# The Global Observatory of Transnational Criminal Networks

# Introduction to the Illicit Pangolin Trade in Africa

No. 19

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The facts and the analysis presented herein are sustained in documents and interviews exposed in mass media and judicial records related to the criminal networks analyzed. No primary information uncovering facts has been gathered, which means that only secondary sources were consulted, from legal to media documents. In the case of the names mentioned, quoted or referenced on indictments —with the exception of those specifically mentioned, quoted or referenced in the text as definitively condemned-, the presumption of innocence, in observance of individual rights is always preserved.

The judicial truth is the jurisdiction of the courts, which by law will decide whether the defendants are innocent or guilty.1 It is stated that belonging to, participating in, being connected to, or appearing on a network, as analyzed herein, does not imply having committed a criminal act or being engaged in a criminal enterprise. It is always possible to belong, participate, be connected, or appear on a network as an agent promoting interests that are socially and institutionally beneficial, or as a result of coercion, among other reasons unrelated to criminal acts committed by the agent.

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### Introduction

The pangolin, also known as the scaly anteater, has earned the dubious distinction of being regarded the most trafficked mammal in the world1. There are eight extant species — four in Asia, four in Africa — representing three different genera within one family, the Manidae.

Two of the Asian species — the Chinese Pangolin, Manis pentadactyla, and the Sunda Pangolin, Manis javanica — are currently listed as critically endangered by International Union for Conservation of Nature (IUCN). Both the Philippine Pangolin (Manis culionensis), and the Indian Pangolin (Manis crassicaudata), are currently listed as endangered.

All four African species are currently listed as vulnerable on the IUCN Redlist. They are:

- Temminck's ground Pangolin (Smutsia temminckii), which is native to Southern and Eastern Africa
- The giant ground Pangolin, (Smutsia gigantean), which is native to West and central Africa
- The white-bellied Pangolin (Phataginus tricuspis), native to West and Central Africa
- The long-tailed Pangolin (Uromanis tetradactyla) native to West and Central Africa)

In Asia, pangolins are hunted illegally for their meat, which is considered a delicacy in parts of China and Vietnam, and their scales, which are used in a number of traditional Asian medicines. This demand has given rise to an organised international black-market trade.

In Africa, pangolins are commonly hunted for 'bushmeat', which is driven by subsistence demands, and for use in various traditional medicines. As this report will show, there is evidence that African pangolins are now being poached to supply the Asian black-market.

This document provides a general overview of pangolin trafficking and poaching in Asia and Africa, focusing on the illicit trade from Africa to Asia. It must be noted that the pangolin trade is poorly understood, with little published material on the topic, other than reports of its existence, and of individual confiscations or arrests. Accordingly, this report cannot aim to be exhaustive. Although researchers have studied the use of pangolins in traditional African medicine, and aspects of their basic biology, there remain many gaps in knowledge to be plugged. There is a particular lack of research into the dynamics of the illicit pangolin trade.

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<sup>&</sup>lt;sup>1</sup> IUCN Pangolin Specialist Group http://www.pangolinsg.org/

This document has the purpose of presenting relevant characteristics of the global criminal market of Pangolin. The document has 6 parts. The first part is this introduction. The second part is an introduction to the main countries where Pangolin trafficking is observed, in Africa and Asia. The third part is a presentation of the economic and political characteristics related to the countries involved. In the fourth and fifth part relevant quantitative and qualitative data is presented. In the sixth part conclusions are discussed.

### Countries involved

#### Asia

According to Challenger (2011), early trade in Asian pangolins was derived "almost exclusively" of Sunda Pangolins, which naturally occur across Southeast Asia, including in Thailand, Indonesia, Vietnam, Laos, Cambodia, Malaysia, and Singapore. In the 1980s and 90s there was a large legal trade in skins to Japan, Mexico and the USA, and in scales to East Asia.

In 1995, all pangolin species were listed on CITES Appendix II, which is designed to control the international trade of vulnerable species. This was done because other pangolin species were being traded, and because it is difficult to tell different species apart, especially when dealing with scales.

In 2000, in response to unsustainable levels of exploitation, zero export quotas were established for three Asian species (Sunda Pangolin, Chinese Pangolin and Indian Pangolin). Despite this export ban, however, the illicit Asian pangolin trade has continued.

According to TRAFFIC<sup>2</sup>, most seizures of poached pangolin since 2000 have been destined for China and Vietnam, where high-end demand has increased due to increased affluence in the region, driving prices up (Challenger 2011).

Challenger (2011) writes: "It is understood that local consumption across much of Southeast Asia — a practice once widespread historically — has largely been abandoned to take advantage of the economic benefits that result from international trade in pangolins and/or their derivatives."

With domestic Chinese pangolin populations believed to have been heavily depleted by overexploitation, there is evidence that poaching activities have shifted further south. Today, Sunda Pangolins from Malaysia and Indonesia constitute the bulk of the trade. There have also been seizures in the Philippines, India, Nepal, Cambodia, Myanmar, Singapore and Thailand (Challender 2011).

As resources have depleted in Asia, there have also been reports of increasing poaching in

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<sup>&</sup>lt;sup>2</sup> http://www.traffic.org

Africa to supply the Asian market. The preceding information has been included to give context to the African analysis, as Asia remains the nerve centre of the trade, and had already built up sophisticated illicit networks by the time poachers extended its reach onto the African continent.

### **Africa**

Pangolins are distributed across West and Central Africa. One species, Temminck's ground Pangolin, occurs in Southern and East Africa. Challenger & Haywood (2012) note that there is evidence of intercontinental trade from Africa to Asia involving all four species, but that "little is known about the extent of this trade or the figures involved."

Seizures of both live and dead African pangolins, as well as scales, have taken place in a number of European and Asian countries, destined in known cases for China, Vietnam or Thailand. It should however be noted that the destination of confiscated shipments is not always known. According to the database compiled by Challender & Haywood, these shipments originated in 13 African countries: Zimbabwe, Mozambique, Namibia, Cameroon, Ivory Coast, Central African Republic, South Africa, Congo, Guinea, Kenya, Nigeria, Angola, and Uganda (Challenger & Haywood 2012).

Media reports have also recorded pangolin poaching in Gabon and Togo. It may be that confiscations from other African countries have not yet been reported on. Given the geographic range of the four-pangolin species, it is likely that poaching has occurred or is occurring in other African states as well.

What follows is a brief overview of the economic, social and political context in which African pangolin poaching takes place; a look at quantitative and qualitative data relating to the phenomenon; and closing remarks.

### 2. Economic, social and political context

Africa has long struggled with political and economic stability. For example, South Africa, by some distance the wealthiest African country involved in pangolin trafficking, has high levels of poverty and unemployment. According to the World Bank, 53.8% of South Africans live in poverty. Statistics South Africa have estimated that 21.7% of the population live in extreme poverty and are unable to afford basic nutrition<sup>3</sup>. These figures are higher elsewhere on the continent, particularly in rural areas where poaching takes place. More than 70% of the continent's poor live in rural areas and depend on agriculture for their livelihoods, yet development assistance to agriculture is decreasing, reports the International Fund for Agricultural Development (IFAD)<sup>4</sup>.

There are currently armed conflicts being fought in Nigeria, Cameroon, Central African Republic, and the DRC. In the last decade there has also been varying degrees of violent conflicts and instability in Uganda, Zimbabwe, Angola, and Kenya.

Large areas of west and central Africa are politically unstable, with low investment in law enforcement and conservation. Corruption is also systemic in many countries: in her review of organised crime in Southern Africa, Hübschle (2011) writes that "organised crime in most countries is underpinned by corruption, which is either a facilitating activity or an organised criminal activity in its own right".

In the midst of this persistent turmoil and economic hardship, illicit wildlife trafficking represents an important form of income in many African states, giving locals an opportunity to support their livelihoods that can otherwise be difficult to come by. It is widely accepted that illicit trades (e.g. abalone in South Africa, rhino horn in Mozambique) prosper in part because of the economic benefits they offer participants living in poverty. One of the single most important drivers of poaching in Africa is a lack of alternative opportunities for many of its participants.

Furthermore, "there is a general lack of awareness of conservation laws and protection status of wild animals in Africa," according to Soewu & Sodeinde (2015). In one survey, in Nigeria, 90% of respondents had no awareness about the conservation status of pangolins, or any

<sup>&</sup>lt;sup>3</sup> Nicolson, G. (2015) South Africa: Where 12 million live in extreme poverty http://goo.gl/cqqAYV

<sup>&</sup>lt;sup>4</sup> International Fund for Agricultural Development Rural poverty in Africa. Available in: http://goo.gl/9MPxaB

threats to their survival (in Soewu & Sodeinde 2015). Studies in this field are rare but this report is representative of a much wider trend, where conservation efforts have become externalised from local communities and run according to imported or non-indigenous value systems, for example maintaining natural beauty for wealthy tourists to enjoy, but not heeding the plight of local peoples who rely on natural resources for income.

The intrusion of the black market onto this scene has had devastating consequences for wildlife precisely because it operates beyond the realm of formal regulation and law, and is driven to a much larger (and less constrained) extent by greed and profit imperatives. The result is rapacious overexploitation of many species in a number of African countries. However, to deny the socio-economic root causes of these trades is unproductive and short-sighted.

Many countries involved in pangolin trafficking have local traditions of both gustatory and medicinal use. Pangolins have been hunted as bushmeat throughout their geographic range. As *muti* or *juju*, or traditional medicine, pangolins have been used as far apart as Nigeria, Benin, Ivory Coast, Tanzania and Zimbabwe. However, it is important to note that the traditional bushmeat trade is different to organized transnational trafficking, supplying local markets with much lower levels of coordination. This report is focused on the latter.

According to Soewu & Sodeinde (2015), pangolin meat is considered a status symbol in Nigeria, similarly to in parts of Asia. There is also a traditional market for scales, which are used as expensive ornaments.

Now, with demand surging in East Asia, these traditional practices have been overlaid by the draw of a lucrative international market, greatly expanding the scope for poaching activities.

### 3. Quantitative data

There is no central database of pangolin poaching and trafficking in Africa, according to Darren Pietersen, co-chairman of the African Pangolin Working Group (APWG)<sup>5</sup>. In the most comprehensive attempt to date, Challenger & Haywood (2012) compiled customs records from France and Belgium, two countries that have been used as trans-shipment points to Asia, with media reports and personal records of confiscations. Before 2008, Challenger & Haywood found no evidence of intercontinental trade, only of local confiscations in Zimbabwe, Namibia and Mozambique. Since 2008 there have been confiscations in Africa, Europe and Asia, ranging from single individuals to large shipments. The largest shipments intercepted to date are:

- 96 kg of scales from Ivory Coast, destined for Hong Kong, intercepted in France in 2009:
- 100 skins (with scales attached) from Guinea, destined for Thailand, intercepted in Belgium in 2011;
- 3 kg of meat and 1 kg of scales from Nigeria, destined for China, intercepted in Belgium in 2012;
- c. 200 kg of dead bodies from Cameroon, intercepted in Belgium in 2012;
- c. 20 small bags of scales from an unknown location, destined for China, intercepted in Belgium in 2012;
- 4 kg and 115 kg of scales intercepted in Uganda in separate incidents in 2012; and
- 6 kg of scales from Angola, intercepted in China in 2012.

There have been a number of large seizures since 2012. In April 2013, 80 kg of scales were confiscated in Cameroon. The following day, 50 kg of scales, also from Cameroon and en route to Hong Kong, were intercepted in Paris.

In May 2014, a shipping container containing c. 1000 kg of scales from either South Africa or Kenya, falsely declared as "plastic pet", were confiscated in Hong Kong. In June 2014, more than 2 tonnes of scales from Cameroon, falsely declared as timber, were confiscated in Hong Kong.<sup>6</sup> Both shipments were routed via Malaysia. A Malaysian businessman, aged

<sup>&</sup>lt;sup>5</sup> http://pangolin.org.za; (interviewed 23 August 2015)

<sup>&</sup>lt;sup>6</sup> Lo, C. (2014). Pangolin scales worth HK\$17m found hidden in shipments from Africa. Available in: http://goo.gl/lhg0M9

46, was arrested in connection with these two seizures and released on bail. Then, in March 2015, a container with 2 tonnes of scales from Nigeria was seized in Hong Kong.

According to Annamiticus, an international NGO that monitors the illegal wildlife trade, an estimated 8,125 pangolins were seized globally in 2013. The organisation estimates that, in total, a number between 117,000 and 234,000 pangolins were traded illegally around the world between January 2011 and December 2013. Owing to its illicit nature, the trade is difficult to monitor, and its total scale is thus not known. In both Africa and Asia, detection rates can be expected to be low, due to lacking resources in customs and border agencies, and highly porous borders.

The African Pangolin Working Group (APWG) has stated that populations of all four pangolin species on the continent are declining due to poaching. The IUCN Red List estimates the following rates of declines for the four species:

- Temminck's Ground Pangolin: Inferred past / ongoing and projected future population reduction of 30-40% over a 27 year period (nine years past, 18 years future)
- White-bellied Pangolin: already begun declining and will continue to decline by at least 40% over a 21 year period (seven years past, 14 years future)
- Giant ground Pangolin: already begun declining and will continue to decline by at least 40% over a 27 year period (nine years past, 18 years future)
- long-tailed Pangolin: projected to undergo a population decline of at least 30-40% over a 21 year period (seven years past, 14 years future)

The primary cause of decline for all four species is given as overexploitation driven by bushmeat, traditional medicine, and — most pressingly — the fast-growing phenomenon of transnational illicit trade.

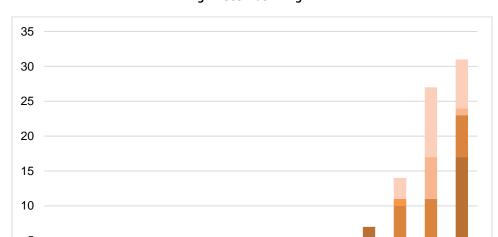


Figure 1. Number of pangolin individuals confiscated in southern Africa between 1 January 2000 and 31 December 2013.

An additional 15 individuals were confiscated in Namibia during this period, but the exact year(s) of confiscation are unknown and hence these seizure are not represented in this figure. **Source: South African** Journal of Wildfire Research Vol. 44, No. 2, October 2014.

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013

Table 1. Year, location of seizure, commodity, species and number of infividualds/weigth of African pangolin/derivated in trade, 2000-2012

Year	Location of Seizure	Commodity	Species	No. Of individuals/ weight (kg)	Source
2000	Zimbabwe	Live	Temminick's Ground Pangolin Smutsia temmininckii	1	THT
2000	Zimbabwe	Live	Temminick's Ground Pangolin Smutsia temmininckii	1	THT
	Mozambique	Live	Temminick's Ground Pangolin Smutsia temmininckii	1	THT
	Zimbabwe	Live	Temminick's Ground Pangolin Smutsia temmininckii	2	THT
2001	Zimbabwe	Live	Temminick's Ground Pangolin Smutsia temmininckii	1	THT
	Zimbabwe	Live	Temminick's Ground Pangolin Smutsia temmininckii	1	THT
	Zimbabwe	Live	Temminick's Ground Pangolin Smutsia temmininckii	1	THT
2003	Namibia	Live	Temminick's Ground Pangolin Smutsia temmininckii	1	THT
2004	Zimbabwe	Live	Temminick's Ground Pangolin Smutsia temmininckii	1	THT
	Zimbabwe	Live	Temminick's Ground Pangolin Smutsia temmininckii	1	THT
2008	China	Live	Manis sp.	4 kg	Media
	France	Live	Manis sp.	1	French Customs

	France (Cameroon)	Live	Manis sp.	3	Media
2009	France (Cte d'Ivoire/Hong Kong)	Scales	Manis sp.	96 kg	French Customs
	France (Central African Republic)	Body(ies)	Manis sp.	4	French Customs
	South Africa	Live	Temminick's Ground Pangolin Smutsia temmininckii	1	Media
	USA	Body(ies)	Manis sp.	>4	Media
2010	France (Congo)	Body(ies)	Manis sp.	1	French Customs
	France	Body(ies)	Manis sp.	1	French Customs
	France	Meat	Manis sp.	15 kg	Media
	Zimbabwe	Specimen	Temminick's Ground Pangolin Smutsia temmininckii	1	Media
	Zimbabwe	Specimen	Temminick's Ground Pangolin Smutsia temmininckii	1	Media
	Mozambique	Scales	Temminick's Ground Pangolin Smutsia temmininckii	Unknown	Media
	Namibia	Specimen	Temminick's Ground Pangolin Smutsia temmininckii	1	Media
2011	Belgium	Skins (with	African White-bellied Pangolin		Belgian
	(Guinea/Thailand)	scales)	Phataginus tricuspis	100	Customs
	Kenya	Specimen	Temminick's Ground Pangolin Smutsia temmininckii	1	Media
	Zimbabwe	Seizure	Temminick's Ground Pangolin Smutsia temmininckii	1	THT
	Zimbabwe	Seizure	Temminick's Ground Pangolin Smutsia temmininckii	1	THT
	China (Nigeria)	Meat/Scales	Manis sp.	311 kg	Media
	Belgium (Guinea/China)	Scales	Giant Ground Pangolin Smutsia gigantea	Unknown	Belgian Customs
	Belgium (Cameroon/Belgium)	Body(ies)	Manis sp.	c, 200 kg	Belgian Customs
2012	Belgium (Unknown/China)	Scales	Manis sp.	c. 20 small bags	Belgian Customs
	Uganda	Scales	Manis sp.	4 kg	Media
	Uganda	Scales	Manis sp.	115 kg	Media
	Kenya	Live	Temminick's Ground Pangolin Smutsia temmininckii	1	Media
	China (Angola)	Scales	Manis sp.	6	Media

**Source:** media reports, Custom agencies.

### 4. Qualitative data

When threatened, pangolins roll up into defensive balls. This defense mechanism is rather useless against humans, who can simply pick them up. Pangolins can thus be hunted without special skills, weapons or traps, making them appealing and lucrative targets for opportunistic collectors (Pantel & Anak 2010). The ease with which pangolins can be collected — versus, say, rhino horns — no doubt is a contributing factor towards their ongoing demise.

Aside from the fact that pangolins are soft targets, there are well-established organized crime networks across the African continent, and illicit wildlife trafficking has been ongoing for decades. This means that there are already pathways and techniques for exporting shipments of contraband. As will be described below, there is evidence that pangolin poaching has been absorbed into the criminal infrastructure that already exists on the continent.

For example, in January 2015, officials in Uganda seized two tons of pangolin skins packed in boxes identified as communications equipment<sup>7</sup>. The seizure also included more than 700 kg of ivory. The shipment was destined for Amsterdam. Custom officials had cleared the boxes for export. Pangolin shipments have also been disguised or mislabeled as dog food, timber, and plastic toys.

This case is instructive, as it reveals that the criminal groups involved with pangolin trafficking also operate in other illicit wildlife trades and use similar methods of concealment for their shipments. In fact, pangolin scales and skins have been seized in transit with rhino horn or ivory (or both) on a number of occasions. This will be elaborated upon in a later report.

Africa is now considered a major conduit for illicit transnational drug flows and has become a major trans-shipment point between producer countries in South America and Asia, and consumers in the U.S. and Europe. Domestic drug markets are also developing at a rapid rate, adding to demand and boosting volumes of traffic (Hübschle 2011). While there have been few to no successful prosecutions of high-end pangolin trafficking groups — certainly none on record — there is evidence that other illicit wildlife trades have been constructed

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<sup>&</sup>lt;sup>7</sup> Unknown (2014) Uganda seizes massive ivory, pangolin haul. Available in: https://goo.gl/iktqU8

around the flow of illicit drugs, for example the exchange of methamphetamine precursor ingredients for poached abalone in South Africa. The seizure of pangolin shipments in countries like Kenya and Nigeria, both notorious drug smuggling hubs, opens the possibility that similar transactions occur with pangolin products. Something similar could be expected in West African countries that currently connect drug trafficking routes from Mexico, Colombia and Venezuela, to Europe.

Another large driver of increased pangolin trafficking from Africa is the rapid expansion of Chinese business and investment across the continent. While conversations about this phenomenon often quickly lapse into prejudice and racial profiling of Chinese migrants — see, for instance, the comments section on virtually any online news article about pangolin poaching in Africa — there appears to be real links between Chinese business and the illicit export of pangolins, just as there are with other wildlife illicit trades like abalone, ivory and rhino horn

The following quote illustrates the perceived connections between the expansion of Africa's Chinese diaspora and pangolin poaching: "Conservationists say the demand boom is due to declining wild populations in Asia as well as high numbers of Chinese workers in Africa's resource and timber sectors, located in remote regions of the continent's interior," wrote one journalist reporting on this phenomenon<sup>8</sup>, cited here merely to illustrate the perceived connections between the expansion of Africa's Chinese diaspora and pangolin poaching.<sup>9</sup>

According to The Economist, China has become Africa's biggest trading partner, exchanging some \$160 billion-worth of goods a year. "More than 1 million Chinese, most of them labourers and traders, have moved to the continent in the past decade."

A closer look at potential links between Chinese or other organised criminal groups, as well as the structure of poaching rings and export networks, will be provided in a later document. At this stage there is little published on the topic, although there are media reports and anecdotal data that give some indication of the structure and modus operandi of trade.

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<sup>&</sup>lt;sup>8</sup> Unkown (2014) No Place to Hide for Africa's Pangolins Amid China Buying Spree. Available in: https://goo.gl/VfZKek 
<sup>9</sup> Farge, E. & Obangome, G. (2014). No place to hide for Africa's pangolins amid China buying spree. Available in: http://goo.gl/lpp3CV

<sup>&</sup>lt;sup>10</sup> The Economist (2015). One among many. Available in: http://goo.gl/HxYCTn

### Conclusion

There are clear signs that pangolin trafficking is on the increase in Africa, driven by demand for pangolin products in the Far East. Organized pangolin trafficking networks have existed in Asia for at least two decades. In response to resource depletion in and around China, the largest consumer, poaching shifted southwards into South East Asia and, as is the focus of this report, onto the African continent, where four species of pangolin currently live and are experiencing sharp population decline. The economic and political climate throughout much of the geographic range in which pangolins occur has rendered poaching activities attractive — particularly amid contexts of chronic poverty — and relatively low-risk, as enforcement and monitoring is generally not up to the task of stemming the illicit flow.

At least 15 countries in southern, eastern, central and western Africa have been implicated in pangolin trafficking by confiscations and seizures, which in reality probably represent just a tiny fraction of the true scale of trade.

There is evidence that pangolin trafficking has become entwined with other illicit wildlife trades on the continent, with confiscations of large shipments containing pangolin products alongside ivory and / or rhino horn. Africa is increasingly seen as a profitable source, destination, or trans-shipment point for organized criminal activities; pangolins seem to have become just another commodity on the thriving black-market. More work is needed to elucidate these links. There have been no successful prosecutions of pangolin traffickers (other than low-level poachers) to date.

The role of Chinese business and investment on the African continent in driving poaching is often mentioned in media reports, and anecdotal evidence suggests a link between the growing Chinese diaspora and increased illicit trade in wildlife, including pangolins. Exploring this connection in greater depth (and with more nuance than the standard racist tropes dredged up by online commentators) is an important focal area for this sort of research moving forwards.

Pangolins are very easy to hunt, requiring little to no expertise. There is a growing market for them. Enforcement is generally weak. Throughout much of the animals' geographic range, people live in chronic poverty. The international trade in African pangolins is having significant negative population impacts that cannot be denied — but the root causes that drive

poaching will need to be addressed before current trends can be arrested, let alone reversed.

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Kimon de Greef is a freelance writer from Cape Town, south Africa. Among other things he writes about informal economies. He has a Masters degree in Conservation Biology. Currently he is working in a book about illicit resource trades in South Africa.

## Khalil Goga

Khalil Goga is a Researcher for the Transnational Threats and International Crime Division of ISS Pretoria. He has been researching organized crime in Africa since 2009. He previously lectured at the University of KwaZulu-Natal, from where he received both his undergraduate and master's degrees