



595 kg of ivory and 270 kg of pangolin scales originated from Mozambique were seized in Viet Nam at Cat Lai International Port in October 2016. They were stored in two timber containers owned by the HCMC- based Dao Gia Company.

Snapshot Analysis

Ivory Smuggling: 2015-2019
Concealment, routes and transportation methods
September 2019

Executive Summary

On 4 July 2017, Hong Kong Customs officers seized 7.2 tonnes of elephant ivory at the Kwai Chung Customhouse Cargo Examination Compound in Kowloon. At the time, it was described as the biggest recorded ivory seizure in the past 30 years. To put the shipment in context, it contained more than 1.5 times the total amount of ivory seized in Hong Kong in the preceding 3.5 years¹.

Despite the significance of the seizure, all the suspects who were initially arrested in Hong Kong were subsequently released without charge. While the details of their release have not been made public, it is assumed that there was insufficient evidence to charge those arrested in Hong Kong and that there was no collaboration between the authorities and their counterparts in Malaysia. Equally, no suspects were arrested in Malaysia, where the consolidation of the shipment took place.

In the intervening two years, it is clear that the ivory smuggling situation has further deteriorated. In 2019, several seizures were made containing huge volumes of ivory, with three cases exceeding the 7.2 tonnes 'record breaker' of July 2017:

- 1. March 2019
- 9.1 tonnes seized in Tien Sa port, Viet Nam.
- 2. March 2019
- 7.4 tonnes seized in Gaogou, China.
- 3. July 2019
- 8.8 tonnes seized in Singapore.

Shipments of ivory weighing tonnes are now normalised.

Analysis by the WJC indicates that the composition of shipments containing ivory is increasing

Analysis by the Wildlife Justice Commission (WJC) indicates that the composition of shipments containing ivory is increasing². To exemplify, while there has been a decrease in the number of detected ivory shipments weighing over 500 kg³ (n=8) between August 2015 – July 2017 and August 2017 – July 2019, the average weight per shipment has increased by over 200%. On average, a shipment of ivory is now estimated to weigh almost 3.5 tonnes compared with 1.1 tonnes two years earlier.

While shipment sizes are increasing, the value per kilogram (kg) of raw ivory is decreasing. The impact of the ivory ban in China⁴ has, on many occasions, been cited by wildlife criminals as having had a negative effect upon 'business' and these factors indicate positive results at the supply end of the trade chain. However, the only meaningful measurement that the ban is directly having on the poaching crisis will be through:

- A sustained reduction in the killing of elephants.
- A reduction in the volume of organised shipments of illegal ivory from Africa into Asia.

According to the reported seizure picture, the latter is not improving.

¹ HK Customs seized a total of 4,694 kg of illegal ivory between 2014 and June 2017. https://www.scmp.com/news/hong-kong/law-crime/article/2101523/record-ivory-haul-worth-hk72-million-seized-hong-kong ² Based upon the reported ivory seizure picture. ³ Under CITES guidelines, any seizure of 500 kg or more is considered indicative of the involvement of organised crime. ⁴ Implemented in January 2017.



Image 2:

7.2 tonnes of raw ivory seized in Hong Kong, July 2017.

Source:

https://www.customs.gov.hk/ en/publication_press/press/ index_id_1909.html



Image 3:

On 26 March 2019, Customs officials at Da Nang's Tien Sa Port in central Viet Nam seized 9.1 tonnes of elephant tusks hidden in timber container. This is likely to be the largest ivory seizure ever recorded.

Source:

https://thanhnien.vn/thoi-su/bat-9-tan-nga-voi-nhap-lau-lon-nhat-tu-truoc-den-nay-tai-cang-tien-sa-1065139.html

Another emerging concern is the combination of shipments containing both ivory and pangolin scales. While combining shipments is not new, the prevalence at which this is now occurring is substantial and may mark underlying changes in criminal dynamics.

To demonstrate: 44% of ivory shipments⁵ now also contain pangolin scales. Furthermore, the volume of pangolin scales in such shipments is greater than the volume of the ivory being smuggled. The proportion of pangolin scales now far surpasses the volume of ivory in shipments that combine both commodities.

A kg of pangolin scales does not have the equivalent kg value as ivory, so more 'product' needs to be smuggled to make a decent return and in real terms more pangolin scales are being detected in illegal trade. Between 2017-2019 the weight of a shipment containing pangolin scales averaged at 4.5 tonnes, compared to around 2.5 tonnes in 2015-2017. It is not unreasonable to assume that pangolin scales may be substituting ivory in the illegal market in China.

One reason for this may be due to declining value of ivory, with traffickers now having to move more ivory to cover their costs. Intelligence indicates that the ivory ban forced the price to drop further, when it was already in decline⁶. Despite this, WJC investigations found that traders are still smuggling ivory into Asia, even though they struggle to sell the stock. Brokers in Viet Nam are currently holding large quantities of ivory that they are cautious to move

across Asian borders. It may then be that traders or brokers in Africa are selling it at such a low price it is worth moving and stockpiling the products until the price increases.

WJC analysts also noted changes in smuggling routes out of Africa in the last two years, as well as shifts in the choice of entry points into Asia, although Viet Nam continues to be the most common trafficking destination for ivory.

Introduction

The Kenyan port of Mombasa had long been the most commonly utilised port for ivory trafficking out of Africa. But, remarkably, since 20 December 2016 there has not been a reported seizure of ivory originating from, or transiting Mombasa. Crime displacement occurs and therefore it is incredibly important to ensure intelligence is both current and relevant.

To this end, a snapshot analysis of reported ivory seizures was undertaken to identify emerging trafficking routes and changes in trends. This report observes the evolving dynamics of the international smuggling of ivory from Africa and identifies new trends and patterns in the routes, commodities and concealment methods for the period 2015-2019. For this purpose, a sample of 52 recorded ivory shipments weighing over 500 kg corresponding to the periods August 2015 – July 2017 and August 2017 – July 2019 was analysed.

⁵ Weighing over 500 kg.

https://www.theguardian.com/environment/2017/mar/30/chinas-legal-ivory-trade-is-dying-as-prices-fall

Key Findings

1. Increase in volume

There has been a decrease of 27% (n=8) in the number of reported ivory seizures weighing over 500 kg between August 2015 – July 2017 and August 2017 – July 2019.

However, the average weight per ivory shipment has more than doubled during the same period.

On average, a shipment of ivory weighing more than 500 kg is now estimated to weigh almost 3.5 tonnes compared with 1.1 tonnes two years earlier.

This means that the volume of ivory being seized has increased by 124% (41,582kg) during those periods. See Table 1.

Table 1

Number of seizures and commodity weights recorded (kg)

	2015-2017	2017-2019	Variation %
Seizure Records	30	22	-27 %
Total Weight	33,550	75,132	124 %
Average Weight per Seizure	1,118	3,415	205 %



2. The value of raw ivory is declining

WJC investigations have collected the price of raw ivory in Viet Nam since July 2015 until June 2019 and while there have been fluctuations during that period, the overall trend is one of decline. The lowest price was recorded in June 2019 at USD 405. See Chart 1.

WJC investigations have witnessed a distinct decline in traffickers' interest in trading in ivory and prominent ivory brokers have spoken of their desperation to offload huge stocks of ivory. In spite of this, traffickers continue to take risks even when the return on profit is smaller because the cost of service fees (transportation and fees/taxes for corrupt officials)

Chart 1

Recorded values of ivory in Viet Nam (2015-2019 / USD)



has remained the same, leading to a situation where more products must be moved in order to maintain profit margins. This change is apparent according to the reported seizure picture for both ivory and now also for pangolin scales and may be attributable to targeted enforcement efforts at ports.

3. Decrease in smuggling by air, while by sea increases

Maritime routes appear to remain the preferred method for smuggling large quantities of ivory, accounting for more than half of the seizures reported during both periods.

During 2017-2019, maritime shipments increased by 11% while air smuggling decreased substantially, and accounts for only 9% of records. This could be explained by the larger shipments of ivory that were being moved, which perhaps could not be accommodated by air transportation and were instead moved by sea. See Table 2.

4. Timber as a concealment method dominates

The use of timber to conceal a consignment of ivory persisted as the most favoured method, accounting for over one third of detected shipments throughout both periods analysed. See Table 3.

Table 2
Transport methods of seizures (%)

	2015-2017	2017-2019
Transport Method	Sea 53%	Sea 64%
	Air 23%	Air 9%
	Premises 10%	Premises 5%
	Land vehicles 3%	Land vehicles 9%
	Unknown 10%	Unknown 14%

Table 3

Concealment methods by weight (kg / %)

Concealment	2015-2017	2017-2019
Timber	11,744 (35%)	30,140 (40%)
Frozen fish	860 (3%)	7,200 (10%)
Plastic for recycling	3,500 (10%)	5,400 (7%)
Marble	593 (2%)	3,230 (4%)
Food	1,285 (4%)	0 (0%)
Beans	3,223 (10%)	0 (0%)
Nuts	0 (0%)	6,500 (9%)
Fruit	0 (0%)	2,700 (4%)
Asphalt / Tar barrels	0 (0%)	4,856 (6%)
Shea Butter (nut product)	790 (2%)	0 (0%)
Corn	600 (2%)	0 (0%)
Random manufactures	1,130 (3%)	0 (0%)
Frozen beef	0 (0%)	2,100 (3%)
Not described / concealed	9,825 (29%)	13,006 (17%)
Total	33,550	75,132



During the first period (2015-2017), a series of shipments were observed sharing one identical concealment method: whole elephant tusks hidden inside hollowed timber logs, with the spaces among the tusks filled up with wax (WJC coded this crime series 'Wax & Cotiplast'). This crime series accounted for almost 27% (n=8 of 30) of the smuggling attempts recorded during this period.

Although during 2017-2019 this concealment method was only identified in 9% of seizures (n=2 of 22), one of these shipments comprised 9.1 tonnes of ivory (further described in Case Study 2). The repeated methodology – along with similar smuggling routes – could imply the presence of a single trafficking network in operation, accounting for an estimated 10% of the detected ivory shipments.

Furthermore, during the most recent period, ivory hidden within timber or agricultural commodity shipments (such as beans, corn, nuts, fish, stones) accounted for approximately 70% of the total ivory seized, with the contraband either hidden among the goods or its appearance was modified to look like the goods it was being smuggling amongst.

5. Case comparison analysis indicates commonalities in 2019 seizures

Three of the largest shipments of ivory intercepted in 2019 share several commonalties:

- **1.** The three shipments were suspected to have originated from the Democratic Republic of the Congo (DRC).
- **2.** Vietnamese nationals were involved in the smuggling of the three shipments of ivory.
- 3. Timber was used as a concealment method.

Case no. 1: contained 3,299 kg of raw ivory seized in Kampala, Uganda (January). Authorities believe it was packed in DRC, before moved in three six-metre containers crossing the border from South Sudan⁷. The shipment detected in Uganda was concealed in hollowed-out logs that were later sealed with wax.

Case no. 2: contained 9,120 kg of raw ivory seized in Tien Sa port, Da Nang – Viet Nam (March). The shipment was concealed in specially designed crates made to look like packs of timber logs. Image 4.

Case no. 3: contained 8,800 kg of raw ivory seized in Singapore (July). The shipment of three containers originated from DRC⁸. The container was part of a shipment of three that transited through Singapore to Vietnam, and had been declared as timber.

⁷ https://www.aljazeera.com/news/africa/2019/01/uganda-seizes-750-pieces-ivory-smuggled-sudan-190131195921122.html

https://www.channelnewsasia.com/news/singapore/singapore-seizes-record-ivory-pangolin-scales-congo-vietnam-11745608



Image 4: Concealment method (specially made timber crates) utilised for the smuggling of 9,120 kg of ivory intercepted in Viet Nam in March 2019 and originated from DRC⁹.

6. Prevalence in the combination of pangolin scales and ivory in shipments

There has been a sharp increase in the prevalence of shipments containing a combination of ivory and pangolin scales during 2017-2019, which now means 44% of ivory seizures also contain pangolin scales. The proportion of pangolin scales now far surpasses the volume of ivory in shipments that combine both commodities. See Chart 2.

Chart 2
Proportion (%) of ivory shipments also containing pangolin scales (2015-2019)



⁹ Source of image: Haiquan Online.

Furthermore, the volume of pangolin scales in these shipments¹⁰ is now also far greater than it was previously. See Table 4.

The shift in the composition of pangolin scales and ivory shipments can be observed in the seizure reported earlier in the year. On 16 January 2019, Hong Kong Customs seized 8,300 kg of pangolin scales and 2,100 kg of ivory tusks hidden inside a container - declared to be carrying frozen beef - at a customs facility. The shipment originated from Nigeria. See Image 5.

Table 4

Volume of pangolin scales seized in combined shipments (by kg)

Period	Pangolin Scales	
2015-2017	7,183	
2017-2019	39,415	

Image 5
The consignment¹¹.



¹⁰ Where ivory and pangolin scales are smuggled together.

¹¹ https://qz.com/1539839/latest-seizure-of-pangolins-in-hong-kong-signals-its-looming-extinction/

7. Ivory Trafficking Routes out of Africa move West

In Africa a shift was observed in the smuggling routes from Eastern countries to Western ones. Specifically, a displacement of activity from Tanzania and Kenya to Nigeria (Apapa port), Angola (4 de Fevereiro International Airport), Cote d'Ivoire, DRC and Benin. Mozambique remained linked to the smuggling routes throughout both periods. See Map 1.

Furthermore, the mentioned largest 2019 seizures - 3,299 kg seized in Uganda in January 2019; 9,120 kg seized in Tien Sa port, Da Nang (Viet Nam) in March 2019 and 8,800 kg seized in Singapore in July 2019 - all originated in DRC.

In Africa, the Kenyan port of Mombasa – Kilindini Harbour – which was associated with two shipments during 2015-2017 was not associated with any shipments at all during 2017-2019.

Map 1
African countries recorded in association with smuggling routes in 2015-2017 (left) and 2017-2019 (right).





8. Viet Nam as an entry point into Asia persists

Viet Nam is ranked highest in terms of the volume of ivory seized throughout both periods, in both cases more than doubling the weight of the next highest volume recorded. China and DRC largely increased their connection to high-volume ivory smuggling during 2017-2019. Malaysia's total weight was substantially higher during the same period, when Hong Kong joined the list. Both of which were consequences of the seized 7.2 tonnes of ivory where the shipment's route originated in the first country and was discovered in the second. See Table 5.

9. Different ports in the same key destination countries are being utilised

Asian countries recorded more frequently as destinations of illegal shipments remained the same throughout both periods and were Viet Nam, China, Cambodia, Hong Kong, Malaysia and Singapore. See Map 2.

However, detected seizures at some of the ports within those countries shifted between the two periods. See Table 6.

Table 5

Countries with the greatest total volume of ivory seized during 2015-2019 (kg)

2015-2017	2017-2019
13,498	39,460
5,640	18,670
5,518	18,580
1,304	19,002
7,350	10,000
4,541	11,600
3,791	12,300
5,461	8,897
804	9,300
4,287	750
	5,640 5,518 1,304 7,350 4,541 3,791 5,461 804

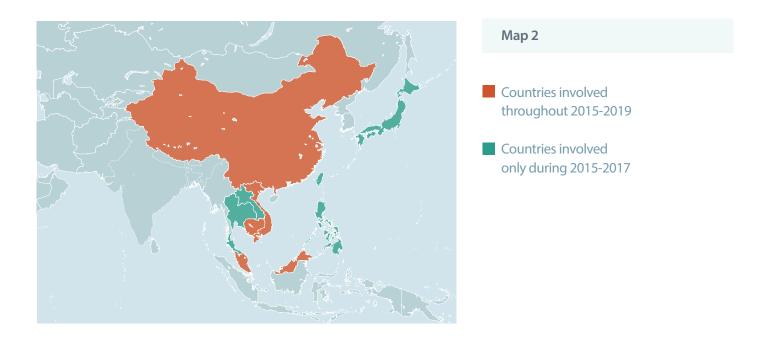
Analysed trafficking routes between Africa and Asia further illustrate the prominence of West African countries and Viet Nam and to a lesser extent Cambodia, Hong Kong and Singapore, with the incidence of smuggling into China less apparent. See Map 3.

Table 6

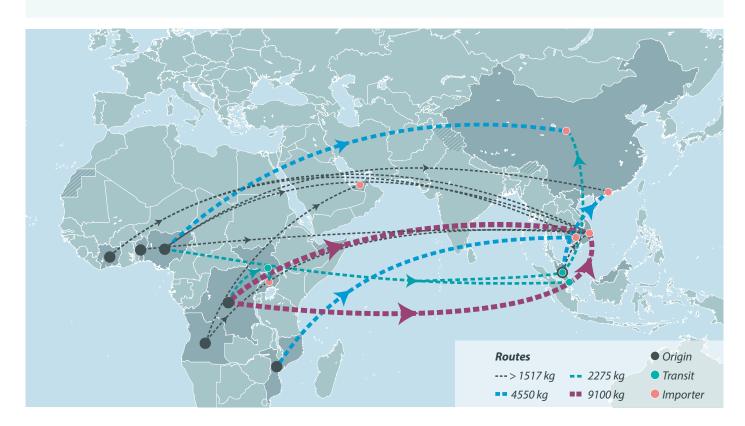
Ports linked to ivory smuggling for the most involved countries during 2015-2019

Country	2015-2017	2017-2019
	Cai Lan	Cat Lai
Viet Nam	Da Nang	Tien Sa
	Hai Phong	Hai Phong
	Ho Chi Minh City port	
Cambodia	Sihanoukville Port	Phnom Penh Port
Hong Kong	(Country)	Kowloon Port
Malaysia	Kuala Lumpur International Airport	Sepanggar Bay Port





Map 3 Ivory trafficking routes >500 kg (August 2017– July 2019).







Conclusions and Recommendations

This snapshot analysis illustrates several changes in the way ivory has been smuggled over the past two years. While shipments are being detected less frequently consignments are getting larger, with the average weight trebling in two years. This, despite WJC intelligence indicating the street value of ivory has fallen dramatically.

The price drop may also explain an interest in the diversification of criminal investment from ivory to pangolins. The analysis noted that large volumes of pangolin scales were increasingly being smuggled in combination with ivory.

While many of the same countries persist as the most implicated – Viet Nam, Mozambique and Malaysia – others have grown in relevance such as Cambodia, Nigeria and DRC. The apparent avoidance of the port of Mombasa as an exit hub out of Africa is also noteworthy.

Combating transnational organised crime relies first and foremost on investigative techniques such as electronic and physical surveillance, phone inter-

cepts, undercover operations and controlled deliveries driven by effective intelligence analysis.

The WJC highlights controlled deliveries ¹² as an under-used but highly effective technique in tackling transnational wildlife crime. It has proved invaluable in identifying and bringing to justice principals, organisers and financiers of the illicit drug trade and WJC investigators believe it merits use in response to the current problem as described.

Organised wildlife crime shows no signs of abating and such criminals have the means and resources to alter their mode of operations in order to evade detection. It is therefore crucial that regular analysis is undertaken, combined with rapid reporting of evolving smuggling dynamics and the use of advanced investigative techniques if wildlife trafficking networks are to be effectively disrupted and dismantled.

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¹² The United Nations Convention against Transnational Organized Crime (UNTOC) defines a controlled delivery as, (i) "...the technique of allowing illicit or suspect consignments to pass out of, through or into the territory of one or more States, with the knowledge and under the supervision of their competent authorities, with a view to the investigation of an offence and the identification of persons involved in the commission of the offence."





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