes' by the Philippine National Police and are not allocated sufficient time or resources for investigation. An ex-officer of the National Bureau of Investigation interviewed for this report revealed that the team tasked with investigating environmental crimes consists of only 12 people, three of which are managers. This means only nine agents are available to deal with cases arising anywhere in the Philippines. Owing to the high volume of environmental crime and the geographical span of the country, this team is not able to adequately address the cases with which they were presented.

Limited intelligence gathering

Metro Manila is a key jurisdiction for disrupting trafficking networks involved in the trade of live pangolins for consumption there, and it is possibly also linked to those involved in the transnational smuggling of scales. Such disruption might involve investigations into individuals involved in collecting and distributing shipments from Batangas, distributing pangolins to restaurants and private homes where they are consumed, moving payments between participants and laundering profits.

This would require active intelligence gathering, with the additional challenge that many of these actors operate in a community of Chinese nationals residing in Metro Manila. Challenges to this work include the difficulty of cultivating sources in communities, who often reside or work in gated security estates or buildings, somewhat separated from the rest of the city, and the fact that the subjects of investigation can flee to their homeland. Law enforcement report that they cannot follow up on tip-offs about actors involved

in the pangolin trade, for reasons that include a lack of prioritization, the impression that the networks have more resources than the police do, and practical difficulties linked to securing search warrants (which require an 'eye witness' to criminal activities and whose name will be put on a publicly accessible document). Former law enforcement officers also report that it is not an active priority, particularly as such investigations are time and resource intensive. ¹⁴⁹

Furthermore, investigating financial flows linked to the wildlife trade prove challenging, resulting from a common dilemma around specialization within police forces. In the Philippines, all investigations linked to financial flows must go through the specialized antimoney laundering council, which adds an extra layer of bureaucracy to securing the necessary search warrants to investigate and freeze suspected accounts. Similar issues arise with securing digital forensics, all of which need a court order and go through a central laboratory, which means that all items for investigation must be sent to Manila.

International cooperation

Responsibility for combatting the pangolin trade within the Philippines does not reside solely with the enforcement agencies in Palawan. Owing to other regions in the country also being involved (e.g. Metro Manila, Mindoro and Mindanao), whether regarding the consumption of live pangolins or as a transit point for scales destined for China via transit countries (e.g. Malaysia), the problem is a national one that is driven by international demand. Cooperation between national enforcement agencies and foreign governments is therefore necessary to address both the demand and supply sides of the trade.

For the transnational pangolin trade, China and Vietnam are particularly important partners for the Philippines government, who will need their cooperation in helping to close routes, investigate networks and exchange information. China is believed to be the primary consumer country for illicitly procured pangolin scales, which are laundered into its

industrial-scale pharmaceutical/TCM industry. China's actions to limit, remove or better regulate the use of pangolin scales in this industry would therefore have an unparalleled impact on the global illicit trade.

In addition, improved cooperation between Philippine and Chinese law enforcement agencies can contribute to effective investigations and extradition of criminal actors involved in the pangolin trade, especially those at higher levels within the criminal networks. An extradition treaty has been in place between the countries since March 2006,¹⁵¹ and although it is unknown to what extent it has been used for investigations relating to the pangolin trade, it presents an opportunity to significantly disrupt the networks, especially as the revised Wildlife Act will provide for harsher sentences related to pangolin trafficking and so act both as a deterrent and as a means of removing actors from the trade.

In the absence of more active intelligence gathering on wildlife trafficking, civil society has an important role monitoring illegal trade.

Civil society and development agencies

As poverty is one of the principal factors driving people into the illicit economy, including the pangolin trade, it is essential that law enforcement interventions are paired with community-based development. Civil society organizations have been conducting projects to help develop local communities by enabling them to manage their natural resources in a sustainable manner, while also linking the preservation of the pangolin population to their livelihoods and long-term wellbeing. This is intended to build communities' resilience to organized crime, as they would no longer need to look to the illicit economy for support.

This is an important intervention, as the Organized Crime Index found that resilience to organized crime in the Philippines is below the average for South East Asian countries, ranking seventh out of 11 countries. The country also scores low on preventing organized crime (strategies, measures and resource allocation) and involving non-state actors in the response to organized crime.

While not the focus of this report, the support of non-government organizations was repeatedly mentioned as being useful to authorities, in the context of their limited resources and the low priority assigned to the pangolin trade by some state actors. Such support can relate to both material aspects, such as the provision of equipment or supplementing wages to employ more guards to patrol the forest, and development activities.¹⁵³

In Manila, it was also clear that in the absence of more active intelligence gathering on wildlife trafficking, civil society actors have an important role monitoring illegal trade and providing leads.



The Palawan pangolin is one of the Philippines' most celebrated endemic species, but the pressure on their existence has not prompted the urgent response needed. © USAID Protect Wildlife and Katala Foundation

his report aimed to establish more detail about the known and probable modus operandi of trafficking networks involved in the hunting, consolidation and transport of live Palawan pangolins or their scales. It has delved into the challenges that law enforcement face in preventing these crimes, deterring participants or uncovering the networks that drive the trade.

This problem has been growing since the first decade of the 2000s but appears to have accelerated sharply since about 2014. The Palawan pangolin is one of the Philippines' most celebrated endemic species, yet the remarkable pressure on their continued existence has not prompted the urgent response usually associated with attacks on iconic species. Although this may stem from pangolins being reclusive, nocturnal and rarely seen, it undoubtedly also speaks to low prioritization of the issue, and the state's response, hampered by various challenges, being several steps behind the growth of criminal networks.

This has happened during a period when criminal networks, due to both international developments and local policies, have had greater ability to operate clandestinely and efficiently through increased utilization of technology, financial services and money laundering, which are often the result of government policies designed to attract greater foreign investment or economic growth.

Although the COVID-19 pandemic and its associated lockdowns appear to have dampened pangolin trafficking dynamics, the underlying vulnerabilities remain, which make a return to high levels of trade possible.

Recommendations

Law enforcement

- The problem should receive greater political priority and improved resourcing of national enforcement agencies to investigate environmental crimes, especially given criminal networks' increased utilization of technology and money laundering through financial services.
- More resources are needed at the frontlines of environmental law enforcement, as well as investment in improved state-community relationships at this level.
- Measures to improve coordination between different Philippine government agencies mandated to deal with the problem will improve the overall effectiveness of the response.
- Responses to pangolin trafficking need to approach investigations as organized crime cases. Developing and using intelligence, as well as tools such as financial investigations and asset seizures, can contribute to more effectively combatting this crime.

Other government policies

- In Palawan, addressing socio-economic drivers of the trade, such as poverty and corruption, is essential to build community resilience to participating in criminal networks and removing any political protection of traffickers.
- The Philippine government should take measures to restrain the broader enabling environment for illicit markets, including improving its anti-money laundering and anti-corruption institutions, as requested by FATF, and enabling civil society to act as a watchdog against government complicity.

International cooperation

■ The Philippines' government and several key regional countries, assisted by international organizations where necessary, should engage in dialogue and formal cooperation to end the illegal pangolin trade. This cooperation should encompass coordinated law enforcement against transnational networks, closing regulatory and enforcement loopholes that allow illegal shipments to pass and illicit money to flow, as well as measures to reduce illegal consumption and demand. Relevant countries include Malaysia, which may be a transit country for Palawan pangolins; Vietnam, which is a transit and consumer country for the global pangolin scale trade; and crucially China, which is the destination of most illegal shipments and the home country of many actors in international trafficking networks.

Specifically, as China is believed to be the primary consumer country for trafficked pangolin scales, there is a need for Beijing: to take adequate measures to close the loopholes with the managed stockpiles of pangolin scales; to consider promoting alternatives to pangolin scales in TCM or otherwise reducing demand; to end the legal use of pangolin scales; and to take steps to combat any black-market trade.

Data about the trade

- To understand the full impact of trafficking, it is necessary to compare trafficking volumes to population baselines. In this regard, efforts by civil society organizations, academic institutions and Philippine authorities are needed to determine and monitor the size of the population of the Palawan pangolin. This will be important for developing a central database to track cases related to illegal wildlife trade.
- At an international level, civil society organizations, academic institutions, international non-governmental organizations or government teams working on DNA analysis and sharing the resultant information are helping to map pangolin trafficking routes, clarify the presence of Palawan pangolin scales in international markets and to link seizures with specific trafficking networks. This work should be supported and expanded.

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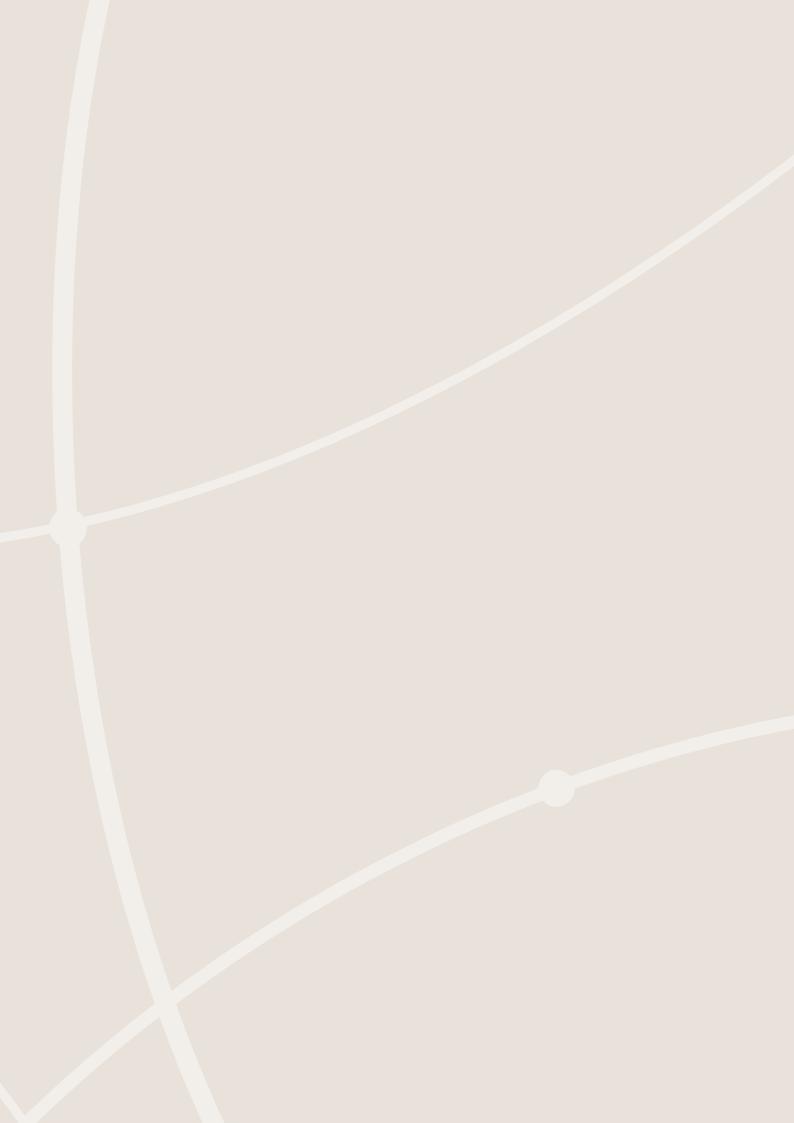
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ABOUT THE GLOBAL INITIATIVE

The Global Initiative Against Transnational Organized Crime is a global network with over 600 Network Experts around the world. The Global Initiative provides a platform to promote greater debate and innovative approaches as the building blocks to an inclusive global strategy against organized crime.

www. globalinitiative.net