

**GLOBAL
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AGAINST TRANSNATIONAL
ORGANIZED CRIME

DISRUPTING ABALONE HARMS

Illicit flows of *H. midae* from
South Africa to East Asia

KIMON DE GREEF | SIMONE HAYSOM

FEBRUARY 2022



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Cover: Abalone being shucked. © *Shaun Swingler*
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EXECUTIVE SUMMARY

Poached abalone shells line the shore of Robben Island, Western Cape, South Africa.

© Peter Chadwick, www.conservationphotography.co.za



Abalone, a variety of marine snail, is valued as a high-status delicacy in East Asia, primarily in China. For more than 30 years, a species of abalone found only in South African waters – *Haliotis midae*, known locally as *perlemoen* – has been subjected to massive levels of poaching, driving the evolution of a lucrative and violent criminal economy.

This report maps out the profound harms associated with this trade, ranging from resource collapse to corruption, turf wars and the erosion of state institutions. Despite decades of anti-poaching efforts, illegal harvesting is currently at its highest-ever levels, with record prices for abalone, myriad groups competing for profits – from Cape gangsters to Somali smugglers – and few realistic prospects for bringing the trade under control. Faced with these facts, a radical shift to the current state response is needed.

Although reports exist of poaching in other countries such as Australia and the US, South Africa has been the global hotspot for abalone poaching since the 1990s. Abalone is harvested by divers, dried in South Africa and smuggled over the border to other southern African states, where it is laundered into licit trade routes and is shipped, primarily, to Hong Kong (the hub of the global abalone trade), from where it enters East Asian consumer markets.

Poached *H. midae* forms a sizable share of the global market. Between 2000 and 2016, as much as a third of the dried abalone imported into Hong Kong from producing nations around the world was obtained from South Africa's illicit abalone fishery and its estimated worth was more than US\$890 million. While there is a legal, largely aquaculture-based abalone industry in South Africa, it is dwarfed by – and ultimately severely undermined by – this illegal wild-harvested abalone flow.

Poaching is sustained by a lethal combination of demand emanating from Asia – which generates huge amounts of income for abalone syndicates – and vulnerabilities etched deeply into South African society: rampant poverty, the world's highest levels of inequality and a government increasingly unable to confront the illicit economy. This has now locked into a devastating feedback loop: the state response has allowed abalone poaching to flourish, which in turn undermines state institutions, enabling more poaching.

Although the bulk of the profits are made in Hong Kong, the illicit cash generated by poaching, drying and selling the product to Asian buyers has been substantial enough to generate a large and highly competitive criminal market in South Africa. Per kilo prices paid to abalone poachers have fluctuated as a result of the COVID-19 pandemic, but have since risen to record levels, eclipsing 1 000 South African rands (R) per kilogram in 2020 (US\$63). Over the last three decades, thousands of working-class men have been recruited as divers, boat drivers and other menial workers in the abalone poaching industry. This has largely taken place in coastal villages where unemployment is high, poverty endemic and a legacy of conflict around formal fisheries legislation drives disaffection, suspicion and resentment towards the state.

Actors in the trade are numerous and clearly segmented (see Figure 5), and criminal networks help facilitate local harvesting and international trafficking. In recent years, new organized criminal groups have become influential actors in the trade, including Somali and Congolese smugglers and increasing numbers of black divers. They join criminal networks directed from Hong Kong and numerous gang factions in South Africa's Western Cape who are also enmeshed in the drug trade and who use abalone profits to fund their criminal activities. There is some evidence that convergence between drug trafficking and abalone trafficking happens through 'in-kind' payments between Asian criminal networks and South African ones, as well as more complex financial transactions occurring at high levels.

The trade in illegally poached abalone has also been enabled by the inequalities of 'concern' generated by transnational trade. Abalone poaching was a priority for South Africa, but not for neighbouring countries where it was laundered or destination consumer markets, which hamstrung South African law enforcement efforts. The report discusses the listing and de-listing of *H. midae* on the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) database and the ways this has affected – and continues to affect – international cooperation.

Abalone stocks are at a small fraction of their former abundance, and the ecological consequences this has caused are practically irreversible given the high

levels of poaching that continue to occur. Yet the myriad social costs of this trade continue to accumulate: gang murders, drownings, the rise of exploitative kingpins, corruption, drug abuse and the criminalization of marginalized communities, among others. Several of the human harms of this trade are exacerbated by the law enforcement response itself, as hundreds of arrests of poachers have failed to contain the criminal market.

These severe harms call for a radically different approach. Instead of treating abalone poaching as an environmental issue or as a law enforcement problem, the report argues that it must be treated as one in which various harms need to be balanced against each other. The best remaining option – while certainly controversial – is to abandon efforts to control illegal abalone harvesting, allowing the species to decline beyond levels that are viable for criminal enterprise. Harms linked to the trade have crossed vital ecological and institutional thresholds, and law enforcement at source no longer serves a valuable purpose in containing its damage.

The report also calls for shifting law enforcement resources to investigating actors involved in trafficking and professional enablers of the trade, in the context of concerted efforts to repair state capacity; shifting the focus towards legal or political campaigns at the international level, particularly in Hong Kong; and investing in credible institutions, as well as alternative economic opportunities, in communities where abalone poaching is currently rife.


Methodology

The research team conducted interviews between October 2020 and November 2021. Interviews were semi-structured and exploratory, allowing new information to guide follow-up questions. For information about southern Africa, most sources were interviewed multiple times. Hong Kong-related information was gathered through in-person interviews, and desk- and phone-based research was conducted. For information on Vietnam, a desk-based study was conducted.

Interviewees in South Africa included current and former poachers, members of the South African Police

Service (SAPS), fisheries and conservation officials, and researchers and lawyers. Many of them asked to be cited anonymously owing to the sensitive nature of the information. In Hong Kong, we spoke to researchers at three environmental non-profit organizations and three participants in the dried-seafood trade.

The report also draws on wide-ranging fieldwork conducted by one of the authors since 2013.¹ Information from these sources was cross-checked and updated during interviews for this project. Lastly, media coverage, court records, research reports and confidential documents were also reviewed.



ILLICIT *H. MIDAE* TRADE ROUTES FROM SOUTH AFRICA TO EAST ASIA

Robben Island's marine protected area – one of the last sites of abalone abundance – has been heavily targeted by poachers in recent years. © Frans Lemmens via Getty Images

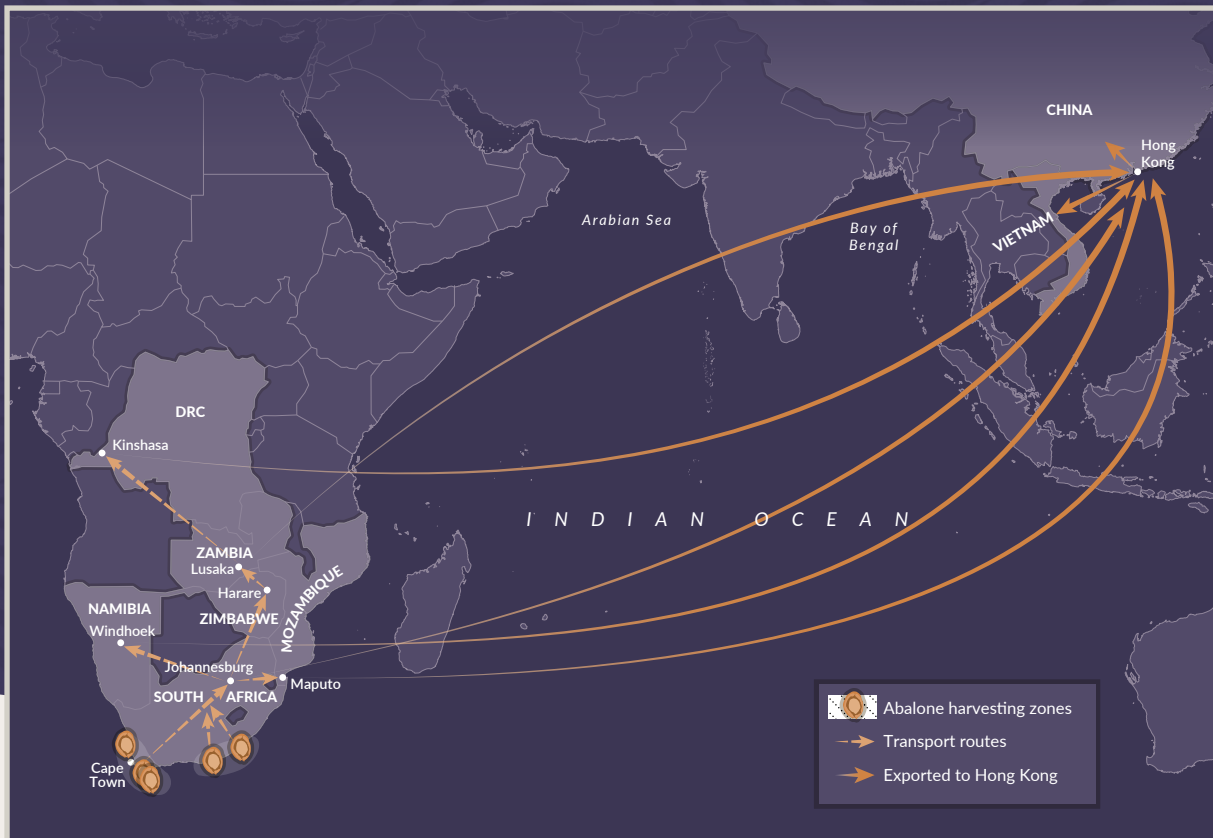


FIGURE 1 Global routes of illicit *H. midae* trade.

South Africa: where it all begins

South Africa is a source of both farmed and illegally traded wild-harvested abalone. Although there is a global trend towards farmed abalone (with more than 95 per cent of current supply coming from aquaculture in Australia, Japan, China, Korea, New Zealand, the US, Mexico, Oman and Peru),² the market still demonstrates a preference for wild-caught product, driving demand for black-market abalone from South Africa.³ There are also reports of poaching in other countries, such as Australia and the US, but nothing like on the scale in South Africa, where poaching is deeply entwined with the criminal economy. South Africa is the global hotspot for abalone poaching.

Abalone is traded in live, fresh, frozen, canned and dried form. Packaging and price differ according to an elaborate system of grading based on country of origin, species and size.⁴ Wild South African abalone is one of the most expensive varieties, after premium Japanese abalone, because it is wild caught, large and dries well.⁵

Why South African abalone was removed from CITES

In the midst of an acute poaching and international smuggling crisis, South Africa's request to remove the mollusc from the CITES regime strikes an odd note. Officials defended the decision by saying that following the listing, authorities detected a high level of abuse of CITES permits, while import data from Hong Kong and other importing countries showed no significant decline in trade volumes.⁶

The listing did have other important ramifications, however. For one, it created a basis, domestically, for making abalone smuggling a priority for an 'illicit economy strategy' on the part of the South African Revenue Service (SARS). CITES listings are also crucial for international cooperation, as they compel all parties to the convention to police the trade of species that would otherwise only be a concern in their country of origin. The unequal distribution of concern is a key factor preventing effective international cooperation on wildlife trafficking. Even if their permits are abused, CITES listings can still be valuable.

Interviews conducted for this report reveal a banal set of factors that account for the delisting. The trouble stems from *H. midae* having been CITES-listed in all forms: canned, frozen, dried and live (the mainstay of the legal industry).⁷ All exports, therefore, had to be inspected and signed off by customs before export. With limited capacity, customs was unable to do this quickly enough for the highly perishable live abalone to be exported in a viable condition, with disastrous impacts for South Africa's fragile legal industry.

The South African government first tried to redress this issue by asking importing countries to accept unendorsed CITES permits, which undercut many of the protections offered by CITES and opened loopholes for smuggling, as unendorsed permits could be recycled to launder poached abalone. The government also asked the CITES secretariat to issue a listing for dried and frozen abalone only – the forms most likely to come from illegal trade – but the secretariat claimed that this was not possible. (Subsequently, CITES has indicated that it would now consider such a listing.⁸) A final blow to the CITES listing came when the legal abalone industry threatened legal action over the disruption to their business. Feeling cornered, government officials asked for the listing to be rescinded.

In subsequent years, NGOs such as the Wildlife Trade Monitoring Network (TRAFFIC), which researches the global trade of wild animals and plants to enhance biodiversity and sustainability, have pushed for these burdens to be circumvented and the listing re-imposed for dried and frozen abalone. However, this request can only come from the state, and dysfunction at the Department of Forestry, Fisheries and the Environment (formerly the Department of Agriculture, Forestry and Fisheries), caused in part by abalone corruption (as this report will demonstrate), meant that processes necessary for a CITES listing, such as stock assessment, did not happen. This dysfunction also suggests that the department would struggle to administer a CITES permit system.



FIGURE 2 Abalone poaching territory in the Western and Eastern Cape provinces, South Africa.

In South Africa, abalone is poached along the West Coast, north of Cape Town, across the Cape Peninsula, Robben Island and the Overberg (the original location of both legal and illicit abalone fishery).⁹ The poaching extends on, up the east coast to the city of Gqeberha (previously Port Elizabeth) and into the rural coastal region formerly known as the Transkei. This encompasses more than half of South Africa's coastline, posing difficulties for monitoring and surveillance.¹⁰

Poachers either dive from shore or go out on high-speed inflatable boats in highly coordinated operations that involve advance planning, spotters and often bribes to the authorities.¹¹ Less sophisticated divers use masks and snorkels, free-diving in shallow water, whereas others use scuba gear to access deeper reefs and stay underwater for longer. This also makes them harder to detect from the surface. Poachers face many risks while diving: rough seas, frigid water, equipment failure, accidents during boat chases with law enforcement, and even shark attacks.¹²

Underwater, poachers search for abalone in kelp beds and between rocks, using metal levers to pry the shellfish loose. They usually shuck the animal from its shell underwater, as the shells have no value on the black market. A common strategy is for divers to leave bags of poached abalone underwater or at remote sections on the coast for collection later, allowing the crew to return to shore without evidence of poaching. Divers usually hire carriers

to run their abalone ashore and deliver it to local buyers, who weigh the abalone, deducting weight for abalone viscera and slime, and pay in cash.¹³

Poached abalone is shucked and dried in South Africa, with drying facilities detected all over the country, often far from the coast.¹⁴ Fresh and dried poached abalone are transported by road, and seizures by the police and customs officials occur quite regularly, although only a few of these are declared publicly or reported on. SARS has claimed in the past that it seizes 20 or 30 times more abalone than what is reported in the press.¹⁵ This is anecdotally supported by interviews with participants in the illicit trade, who regularly receive information about abalone busts.¹⁶

These local buyers are the first in a complex series of middlemen who move abalone from poachers towards export. The number of people involved at each level of the chain rapidly decreases. At the top, according to law enforcement officials we spoke to,¹⁷ is a small group that coordinates the various supply lines, and determines where each syndicate is allowed to operate and the poaching networks they may source from.¹⁸ Local abalone buyers must deal with designated middlemen, who are responsible for storing abalone purchased from divers – sometimes paying community members to stash it in home freezers – until they are able to deliver a shipment.¹⁹ Fresh abalone spoils quickly, so it is imperative to avoid long periods without refrigeration.



Pringle Bay, a town along the Overberg coast, is an abalone poaching hotspot. © Wikipedia

Deliveries are meticulously organized and highly secretive, often involving bribes to local law enforcement officials, who provide tip-offs about roadblocks and other obstacles, and 'spotter' vehicles to ensure the route is clear. Often, deliveries are conducted via 'blind drops' to intermediaries along the chain, which prevents poachers knowing where their product ends up.²⁰

The next step is drying the abalone, an elaborate and technical process that has a big impact on the quality of the product, and hence its price.²¹ In covert facilities across the country – on farms and small-holdings, in suburban houses and factories – abalone is cooked in large vats with dehydrating chemicals, such as sodium hydrosulphate, and dried using heaters and fans.²² The abalone is typically cooked over gas, and on occasion gas leaks have led to explosions at drying facilities.²³ In the past, abalone drying was mostly handled by Chinese workers, but in recent years, undocumented immigrants from other African countries have been arrested in increasing numbers at drying facilities.²⁴ Officials see this as a strategy to avoid detection. In many situations, a Chinese worker coming and going might attract suspicion, but 'a Mozambican guy just looks like a gardener', as one investigator explained.²⁵ Several syndicates have reportedly begun recruiting workers outside South Africa and teaching them how to dry abalone, before bringing them into the country.²⁶

Dried abalone is then either exported illegally from South Africa to Hong Kong, the global epicentre of the trade, or smuggled over the border to neighbouring countries, where it can easily be laundered into licit trade flows. Unlike poached products such as rhino horn and ivory, there is a massive legal abalone market, encompassing both farmed and wild-harvested species from many countries around the world. Hong Kong imports thousands of tonnes of abalone a year.

Until this point, the commodity and its production are highly proscribed. In South African law, it is illegal to harvest wild abalone, transport it or trade it, except within clearly defined and limited quotas.²⁷ Nonetheless, because of rampant poaching, the total allowable abalone catch has been drastically reduced from around 700 tonnes annually to fewer than 100 tonnes.²⁸ There is also a substantial and fast-growing abalone aquaculture sector, producing close to 2 000 tonnes of abalone annually.²⁹ And yet the estimated illegal catch dwarfs all legal production, currently exceeding 3 000 tonnes per year – among the highest levels since monitoring began.³⁰

The national fisheries authority no longer performs detailed stock assessments, but the long-term trend has been a devastating decline, especially in zones where abalone was formerly most abundant.³¹ Poachers also speak of diminishing catches. This suggests that, in terms of effort or man-hours spent in pursuit of the shellfish, abalone poaching now occurs at significantly higher levels than ever before.³²



Divers on a suspected poaching boat along the Overberg coast. © Jean Tresfon, www.photodestination.co.za

Southern Africa

In the past, poached abalone was smuggled directly from South Africa to markets in Asia, principally Hong Kong, but in response to tighter law enforcement at source, new trade routes developed via other southern African countries.

Over the last two decades, the proportion of *H. midae* imports to Hong Kong attributable to the Southern African Development Community (SADC) region (excluding South Africa and Namibia) has fluctuated and the number of countries implicated in laundering the product along the way has gradually grown. From 2004 to 2007, between 86 and 97 per cent of all *H. midae* imported to Hong Kong was declared as coming from South Africa only. By 2008, that figure had dropped to just 29 per cent,³³ the same year South Africa shut down its entire legal abalone fishery in an attempt to ward off poaching, a decision that was revoked in 2010 following protests from legal fishers. Meanwhile, it appeared that a new trade pattern had developed involving shipping abalone via intermediary countries. By 2016, Hong Kong recorded imports from another seven SADC countries. TRAFFIC records that between 2000 and 2016, up to 43 per cent of illegally harvested abalone trafficked to Hong Kong was traded via other sub-Saharan African countries.³⁴

According to law enforcement sources, as of May 2021 the three most popular routes were across the border into Namibia and exported from Windhoek, and through Zimbabwe to Zambia or the Democratic Republic of Congo. According to an investigator, '[to get to Kinshasa], it's a three-day drive and from there, 12 hours later, it's in Hong Kong.'³⁵

Abalone is smuggled from South Africa in multiple ways: across land borders, via light aircraft and on commercial cargo flights, either declared erroneously or accompanied by fraudulent abalone permits. The records for seizures on these routes is spotty. In South Africa, abalone destined for neighbouring countries has been seized (see Figure 1), but very few seizures have occurred within these countries. This can be explained by a lack of official interest: apart from Namibia, abalone is neither a locally produced species nor a priority for enforcement among South Africa's neighbours.

Non-producing countries are in many ways perfectly suited for laundering illicit abalone. Customs and other officials are neither trained nor incentivized to check for or confiscate it. Abalone smugglers have exploited this lack of knowledge, for example by falsely declaring abalone as dried fruit, which, superficially, looks similar. Criminal justice institutions

do not have specific legislation to prosecute abalone smuggling, which, after all, is not a local resource in any of these countries.³⁶ The rapid spread of Chinese businesses and infrastructure projects in sub-Saharan Africa in recent decades has also facilitated the development of new illicit trading relationships, linking syndicates in South Africa to a growing number of other countries on the continent.³⁷

SARS and the Department of Forestry, Fisheries and the Environment have tried to build the capacity of customs officials in neighbouring countries at the level of informal regional relationships, but with no regional protocol to guide this, it remains loosely coordinated and, as such, largely ineffective.³⁸

The use of countries as intermediaries to launder the abalone imposes additional costs on smugglers, by making the supply chain longer and more expensive. In recent years, this appears to have facilitated the rise of a new network of intermediaries specializing in moving illicit products across borders, including, as we report later, Somali and Congolese criminal networks.

One strategy syndicates use to evade detection by customs is to falsely declare abalone as car parts, for instance, and use commercial freight companies to ship it, leaving many couriers none the wiser.³⁹

Another strategy makes use of false permits or recycles legal permits.⁴⁰

Trade observers speculate about a possible second explanation for the high levels of South African abalone declared as originating from other SADC countries upon import in Hong Kong: the misuse of bonded warehouses in South Africa, a tactic sometimes used for other illicit commodities, such as tobacco.⁴¹ Bonded warehouses are used by customs to hold goods while they are trans-shipped via South Africa to other countries. As a rule, such goods are not inspected as thoroughly as direct exports, as the South African authorities do not place export levies on bonded shipments.⁴² Using this method, abalone smugglers mislabel both the origin and the nature of their shipment, and enter them into bonded warehouses, from where they can be exported directly to Hong Kong. In this scenario, the laundering occurs in South Africa, without any need for laundering via SADC countries.⁴³

Abalone may enter southern African countries by road or by air, but practically all of it – an estimated 98 per cent – leaves for East Asia by air cargo.⁴⁴

Over a 17-year period, from 2000 to 2016, the estimated value of South Africa's illegal abalone catch was more than US\$890 million.⁴⁵

Vats for drying abalone in a residential home that was used as an illicit drying facility. © South African Police Service



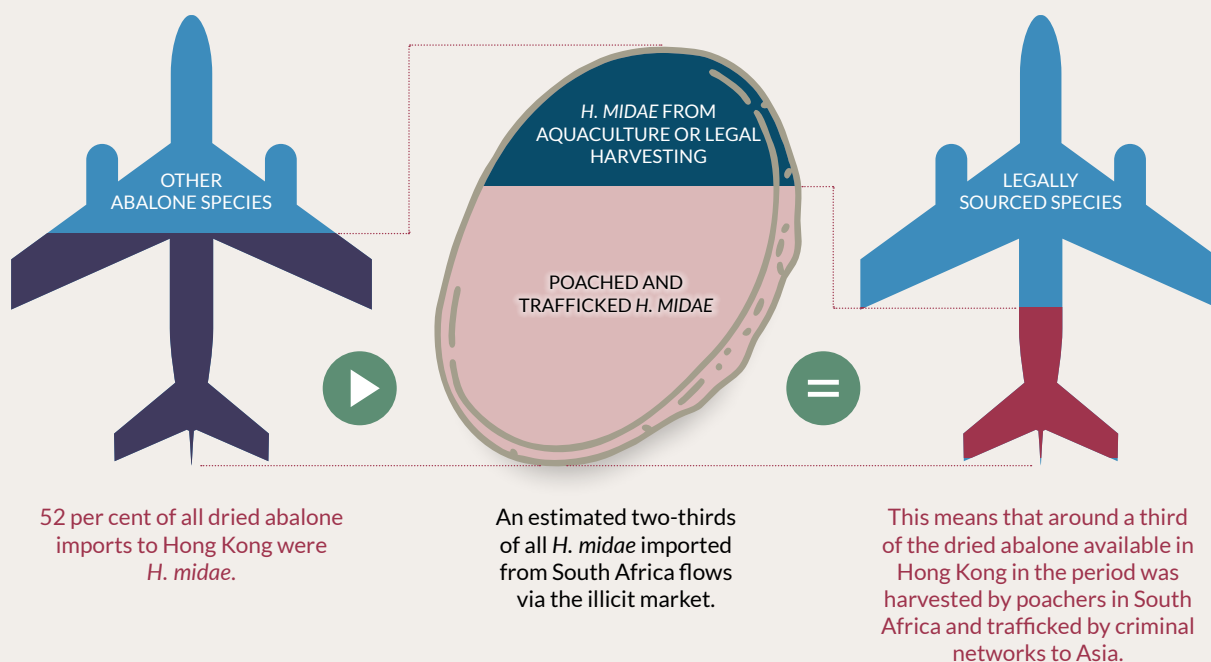


FIGURE 3 Poached *H. midae* as a proportion of total annual Hong Kong imports of dried abalone between 2000 and 2016. SOURCE: Adapted from Wilson Lau, An assessment of South African dried abalone *Haliotis midae* consumption and trade in Hong Kong, TRAFFIC, 2018.

East Asia, via Hong Kong

By far the biggest market for abalone is mainland China and other places around the world with large Chinese populations. Hong Kong has long been the hub for trade in dried seafood products and, as a free trade port, has maintained a central role in the flow of abalone and other seafood to China.⁴⁶ In Cantonese cuisine, abalone, along with sea cucumber, shark fin and fish maw, are regarded as delicacies. Abalone has been associated with royalty for more than 2 000 years and eating it conveys high status.⁴⁷

Hong Kong imports more than 6 000 tonnes of abalone per year, with the total value declared at over US\$250 million annually. As much as a fifth of this is subsequently re-exported, either to mainland China or to places such as Singapore or North America.⁴⁸

Dried abalone, when converted to whole mass, makes up just under a third of these imports,⁴⁹ and it fetches premium prices, as drying is said to concentrate the flavour. It also happens to be easier to smuggle, as it only needs to be kept dry and does not require refrigeration.

Analysis of trade data indicates the astonishing degree to which poached abalone from South Africa permeates the Hong Kong market. Between 2000 and 2016, according to TRAFFIC, 52 per cent of all dried abalone imports to Hong Kong were *H. midae*, far more than any other abalone species. The organization also reports that two-thirds of all *H. midae* imported from South Africa flows via the illicit market. This means that around a third of the dried abalone available in Hong Kong during that period was harvested by poachers in South Africa (see Figure 3).

Hong Kong, trade hub and consumer market

Hong Kong is one of the world's largest hubs for the wildlife trade, moving enormous volumes of threatened species into Asia and around the world. And yet, combatting wildlife crime has in the past not been a priority in Hong Kong, with few resources devoted to investigations, beyond arresting 'mules' found with illicit products.⁵⁰ Until recently, organized crime legislation excluded environmental offences, leaving little recourse to investigate trafficking networks, seize assets or undertake forensic studies of money laundering.⁵¹ This means that traffickers dealing in explicitly illegal products, such as ivory and pangolin scales, which are both protected under CITES, faced little risk of being sanctioned.

The situation is even more permissive when it comes to South African abalone, which is not protected by any local or international trade agreements and thus receives little attention from Hong Kong authorities.⁵² By the time black-market South African abalone arrives in East Asian ports, it has already been laundered and has the correct documentation. Though individuals involved in the seafood trade are broadly aware of its black-market origins, few

questions are asked. Local infrastructure is then used for licit import, trade and distribution.⁵³ Abalone arrives in Hong Kong by air and is distributed by road to wholesalers at the seafood markets.

Once poached abalone is imported into Hong Kong, it can be traded openly alongside farmed or legally harvested product. Although it is often possible to distinguish poached abalone by the inferior quality of the drying process, which gives rise to misshapen or unevenly coloured product, there are no clear mechanisms to investigate its provenance – even in cases where Hong Kong authorities have been informed that abalone was sourced from illegal fishing operations.⁵⁴

Demand for abalone, along with other high-status foods, rose sharply in Hong Kong following the stock market boom of the 1970s and 1980s, when the territory's gross domestic product began a period of almost exponential growth. An astonishing proportion of this demand was met by poached *H. midae*. Trade data shows that abalone from African countries – which is assumed to be *H. midae*, the only commercially exploited species on the continent – consistently makes up at least half of all dried abalone imports. In 2014, that figure soared to 74 per cent.⁵⁵ And of all

A seafood market in Hong Kong. © Hanohiki/Shutterstock





Fresh abalone in their shells offered at a seafood market. © DigiPub via Getty Images

H. midae imported into Hong Kong, approximately two-thirds is thought to come from the black market.

Abalone is also sold in Hong Kong, where entire shopping districts catering to Chinese tourists offer dried abalone for sale. In market surveys conducted by TRAFFIC, Hong Kong traders said that poached South African abalone is commonly available at these outlets, where customers are regarded as less discerning.⁵⁶ Researchers involved in this study have observed low-quality dried South African abalone (and thus almost certainly poached) being sold in these shops, as well as in shops that cater to local Hong Kong customers.

There may be hundreds of stores that sell dried abalone in Hong Kong and there is little understanding of the processes through which poached South African abalone reaches the market.⁵⁷ Investigators in South Africa believe that a small network of Hong Kong traders – possibly even a single extended family – controls the illicit industry, dealing with poaching syndicates in South Africa and coordinating imports.⁵⁸ However, this could not be established conclusively in Hong Kong.

Shark fin, a commodity that trades alongside abalone and has many similar market dynamics – illegal products laundered onto the legal market – has received far more attention from environmental groups, in the form of sustained global campaigns and generously funded research projects. Yet even in this comparatively scrutinized area, knowledge of how products move from importers to wholesalers and retailers is incomplete.⁵⁹ Existing research on shark fin indicates that a small number of people are responsible for most imports, maintaining trusted relationships with suppliers in over 120 countries and acting as a conduit into the wider Hong Kong market. This picture matches what is known on the South African side about illicit abalone flows.⁶⁰

The dried seafood trade in Hong Kong is organized into two main industry associations, each with no more than 20 members.⁶¹ Pressure from shark fin campaigners has reportedly led, over the past two decades, to these groups becoming less receptive to speaking to researchers, and efforts to include them in this study were unsuccessful.

Mainland China

Mainland China is a major market for abalone, with rising affluence since the economy opened in the late 1980s driving a boom in luxury goods, yet official trade records do not show major flows of abalone from Hong Kong. A thriving grey market exists for smuggling products from Hong Kong into China to avoid import duties, and abalone has been discovered in busts alongside items diverse as surgical masks and second-hand iPhones.⁶²

Abalone is transported from Hong Kong to southern China by air, road and sea. From there, it is distributed to various food wholesalers, retailers and restaurants in southern China using the same infrastructure as other commodity distribution systems. There are also signs that abalone is re-exported from Hong Kong to China via Vietnam, a known route for other contraband into China (see next section, on Vietnam). This allows exporters to dodge taxes by taking advantage of porous land borders.

The central importance to the trade of demand for abalone in mainland China was demonstrated in 2012, when a sweeping government anti-graft campaign put an end to the common practice of officials hosting lavish banquets where items like abalone would be served.⁶³ Hong Kong traders report that this caused a sharp drop in demand, while 2012 trade data reflects a dip in dried abalone imports, which subsequently recovered.⁶⁴

Vietnam

Vietnam is another major importer of abalone. Imports of dried abalone from Hong Kong increased significantly from 2000 to 2015. In a report for TRAFFIC, Wilson Lau suggests that Vietnam may have been importing dried abalone from Hong Kong to re-export to China, as consumer demand for abalone in Vietnam has historically been low compared with that in other countries in the region.⁶⁵

However, in recent years, Vietnamese demand for luxury products, from handbags to wildlife products such as rhino horn, has increased, and it appears that demand for abalone is also on the rise.⁶⁶ However, research into Vietnamese markets shows that abalone is mostly sold frozen or canned, which suggests a legal origin for these products. The abalone is also advertised as being from Korea, as modern Korean culture is highly influential in Vietnam, driving up demand for products from Korea. The dried abalone imported from Hong Kong might well not be for local consumption, but rather for re-export to other countries, such as China.

As South African abalone is not CITES-listed, there is no restriction on importing it and any registered trading company can do so. Vietnam is one of the main importers of legally produced, farmed South African abalone. However, legal South African abalone producers say that many importers in Asia are shifting to exporting to Vietnam from Hong Kong,

Dried abalone. © Anthony Wallace/AFP via Getty Images



and from Vietnam into China. This means that large amounts of South African abalone may be entering Vietnam, recorded as a Hong Kong import. We found no evidence that Vietnamese customs officials record the species of abalone, making its provenance difficult to determine.

The growth of this route is most likely explained by traders seeking out the lowest-cost transport routes, in which case Vietnam may simply provide a route for abalone to enter China without import duties.⁶⁷ This pattern has also been observed with shark fin and sea cucumber in recent years.⁶⁸

In general, a large, unregulated/black-market trade is known to occur across the land border between Vietnam and China, providing an attractive route for illegal goods, or those with suspect documentation. However, as abalone is a legal commodity in Asia, the trade in abalone does not need to operate underground and is unlikely to take this route into China.

If abalone is diverted to Vietnam before entering China, in order to benefit from favourable tax

regimes, it will be transported by air as a legal cross-border product. Illegal shipments to China – if these occur – typically cross the long China–Vietnam border by road or on foot.

The Chinese diaspora

The Chinese diaspora around the world is another consumer of abalone, the vast majority of which arrives from Hong Kong. Vietnam absorbs about 50 per cent of Hong Kong's abalone, although this is thought to largely represent flows into mainland China. In significantly smaller quantities, the next biggest importers of abalone from Hong Kong are the US, Canada and Singapore. Although it appears that these flows are mostly legal, there are no mechanisms to prevent laundered abalone from circulating between Hong Kong and importing nations. Researchers involved in the current study have observed poached South African abalone (identifiable by the poor quality of the dried product) in Chinatowns in New York City and Vancouver, Canada.⁶⁹

Fresh abalone is a sought-after product at seafood markets in Hong Kong. © Uwe Zimmermann/EyeEm via Alamy



THE ROLE OF INFRASTRUCTURE IN ILLICIT FLOWS OF H. MIDAE

SOUTH AFRICA:

Infrastructure in South Africa is used for illegal extraction, transport and processing of the contraband and smuggling it out of the country.



Port and slipways for launching poaching vessels. These are poorly policed and enabled by pervasive corruption of fisheries compliance officers and other agencies.



Parks and reserves, such as Dyer Island and Robben Island. These are relatively abundant abalone beds, accessible through bribing police and other officials.



Drying facilities. These are found across the country: in suburban homes, on smallholdings, farms, and in industrial areas, stretching from the west to the east coast and inland. They used to be bigger but rising abalone prices have made smaller facilities economical, and these raise less threat of major busts.



Road network for connecting poachers to buyers, dryers and exporters. Many abalone busts result from roadblocks by the traffic enforcement authorities; parliamentarians have proposed equipping the traffic department specifically to combat the abalone trade. Abalone shipments have been found concealed among items as diverse as dried fruit, fresh produce, charcoal and vehicle parts.



Harbours for shipping abalone to East Asia.

SOUTHERN AFRICA:

Abalone is smuggled out of South Africa into neighbouring countries, where it is laundered through false paperwork and enters legal transport flows.



Abalone may enter southern African countries by road or by air, but practically all of it – an estimated 98 per cent, according to TRAFFIC – leaves for East Asia by air cargo.

EAST ASIA:



Abalone arrives in Hong Kong by air, and then is distributed to wholesalers in the seafood market by road.



It also leaves Hong Kong by air, road and sea to southern China.

In China, abalone is distributed to various food wholesalers, retailers and restaurants in southern China using all the infrastructure used by other commodities distribution systems.



ENABLERS:

The crucial roles that lubricate illegal trade



Money movers



Logisticians



Bank managers, accountants and auditors




Lawyers



The networkers



**VIOLENT CRIMINAL
NETWORKS AND
PROFESSIONAL
ENABLERS: THE SOUTH
AFRICAN TRADE**



This section describes the political economy that makes the physical flow of the abalone trade possible. This is the ‘software’ vital for opening a route through the ‘hardware’ of coastal slipways, national roads, international ports and onto restaurant tables. It encompasses bad governance and the socio-economic drivers that lead to participation in organized crime. It also includes criminal networks and their ‘enablers’, who ensure the flow moves smoothly. These people provide crucial professional services, such as facilitating financial transactions or providing legal or logistical services.

As most criminality is located in South Africa, this report focuses on the factors that have allowed the illegal trade to flourish, as well as recent shifts in poaching and trading dynamics.

The first surge in demand triggering the development of a poaching industry in South Africa occurred when the country was especially unprepared. In the early 1990s, demand in China surged after its economy opened up and the middle class began to grow.⁷⁰ An aspirational product for centuries, abalone was now affordable for a larger, and rapidly expanding, segment of the population. At the same time, South Africa was opening its borders after apartheid; international trade flourished after decades of sanctions and moving abalone became easier. Over the next decade, the rand depreciated sharply against the US dollar and, as a consequence, the local abalone price skyrocketed.⁷¹ Prices rose in China too, due to increased demand, almost tripling after years of stability. By the mid 1990s, a thriving black market for abalone was established along the Overberg coast, where the legal abalone fishery had operated since the 1940s.⁷²

At the time, the South African state was only beginning to grapple with the threat posed by organized crime and illicit trade, and its law enforcement agencies were undergoing periods of rapid (and often unsuccessful) reform to enable them to meet the challenges facing the new democracy.⁷³ The illicit economy, however, reacted quickly and adaptively. Throughout the 1990s, abalone poaching increasingly converged with organized criminal gangs based in Cape Town, who were already involved in retail drug markets.⁷⁴

This is perhaps best encapsulated by the career of Ernie Lastig, a senior gangster affiliated with the 28s gang, who moved to the coastal town of Hawston in this period and began to extort existing poaching networks, in addition to becoming a powerful middleman himself.



© Cornél van Heerden

Ernie Lastig, underworld figure and abalone trader

By the time of his assassination in late 2020, Ernie Lastig reputedly controlled territory that included hundreds of kilometres of coastline, including on the west coast, around Cape Town and across the Overberg. Poaching groups in the region had to pay him protection fees in order to operate and, in many cases, were forced to sell him abalone at reduced rates. One large syndicate was said to be paying him up to R100 000 (US\$7 000) per month. There are several theories about the motivation for Lastig's assassination. One of them is that the murder was linked to a split within the 28s gang over these payments, with a younger generation of abalone kingpins refusing to cut him into their profits.

Chinese criminal groups from Taiwan and Hong Kong were also engaged in a violent rivalry during this period,⁷⁵ and the first reports of abalone being traded for methaqualone⁷⁶ (to manufacture mandrax) and, later, methamphetamine, known locally as *tik*, emerged.⁷⁷

The movement of gangs into the abalone trade had a number of significant and lasting consequences. Poaching, instead of being a fringe illicit activity, became embedded in the criminal economy.⁷⁸ Gangsters are involved in numerous ways: as middlemen, compelling divers to sell to them; as boat owners, charging divers fees to work with them; or as extortionists, who would rob divers of abalone unless paid protection fees. In many cases, gangsters took on multiple roles at once.⁷⁹ Violence flared in places like Hawston, as rival groups battled for control. There were shootouts,⁸⁰ arson attacks and lurid rumours of beheadings and of vanquished rivals being fed to great white sharks.⁸¹

Gang involvement also drove a destructive wave of drug abuse in many coastal areas, as drug merchants affiliated with poaching networks established new bases for their operations.⁸²

The poaching economy, in turn, had a transformative impact on gangs, establishing a lucrative new revenue stream for buying drugs and weapons, or otherwise establishing and holding on to power. Abalone is not only valuable, but a highly liquid asset. Within hours of a single boat-based poaching operation, its participants can walk away with over R200 000 (US\$14 000) in cash. And as gangs increasingly took over the supply chain, much of this money began flowing to them.⁸³

'You don't wait for your money. If it's on the scale at the Chinese wet store, within two hours max you're paid in cash,' one investigator told us. By 2005, abalone poaching had reached crisis levels, and in 2008 the South African government shut down the commercial

abalone fishery in an attempt to protect rapidly diminishing stocks.⁸⁴ This proved futile, as levels of poaching were much higher than the legal catch, and the ban was revoked two years later. Since then, estimates based on import data from Hong Kong indicate that poachers have removed 2 000–3 000 tonnes of abalone per year, while legal quotas have remained below 100 tonnes per year.⁸⁵ If anything, the main effect of the 2008 ban may have been to push abalone syndicates into exporting their product via other SADC countries. That same year, trade data from Hong Kong shows a pronounced shift to abalone imports from Mozambique, a country with no wild or farmed abalone populations.⁸⁶

Today, a multitude of social, economic and political features feed into the prevalence of abalone poaching and smuggling in South Africa. Some of these elements have long historical roots, whereas others signal recent shifts in the global economy and demand for abalone.

Socio-economic contributors to abalone poaching

The coastal communities participating in the poaching economy live with the legacy of the extreme and racialized income inequality that arose during the apartheid era. Black and Coloured fishers were excluded from commercial quotas at that time and were treated, instead, as cheap labour for the fishing industry.⁸⁷ The arrival of democracy in 1994 brought expectations that this inequitable system would be reformed, integrating formerly excluded fishers into more profitable positions and assigning them fishing rights of their own. However, the reform process proved to be desperately unwieldy, beset by infighting, cronyism and corruption, and it ultimately failed to reform fisheries in any meaningful way.⁸⁸ This led to profound resentment towards the authorities in many fishing communities, whose material circumstances remained unchanged. In some ways, in fact, their quality of life was deteriorating, with rising levels of unemployment, housing shortages and gang violence.

The existence of de facto coastal ghettos adjacent to high-value abalone and lobster resources, coupled with the growing sense that government was unable or even unwilling to address these pressing problems, provided fertile conditions for smuggling to boom.⁸⁹ In the context of high unemployment, poaching syndicates offered

people (predominantly men) in these communities jobs as divers and boat drivers. The salaries paid were much higher than those that could be earned in legal jobs, on the rare occasions when these arose.⁹⁰ In recent years, the influence of this high pay became more pronounced, as the abalone price has risen to record levels, eclipsing R1 000 per kilogram in 2020 (US\$56).

State responses and their effects

Other factors contributing to the growth in abalone poaching are rooted in the state response. Two of the main agencies tasked with curbing poaching – the Department of Forestry, Fisheries and the Environment (formerly the Department of Agriculture, Forestry and Fisheries) and SAPS – have consistently suffered from extremely weak governance and worsening corruption, which have become endemic through complicity with abalone poaching networks.⁹¹ The situation at SARS has fluctuated. Reforms in the 1990s and the first decade of the 2000s, which included a strategy to address threats posed by the illicit economy, led to serious investigations into poaching syndicates. Lifestyle audits and other forensic work identified leading figures in the trade.⁹² SARS suffered a serious blow during the 'state capture' era, and it has yet to fully recover.⁹³



Former South African president Jacob Zuma arrives before the Commission of Inquiry into State Capture that probed wide-ranging allegations of corruption in government and state-owned companies, July 2019.

© Mike Hutchings/Pool/AFP via Getty Images

State capture

What came to be called state capture occurred under the administration of former president Jacob Zuma (2009–2018). It refers to a pattern of corruption in which private individuals and companies manipulated organs of state to redirect public funds for their own gain. Simultaneously, the state institutions responsible for protecting the country against such corruption were gutted, including SAPS, the National Prosecuting Authority and SARS.

The criminal justice response also suffered when a specialized environmental court, set up in 2003 to process abalone poaching cases in the Overberg, was shut down in 2005 owing to policy changes and a lack of funding. This was despite the court boosting the rate of successful convictions from an estimated 10 to 75 per cent.⁹⁴

At the same time, there is high-level corruption in the enforcement agencies and the legal frameworks governing fisheries and other regulations are widely regarded as illegitimate by the communities where poaching is rife.⁹⁵

As a result of weak enforcement and poor local cooperation with law enforcement agencies, prosecution rates are low and penalties to deter poachers insufficient.⁹⁶ Successful prosecutions of higher-level syndicate members or shutting down supply lines are even rarer.⁹⁷ This poor state performance is pitted against a highly coordinated and sophisticated system of Chinese buyers and their local business partners, which includes the gangs that have flourished in tandem with poaching activity.

Local policing scores arrests, but merely displaces poaching

South African law enforcement against abalone poaching is sometimes successful, but in the broader context of dysfunctional state institutions, these successes cannot be sustained, nor will they translate into a wholesale collapse of the poaching economy.

To take a recent example, in late 2020, a successful Keep Poachers out the Sea operation in Gansbaai, a key poaching location in the Overberg, reportedly shut down most poaching in the area. Unfortunately, the cost of the operation proved prohibitive, nor could it be scaled up over the entire coastline. Police capacity in Gansbaai was insufficient to sustain the operation and staff were drawn away from other stations, officials said.⁹⁸ It also had the effect of 'squeezing a balloon', as the Gansbaai poachers were displaced elsewhere, notably towards nearby Hangberg and further north-west towards Gqeberha and the Eastern Cape coast. This pattern is a repeat of events observed in the past.⁹⁹



Police inspect a warehouse of seized abalone.

© Shaun Swingler

Shifting prices and growing profits amplify the trade

Meanwhile, the COVID-19 pandemic and related lockdown measures undermined the abalone trade¹⁰⁰ and prices dropped sharply.¹⁰¹ In the early phases of lockdown (March–May 2020), prices paid to divers crashed from around R600 to R300 (US\$20–40) per kilogram, as buyers further up the supply chain reportedly stopped buying in new product.¹⁰² By November 2020, the price had more than recovered, however. Divers were getting up to R800 per kilogram (US\$56), a price that had previously fluctuated between R250 and R600 (US\$18–40). As of May 2021, the price in Cape Town is even higher, with divers getting R700–R1 000 per kilogram.¹⁰³ Similarly, dry abalone in Cape Town fetches up to R4 300 per kilogram (US\$295), approximately double the average price before the pandemic. The price for dried abalone is always higher in Gauteng; currently it exceeds R6 000 per kilogram.¹⁰⁴

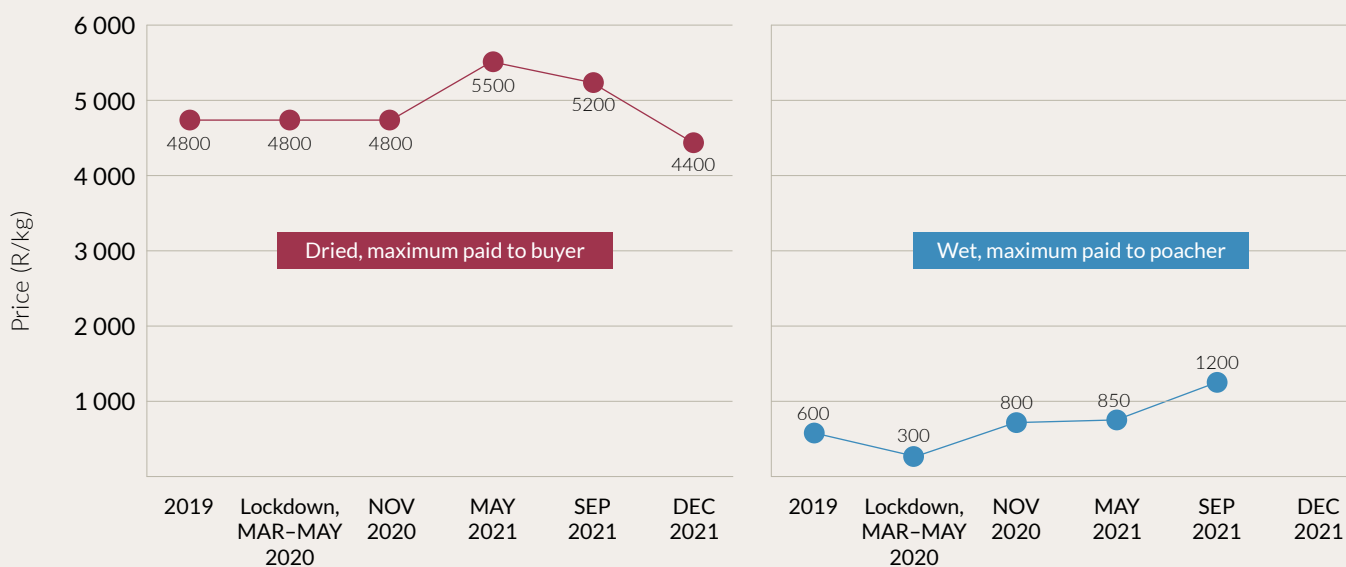


FIGURE 4 Upper-range prices for wet and dry abalone in the Western Cape province of South Africa, 2019–2021.

NOTE: Due to currency fluctuations during the research period, prices are given in local currency. These prices apply to medium-sized abalone.

The rising price of abalone has changed the economics of illicit drying facilities. It is now possible to operate many smaller facilities, each of them profitable. This also lowers risk for poaching networks, as it distributes the risk and impact of being raided by the police and makes it economically viable to set up facilities, for the express purpose of being ‘busted’, as part of a corrupt quid pro quo with police.¹⁰⁵ The high profits in the trade means that even a small facility, drying just 350 kilograms of abalone per week, resulting in 100 kilograms of dry product, nets more than R400 000 (US\$27 000) per week and R1.6 million (US\$110 000) – or even more – per month.¹⁰⁶

Other recent shifts in the South African abalone trade include the intervention of Somali middlemen in the trade (see the following section) and the rise in armed heists of legal shipments of abalone while in transit to the airport. Burglaries, committed by corrupt police officials, of illegal government dealers and government abalone stores are also increasing.¹⁰⁷

Criminal organizations in the South African trade

By 2020, five groups could be identified working in the illegal abalone trade. They are the organized Cape criminal gangs, in particular those affiliated with the 28s; poaching-only syndicates that developed out of Coloured fishing communities in the Western Cape and who had ancestral ties to fishing in these waters; black divers from the Eastern Cape working in the Overberg and Cape Town areas, who are increasingly affiliated with gangs; Somali middlemen buying from black divers, and arranging transport and laundering for Chinese buyers; and Chinese networks encompassing buyers, driers and exporters, usually referred to in the trade as ‘kingpins’, even though some of the most powerful figures in the trade have been women.¹⁰⁸

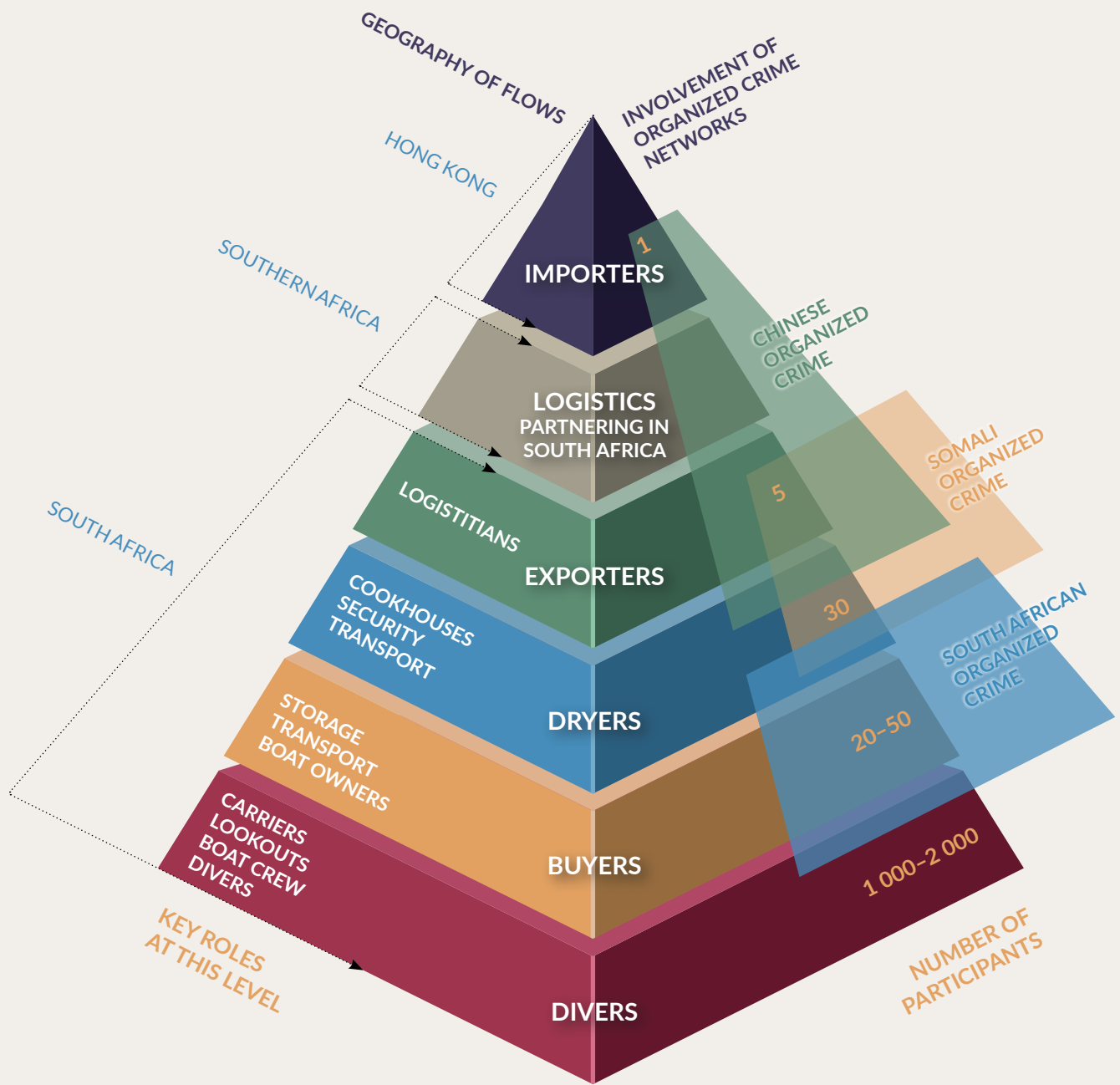


FIGURE 5 Organizational structure of the illicit *H. midae* global supply chain and estimated number of participants.

SOURCE: Estimates of the number of divers nationally is composed from key informant information. It compiles separate estimates from the West Coast, Hout Bay, Kleinmond, Khayelitsha, Hawston, Gansbaai, Pearly Beach, Buffeljag, Gqeberha, and the Wild Coast. The number of carriers and lookouts is based on a 2:1 ratio relative to the number of divers observed in Hout Bay in 2012. The number of local buyers is based on information from interviews with key informants and does not include buyers operating near Gqeberha.



Dried abalone confiscated from suspected poachers in Cape Town, March 2014.

© Mike Hutchings/Alamy

Networks of Chinese bosses operate in Cape Town and in Johannesburg, South Africa's biggest logistics hub. From here, large volumes of abalone are believed to leave the country, either via Johannesburg's OR Tambo International Airport or concealed in vehicles crossing into neighbouring countries such as Zimbabwe and Mozambique. Officials regularly confiscate abalone as it is transported from poaching regions along the coast towards Johannesburg, while drying facilities situated deep in South Africa's interior have been busted, indicating the importance of this trade route. Its value is also reflected in the abalone price, which is consistently around 50 per cent higher in Johannesburg.

Chinese networks also operate in Cape Town. One investigative reporter identified a high-profile syndicate, linked to multiple abalone busts, based in the city's northern suburbs, where its members have purchased several luxury homes.¹⁰⁹ Law enforcement officials have also identified other members living nearer the city centre.¹¹⁰ Yet these networks have not been brought to justice, despite more than two decades of focused investigations.¹¹¹ On several occasions, prosecutors have charged Chinese

individuals for running syndicates, only for their suspects to skip bail and disappear.¹¹² One alleged kingpin, known as Ran Wei, vanished after members of his syndicate were arrested in 2012; officials now refer to him, somewhat ruefully, as Ran Away.

According to several law enforcement officers¹¹³ and people close to operators in the abalone industry, there are very few 'traffickers' controlling illegal abalone exports to Hong Kong. For a long period in the 1990s, there may, in fact, have been only one – a woman known as Mei (among other names). From Hong Kong, all the way down the line to the purchase of large shipments of aggregated illegal abalone in South Africa, the chain of trade is vertically integrated and the networks involved are extremely organized and careful. Hong Kong bosses reportedly dictate where top-level buyers – those who buy abalone, dry it and arrange for export – are allowed to work, which local middlemen they are allowed to deal with, and what quantities of abalone they are expected to supply.¹¹⁴

So-called 'operational managers' in South Africa monitor these buyers and help coordinate exports.

The level of oversight is such that investigators struggle to execute reverse entrapments, as the arrival of abalone on the market that has not been accounted for by a buyer in the network raises suspicions. 'If as little as 300 kilograms of abalone enters the market, the Chinese immediately know who took it in and who they bought it from,' one official said.¹¹⁵

Officials describe a system that operates on the basis of quotas or concessions, as buyers must first be approved and then play by the rules in order to do business. Occasionally buyers take in abalone intended for rivals, but only in small quantities, so they are not detected. Officials estimate that fewer than 40 buyers work at this level, the vast majority of them Chinese. They have been joined, in the past few years, by a small number of Somali traffickers who have entered the trade.¹¹⁶

Beneath this level, are the 'frontline buyers', who deal directly with poaching syndicates and gangs, and it is here where more disorder and competition creep in.¹¹⁷ There is constant low-grade war between frontline buyers to attract the divers' catch. At the level of poaching syndicates, gang extortion and competition, there is much fluidity, high levels of competition and, at times, extreme violence.¹¹⁸

Poachers call the chain of transactions between harvesting abalone and its delivery to a frontline buyer a line (or *lyn*, in the local Afrikaans vernacular).¹¹⁹ A line implies integration and organization of the chain, which includes securing protection from corrupt officials. If someone controls a particular line, he can also charge others a fee to use it. The lines that connect poachers and buyers are unstable and an ambitious boat driver with the capital to buy his own equipment, a connection to a corrupt official and communication links with a frontline buyer can break away and form his own operation. Independent divers also fish for abalone and new syndicates attempt to establish a line all the time. At this level, the trade is chaotic.

Over the years, the South African networks involved in abalone poaching and smuggling have evolved. While the poaching syndicates that formed in the early years of the market were largely confined to just that – poaching – in the 1990s, figures from

organized criminal gangs in Cape Town became involved in the industry.¹²⁰ The poaching world has become increasingly 'gangsterized', meaning a greater use of weapons and violence in competition over the trade, combined with more sophisticated systems of extortion. In addition, much of the industry's profit (although the proportion and value are unknown) passes through gang treasuries.¹²¹

This phenomenon was recognized by the South African state in the first decade of the 2000s. In response, SAPS launched Operation Neptune and the National Prosecuting Authority (NPA) established a specialized 'abalone' court in Hermanus. These interventions were effective, to some extent, and this decade saw the most successful policing of the abalone trade to date.¹²² But the unintended consequence of this enforcement was the displacement of the trade up and down the coast, as syndicates moved away from the heart of enforcement operations in Gansbaai and Hermanus.¹²³ Rather than being dismantled, poaching networks adapted their modus operandi, to the extent that they studied the court cases in which syndicates were charged. 'Every case taught them more about how the state was trying to catch them,' said one source close to the trade.¹²⁴

Divers are at the lowest rung of the ladder. They are almost always male and, while the first wave of poachers was white and the second wave from predominantly Coloured coastal communities, many black migrants from other provinces are now hired as divers. As many as 80 per cent of the divers currently operating in the Hangberg neighbourhood of Hout Bay – a traditionally 'Coloured' fishing community – are believed to be black men from the Eastern Cape.¹²⁵ Black frontline buyers now also deliver to Chinese buyers.¹²⁶ If a boat is linked to the Cape gangs, divers may be conscripted from people who owe money to the gangs for drug debts. Middlemen from coastal communities, like Ernie Lastig, whose methods amount to extortion, control who is allowed to dive and what they will be paid for their services. Divers with their own 'rig' (scuba-diving gear) can work independently from poaching syndicates and simply sell their products to them, but it is increasingly difficult to collect significant quantities without access to a boat.

At a level above divers are the boat drivers, and they work with lookouts who alert them to police patrols.

From coastal harvest, abalone is aggregated at drying facilities, which can be situated nearby, but are also found in interior provinces and as far away as KwaZulu-Natal, over 1 000 kilometres away.¹²⁷ When drying facilities are raided, those arrested are often undocumented foreign migrants from places like Malawi, Zimbabwe and Pakistan. It is thought that buyers may invest in training migrants to be highly skilled driers, as this process has a big impact on the final price that can be charged for the goods. It is possible that migrants are preferred because their insecure legal position makes them more dependent on the job and therefore more reliable as an investment. There are also accounts of their salaries being subtracted from the 'debts' they owe to the people smugglers who have arranged their entry into South Africa.

Recently, new players in the poaching economy have proliferated, along with the assassination of existing leaders and the return of key criminal figures in the poaching economy. This indicates a deterioration of the criminal market, or at the very least, a less stable one.

Two interviewees claim that Somali migrants have become involved as middlemen in the trade in the last two years, buying from divers and then drying, transporting and smuggling abalone to countries including Zambia. This represents a major shift in a trade that, until now, has been controlled at this level

by Chinese criminal groups. 'If you're a successful transporter – doesn't matter what colour – if you can guarantee getting the product out, you're in the driving seat. You will be a multimillionaire.'¹²⁸ These Somali networks are reportedly very organized, vigilant and difficult to monitor. They are armed and highly insular, providing few entry points for infiltration by investigators or their informants.

In addition to the Somalis, investigators have detected Congolese criminal groups running abalone transport routes out of South Africa since 2018. The Congolese are considered logistics partners, whereas the Somali groups are also involved in buying and drying.¹²⁹

Many of the strip malls (branded by their owners as 'China malls') catering to wholesalers paying cash are believed to double as illicit abalone hubs.¹³⁰ Overall, the number of smaller poaching and drying businesses has grown – especially businesses involved in buying from local middlemen to sell to exporters. This has the effect of making surveillance more difficult. There is also a greater risk of the police interfering, sometimes deliberately (if corrupt), in operations designed to obtain intelligence on bigger targets.¹³¹

Combined with surging abalone prices, these trends have destabilized the market and contributed to high levels of violence (five high-level police informants were killed in 2020 alone) and to increases in the incidence of poaching groups robbing each other.¹³²

The enablers: lubricating the wheels of the illegal abalone trade

A range of people play crucial roles in illicit trade chains. Law enforcement officials in South Africa called them ‘facilitators’. Other civil society groupings prefer the term ‘enablers’, which provides a broader definition not tied to the law, which is the term we use here. These role players are vital to organized crime, yet many of them ostensibly stand entirely apart from it and can covertly or overtly incorporate their role within the bounds of their legitimate professional careers. In general, they do not specialize in one commodity, nor do they have allegiance to particular criminal networks, but rather form a pool of illicit operators in their own right.

1. Money movers are professional money launderers, who tailor their services depending on the sophistication of the criminal enterprise. The least sophisticated systems manipulate the paper trail directly (to create fraudulent documents), while the more advanced make use of loopholes in the formal financial system (such as tax havens).



In the case of the illegal abalone trade, no known criminal investigation has been able to trace and describe the exact mechanisms of money flows between Hong Kong – or southern China – and South Africa, although officials believe that *hawala*-type remittances play a pivotal role.

2. Logisticians are involved in logistics, transport and storage. It includes people who can ship and clear things through customs, or complete bills of entry and lading, shipping manifests, etc. This is demonstrated in the rapid rise of Somali intermediaries, who could exploit their existing trans-border trade connections to provide logistics services.



3. Bank managers, accountants and auditors have a different role from money launderers. They are important to formally registered businesses that also have a black-market component. These businesses need the services of legitimate professionals who do not ask too many questions.



The professional financial services industry seems to have escaped scrutiny when it comes to the illegal abalone trade. The only instance we could find of a financial professional being implicated in smuggling was the 2012 prosecution of bookkeeper Frank Barends, who was also a major abalone buyer, from the town of Gansbaai. He was ultimately acquitted of all charges.

4. Lawyers usually become involved only when trouble arises. Figures in the illicit economy tend to use the same law firms in each jurisdiction, and the same advocates, a pattern that repeats itself in the abalone industry. One lawyer interviewed for this report had worked and held trusts for divers, poaching syndicate leaders and Chinese buyers.



5. The networkers know people within criminal and illicit trade circles. They build careers on gaining access to influential people (who could be traffickers, gang lawyers, or even legitimate customs/police detectives). They use that access to connect people (deriving payment and further influence as a reward), as well as using it to create the perception that they are able to influence the outcome of events. In the early years of the abalone trade, key ‘networkers’ must have brokered the illegal trade arrangements between abalone poachers, gangs and abalone traffickers.



Corruption in South Africa's state institutions

There is evidence to suggest that every single government agency tasked with combatting abalone poaching has been compromised to some degree by corruption linked to the trade. The most pervasive and wide-ranging corruption allegations are linked to the fisheries department and SAPS, while some SARS officials are alleged to collude with poaching syndicates on an ad hoc basis. Systemic factors – such as coastal poverty, racial wealth disparities and weak rule of law – have had a hugely significant role in the trade. South Africa's high levels of poaching would be impossible to sustain without this pervasive graft.

Instances of corruption in the abalone trade range from quotidian bribes of low-level inspectors to serious allegations against senior officials. Collectively, these payments enable divers to access supposedly protected waters and local middlemen to safely transport abalone to their buyers. They also see suspects walk free when evidence goes missing, while drying facilities go unraided and bulk batches of confiscated abalone are steered, at discounted prices, to people with ties to poaching syndicates. Legal

permits can be laundered to export poached abalone and encourage customs inspectors to look the other way at border inspections, while a range of other corrupt practices unfold along the supply chain.

The fisheries department

Compliance officers at the national fisheries department are supposed to ensure that permits for wild harvesting are correctly issued and are in the possession of divers when fishing for abalone. They are also responsible for conducting anti-poaching patrols, but have frequently been accused of colluding with poaching syndicates. In one ongoing case, nine officers at the Gansbaai fisheries office are charged for collusion with poachers, including escorting illegal shipments and selling abalone seized in patrols back to local poaching groups.¹³³

Meanwhile, several years ago, the two most senior officials at the department – the director general and his deputy – were accused of being involved in separate abalone scandals.

Allegations of abalone-related corruption at the fisheries department

In 2016, Mike Mlengana, then the director general of what was the Department of Agriculture, Forestry and Fisheries at the time, was reportedly involved in steering a lucrative contract for processing some 90 tonnes of confiscated abalone to a company with no prior experience in the fishing industry, Willjarro. The business had been added to the official supplier database just one day before the tender was advertised and, at the time of winning the tender, did not possess permits for processing or transporting abalone, technically disqualifying it from the bid.¹³⁴

When a rival abalone processing company, Shamode, filed an urgent court application to suspend the contract, an official in the fisheries department wrote to Willjarro, urging them to 'destroy the evidence'. As the saga dragged on in court, the factory in Gansbaai where Willjarro was storing the first batch of abalone was broken into and more than 1.5 tonnes of dried product, worth more than R3 million at the time, was stolen. To date, no arrests have been made. The fisheries department eventually compelled Willjarro, through a court order, to return the remaining abalone in its possession.



Mike Mlengana, former director general of the Department of Agriculture, Forestry and Fisheries.

© Twitter

But some of that very same abalone was soon involved in another alleged scheme to defraud the government stockpiles, this time involving Mlengana's deputy and bitter rival, Siphokazi Ndudane. Late in 2017, two detectives from SAPS' Crime Intelligence (CI) Division approached the department for permission to use three tonnes of confiscated abalone to conduct a sting operation against a powerful group of Chinese smugglers. Multiple officials within the department immediately raised concerns about the nature of the request,¹³⁵ as it deviated in key respects from normal protocols for reverse entrapments. The large quantity of abalone was in itself unusual, given the known difficulty of entering abalone into the black market without detection. And yet, officials reportedly close to Ndudane pushed the approval through and, early in 2018, handed over the abalone.

A tug of war ensued, as other officials managed to have permission for the sting operation withdrawn by the director of public prosecutions. The police were instructed to return the abalone to the government stores, but when they did, it was found to be rotten, and there was suspicion that the abalone had been swapped for inferior product.¹³⁶ Ndudane and several others were subsequently charged with theft and conspiring to defraud the department, although she was cleared on technical grounds. Ndudane, in a written statement, has denied the allegations, saying 'there was nothing unlawful, misrepresenting nor false about the operation since an approved 252A request was received from the Directorate of Public Prosecutions by the police.'

Ndudane was separately implicated, in 2018, of facilitating a bribe of R1 million to South Africa's former president, Jacob Zuma, in a bid to steer abalone processing contracts towards Shamode – the same company that had blown the whistle on Willjarro.¹³⁷ She and Mlengana no longer work at the department.

These two scandals suggest that corruption reaches into the highest positions in the department, and includes conspiracies to abuse its resources and powers, not to mention those of the SAPS' CI Division.



Robben Island. Police and conservation officials allegedly control access to the area's abundant abalone supply.

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Corruption in local policing

Corruption of police officers is crucial to protect access (through avoiding patrols) to abalone-rich waters and to prevent seizures of abalone when it is being transported or aggregated at drying facilities. Corrupt police may provide tip-offs about impending seizures or patrols, or divert investigations away from the activities of protected individuals.

For example, law enforcement officials and poachers claim that police and conservation officials control access to Robben Island, where some of the biggest remaining abalone stocks are still found. The island is a marine protected area, subject to greater enforcement, and is also physically more distant from where boats are launched. Its beds have, therefore, suffered less depletion. This police officer knows the timing of the police patrols and coordinates for poaching syndicates to dive outside of the police's circuits of the island. According to one interviewee, the police officer was moved out of his position, but then moved back into it. Accessing Robben Island costs R5 000 to

R10 000 (US\$350–700) per boat per night and some 15 boats can head out at once, amounting to as much as R150 000 (US\$10 500) in bribes per night.¹³⁸

Law enforcement officials also report they have detected a rising number of incidents of drying facilities being robbed by people posing as police officers. It is suspected that police officials are, in fact, behind these robberies and that the stolen goods are sold to poaching networks. These police could be acting on their own accord or be on the payroll of the poachers. The managers of the drying facilities cannot report these thefts to the police because their product is illegal, so these incidents are not officially captured in police records, but information was gathered through informants. The 'victims' of the crimes may also not be aware that these are not legitimate seizures. Armed robberies of a government facility where seized abalone is stored have also been committed by people dressed in police uniform and driving police vehicles.¹³⁹

Corruption within the Hawks and crime intelligence

The Directorate of Priority Crime Investigation (usually referred to as the Hawks) is a specialized investigative capacity within SAPS. Its primary responsibility is to conduct investigations into high-level organized crime figures and is thus actively involved in enforcement efforts against the illegal abalone trade. However, corruption is allegedly rife and the Hawks is generally considered to be ineffective, despite the good work done by some investigators.¹⁴⁰

The CI Division is responsible for gathering data that can feed into investigations and enforcement

strategies, such as the timing and placement of patrols and roadblocks, and it is believed to run many informants in poaching networks.¹⁴¹ However, CI is also considered to be endemically corrupt and to have played a pivotal part in state capture.¹⁴² As of March 2021, ongoing investigations were underway into allegations that the CI Division was involved in a scheme benefitting poaching networks or abalone buyers.

Customs has also been implicated through the issuing of fake or duplicate export permits, as well as accepting bribes at border posts to allow abalone shipments to pass through.¹⁴³

Illicit financial flows and their impact in South Africa

The illegal abalone trade entails several large, intertwined economic harms for South Africa, and generates a large amount of illicit and licit income in Hong Kong and the Chinese mainland. It is a highly lucrative business that generates enormous profits at the top, but also substantial income and bribe payments along the South African section of the value chain. The bulk of the profits is made in Hong Kong, not South Africa.

It has long been suspected that much of the 'working capital' needed for salaries and bribes enters South Africa as drug imports, which must then be sold and converted to cash. Evidence for this trade relationship comes anecdotally from gang and poaching participants, who claim that they are paid directly in drugs for catch out the water. This is not a strong indication of real convergence, confirming rather that drugs are common currency in the underworld.¹⁴⁴ However, in 2007, a notorious Cape gang boss admitted to *The Wall Street Journal* that by trading abalone for drugs, he could exponentially grow his profits.¹⁴⁵ Senior police officials in South Africa have also described exchanges of abalone for drugs and precursor chemicals.¹⁴⁶ In interviews conducted for the GI-TOC, a high-ranking gangster claimed that gang bosses had exchanged abalone for drug precursor chemicals to make methamphetamine, as well as for real estate, and even for targeted assassinations.¹⁴⁷

Investigators in South Africa have long sought to demonstrate high-level connections between abalone syndicates and the methamphetamine trade, attempting to conduct reverse entrapments, in which abalone is exchanged for drugs. The closest they have come to success is being able to buy drugs on credit from contacts of abalone dealers. They have never succeeded in buying drugs from the same person buying the abalone.¹⁴⁸ These investigators believe these two commodity lines and the money associated with them – by means of some arrangement between key figures in East Asia – are kept as separate as possible.¹⁴⁹ In other words, the people importing drugs to South Africa are not the same as those who export *H. midae*, although investigators believe that they may sometimes conduct business with one another on a 'credit' basis.¹⁵⁰ Things are different among the Cape gangs, who have more overlap between their drug and abalone businesses, and who are also presumed to be buying the drug imports.

It is not clear, however, how the abalone buyers get the working capital for their business costs, this being the cash needed by the buying syndicate to pay poachers, to buy stock and equipment, and to pay bribes.¹⁵¹ Based on anecdotal accounts of how much money is required to pay corrupt intermediaries involved in abalone poaching, this working capital must represent a sizeable amount. However, as the

total revenue accrued from abalone poaching is very high, working capital requirements are comparatively small.

To service working-capital needs, cash needs to move between poaching spots and the location of buyers and kingpins, who have the cash to disburse.¹⁵² Based on anecdotal accounts, it is often moved in the form of cash by couriers in vehicles.

Individuals from poaching networks meet Chinese buyers at public locations, such as a popular mall in Cape Town,¹⁵³ who give them working capital upfront, in advance of poaching, or in payment for loads. Buyers will often invest in a boat, and find a driver and a diver to set up their own poaching operations.

There have also been very few documented cases of the illicit abalone trade converging with other illegal environmental commodity flows. However, the small amounts of non-abalone products seized and the lack of any overarching pattern in documented seizures suggest that such convergence is ad hoc and opportunistic. TRAFFIC counts just seven known cases, all without any common modus operandi.¹⁵⁴ Another case was documented by one of the authors of this study, in which abalone drying gear was found at a donkey skins bust.¹⁵⁵

As mentioned previously, law enforcement sources believe that the drug and abalone trades converge

only at the very upper levels, among Hong Kong-based organized crime figures when they balance payments. The two commodities flow separately, until Asian drugs are bought by the same gangs who also sell abalone to Asian traffickers.

As for the effects of these illicit financial flows, in South Africa there are no reliable estimates for the tax revenue lost during the period of large-scale abalone smuggling, but it is likely to be significant. Based on import prices, the estimated value of South African abalone poached in 2016 was more than US\$55 million, a sum exceeded only by two of the country's legal fisheries, namely hake and squid.¹⁵⁶ This represents an enormous loss, not just of tax revenue, but also massively reduced catches for the legal abalone industry.

Illicit financial flows have other impacts, including the socio-economic effects of criminal profits circulating in communities. Although small in comparison to those at higher levels of the trade chain, a portion of the profits at poaching/gang level flow back into the illicit economy and fund other socially destructive activities, such as the purchase of weapons, assassinations, unregulated drug sales and consumption, and the payment of bribes. Being illegally gained money, it also does not get banked. However, it is also important to note that money from abalone poaching is used to support livelihoods in economically depressed communities.

An outboard motorboat and a luxury vehicle at a poacher's shack, Western Cape, South Africa.

© Peter Chadwick, www.conservationphotography.co.za



Corruption and the collapse of the fisheries department: feedback effects in the illicit economy

Any illicit wildlife trade relies on corruption to move protected species and prohibited goods across the world, and the bribery and influence-buying by criminal networks linked to the wildlife trade have wrought havoc on state departments across the world. In the process, corruption has undermined crucial services, such as conservation management, law enforcement and forestry, to the point where basic regulatory functions have ceased. The impact of the illegal abalone trade on South African institutions, particularly the fisheries department, is a perfect example of this.

We cannot give a specific level of attribution for the dysfunction to the illegal abalone trade, but the experts and insiders we consulted believe it has significantly contributed to the current state of affairs, referring to a ‘meltdown’ of essential functions.

This collapse has several components. The first is financial, according to our interviewees. The fisheries department is unable to pay contractors for basic, essential services, such as gathering data on remaining abalone and rock lobster populations. As a result, this work has been abruptly suspended several times for extended periods.¹⁵⁷ Secondly, the collapse impacts on departmental research, as senior scientists retire and are not replaced.¹⁵⁸ As for abalone, interviewees claim: ‘The abalone scientific working group [in the fisheries department] is almost entirely defunct, with basically no research for the past two years’, including mapping the remaining abalone population.

Poor management has also led to the deterioration of monitoring and compliance services, and, crucially, the awarding of legal long-term fisheries rights. These were due to be awarded in 2016, but have still not been awarded for major sectors, with huge impacts on the fishing industry. In the case of abalone, the rights to legally collect wild abalone are nine years late.¹⁵⁹ Auctions of confiscated abalone have also become a major laundering mechanism for poaching syndicates, who have reused export permits to ship poached abalone.¹⁶⁰

Lastly, two members of the department’s management team were suspended for alleged corruption in connection with abalone smuggling, creating a leadership vacancy. Aside from troubling implications for the rule of law, this contributed to further departmental instability.

It seems likely that this corruption is now locked into a positive feedback loop with the illegal abalone trade. In homeostatic systems, feedback loops either stabilize an effect (for example, when the external temperature rises, the human body sweats, causing the body to cool), or the feedback increases the effect, causing cascading increases in severity (as when global warming causes ice caps to melt; the Earth then reflects less sunlight and warms more quickly).

In this case, weakness in the department and other state agencies appear to have allowed the criminal networks behind the illegal abalone trade to grow, generating funds and incentives for corrupt officials within the department. The more corruption present in the department, the worse its management and enforcement become, allowing the illegal abalone trade to flourish, producing more resources and incentives to keep the department dysfunctional.

It seems unlikely that a typical set of anti-corruption interventions could disrupt this feedback mechanism, in the absence of a big change in the external pressure on the department, coming from dirty abalone money.

野生白花膠



濱鮑魚



日本關東遼參



魚公肚



野生西藏那曲
冬蟲草




山石斛



THE HONG KONG CRIMINAL MARKET



A woman walks past a shop selling dried abalone in Hong Kong. © Anthony Wallace/AFP via Getty Images



The general dynamics of South Africa's criminal abalone market are by now well understood, even though operational details shift in response to law enforcement strategies, changing underworld relationships, abalone prices and other factors. Yet the picture in Hong Kong has remained murky to researchers and investigators, especially when it comes to piecing together the complex transnational criminal relationships that make the trade possible.

By the time abalone reaches the market in Hong Kong, it is a legal product no different from other luxury goods like champagne. As long as it has been declared on import and with the appropriate taxes paid, there is nothing unlawful about its sale. Hong Kong and Chinese authorities frequently catch smugglers ferrying abalone (along with an extensive variety of other goods) to mainland China in a bid to avoid paying duties on re-exports.¹⁶¹ But criminality is seldom detected in the primary flow of abalone into Hong Kong. This does not mean that criminality is absent, but rather that there are limited tools for policing it.

South African authorities are confident that the syndicates who control the poaching, drying and export of abalone are, in turn, controlled by criminal groups in Hong Kong.¹⁶² As far back as the late 1980s, South African police discovered mafias from Hong Kong and Taiwan trading illegal shark fin and abalone in Cape Town.¹⁶³ In the 1990s, South African police officials attended training with counterparts in Hong Kong and Macau to study the operations of criminal groups such as the Wo Shin Wo, regarded Hong Kong's oldest triad.¹⁶⁴ Yet in the more than two decades since then, there has not been a successful case linking suspected syndicate members in South Africa to criminal networks in Hong Kong, even though investigators say they have found compelling evidence.¹⁶⁵

On several occasions, South African authorities have attempted to secure closer cooperation with officials in Hong Kong, for example to trace payments for imports of poached abalone.¹⁶⁶ Yet the legal status of abalone in Hong Kong and the absence of international trade agreements, such as CITES, mean there is little incentive for police in Hong Kong to devote attention to the issue.¹⁶⁷ South African authorities have also attempted to obtain information from Hong Kong authorities via diplomatic and customs channels, but this, too, has been largely unsuccessful.¹⁶⁸

One major hurdle is that environmental offences have not, until recently, fallen under Hong Kong's laws against organized crime.¹⁶⁹ This has severely constrained investigations. A recent report on wildlife trafficking cases in Hong Kong notes that officials had:

- no power to investigate persons or materials in connection with organized crime;
- no power to confiscate the proceeds of crime; and
- no power to issue restraining orders or charging orders of assets/instruments used in offences.¹⁷⁰

Convictions for wildlife trafficking have, as a consequence, tended to target low-level mules, instead of the people controlling these illicit markets. Penalties for wildlife offences have also been far too low to be a deterrent. An analysis of 99 cases for which both fines and seizure values were available showed that fines amounted to less than 18 per cent of the value of the smuggled products.¹⁷¹ And this is for overtly illicit trades, involving commodities such as ivory and pangolin. Abalone, with its legal status in Hong Kong, barely features in arrests and confiscations.¹⁷²

Interviews in Hong Kong indicate that a relatively small group of wholesale traders controls abalone imports from South Africa.¹⁷³ This mirrors what is known for other luxury dried seafood product flows, such as shark fin and sea cucumber, which originate as illicit trades, but sell openly in Hong Kong.¹⁷⁴ One trader spoke freely about corruption in South Africa, saying that it enables smuggling to neighbouring African states, or the falsifying of export documents to conceal illicit shipments.¹⁷⁵ This trader also pointed out that the biggest market for South African abalone is in China,¹⁷⁶ and that smuggling between Hong Kong and China is rife. TRAFFIC market surveys suggest that a high proportion of abalone traders in Hong Kong are aware of criminality in the supply chain from South Africa.¹⁷⁷ However, in practice the persistence of legal flows from the expanding aquaculture sector provides cover for ongoing smuggling.¹⁷⁸

Our researcher in Hong Kong also heard about a trader who attempted to circumvent existing import channels by flying to South Africa to find a direct supplier. The man's wife eventually reported him missing, only to discover that he had been killed.¹⁷⁹ While we have been unable to confirm the details of this case, investigators in South Africa have told us that spheres of influence in the illegal abalone trade are strictly policed and it can be dangerous to flout the rules.¹⁸⁰

Hong Kong fieldwork also confirmed earlier findings by TRAFFIC¹⁸¹ that the abalone trade – and the dried seafood sector more broadly – is opaque to external observers, with complex relationships between importers, wholesalers and traders. Many traders act as both wholesalers and retailers; or they might wholesale several products and obtain other products from different wholesalers. Coupled with a general reluctance to discuss the trade, which has become more pronounced since Western-backed campaigns against shark-finning gained momentum in the 1990s and the first decade of the 2000s, abalone flows become exceedingly difficult to trace.



Dried abalone for sale in central Hong Kong.

© Alexandre Tziripouloff/Alamy

Grey-market seafood supply chains in Hong Kong

The majority of the dried seafood traders interviewed knew about illegal activity in the abalone trade. Although the illicit origins may harm product quality, South African abalone provides a valuable bulk, mid-quality input into the market from which the Hong Kong seafood industry supplying Chinese markets has made a substantial profit. Without outside pressure, Hong Kong seafood traders have little inducement to upset the status quo. Meanwhile, Hong Kong officials have little reason to spend resources and political capital on launching investigations or imposing additional checks to verify the integrity of abalone supply chains.

There is, however, one unknown factor in this calculation. Although individuals organize and profit from the trafficking from South Africa to Hong Kong, it is not clear what their role is in the broader Hong Kong underworld (or legal trade, for that matter). With no serious investigation of abalone-related criminal networks, their impact on corruption, violence, money laundering or the other problems associated with criminal networks is hard to define.

Perhaps their relationship to South Africa allows for a complete ‘externalization’ of these consequences to another territory. If this externalization is incomplete, however, it might provide a persuasive reason for Hong Kong authorities to pay the abalone trade more attention.

Likewise, it may be possible to trigger more Chinese government interest in this issue, if it is raised at a high enough level as a crime convergence issue – and one that China is not acting on. This appears to have been influential in stimulating Chinese state intervention into criminal networks involved in ivory poaching. Findings from other GI-TOC analyses suggest that for this strategy to succeed, the abalone issue would have to be seen as harmful to China’s image in priority countries. In addition, Chinese government interventions would focus only on the involvement of Chinese citizens, with the full cooperation of the states where the crimes occurred.¹⁸²

Lastly, surveys in Hong Kong indicate that consumers are, at best, patchily aware of South African abalone’s illegal origins.¹⁸³ Seafood customers place great importance on the hygienic processing of the food they consume. Emphasizing the unhygienic drying and processing methods at illicit processing plants might persuade them to demand licit supply chains.

Abalone

Pearl of great price

Abalone, *Haliotis midae*, is a large flat snail with an ear-shaped shell. Its common name 'Perlemoen' refers to the beautiful mother-of-pearl lining of the shell. Abalone is one of the most valuable edible resources harvested from the coast of South Africa but it is also highly vulnerable and on the brink of collapse. A number of factors have contributed to decreases in abalone numbers, including where it lives, its behaviour and life cycle, and its interaction with other sea creatures, but poaching is a major factor.

Many of the once peaceful fishing villages in the South Western Cape are being torn apart by their interest in this humble snail. Some people oppose poaching while others regard it as a way of claiming their rights. The simple truth is that perlemoen are being depleted so fast that they are in danger of becoming extinct in the wild.

Hopes for the future include the control of poaching, long-term sustainable harvesting, fair allocation of legal commercial rights and the increased control of abalone farming. In this way the revenue earned from perlemoen can uplift the region and provide a better life for all.



PERMITS AND REGULATIONS

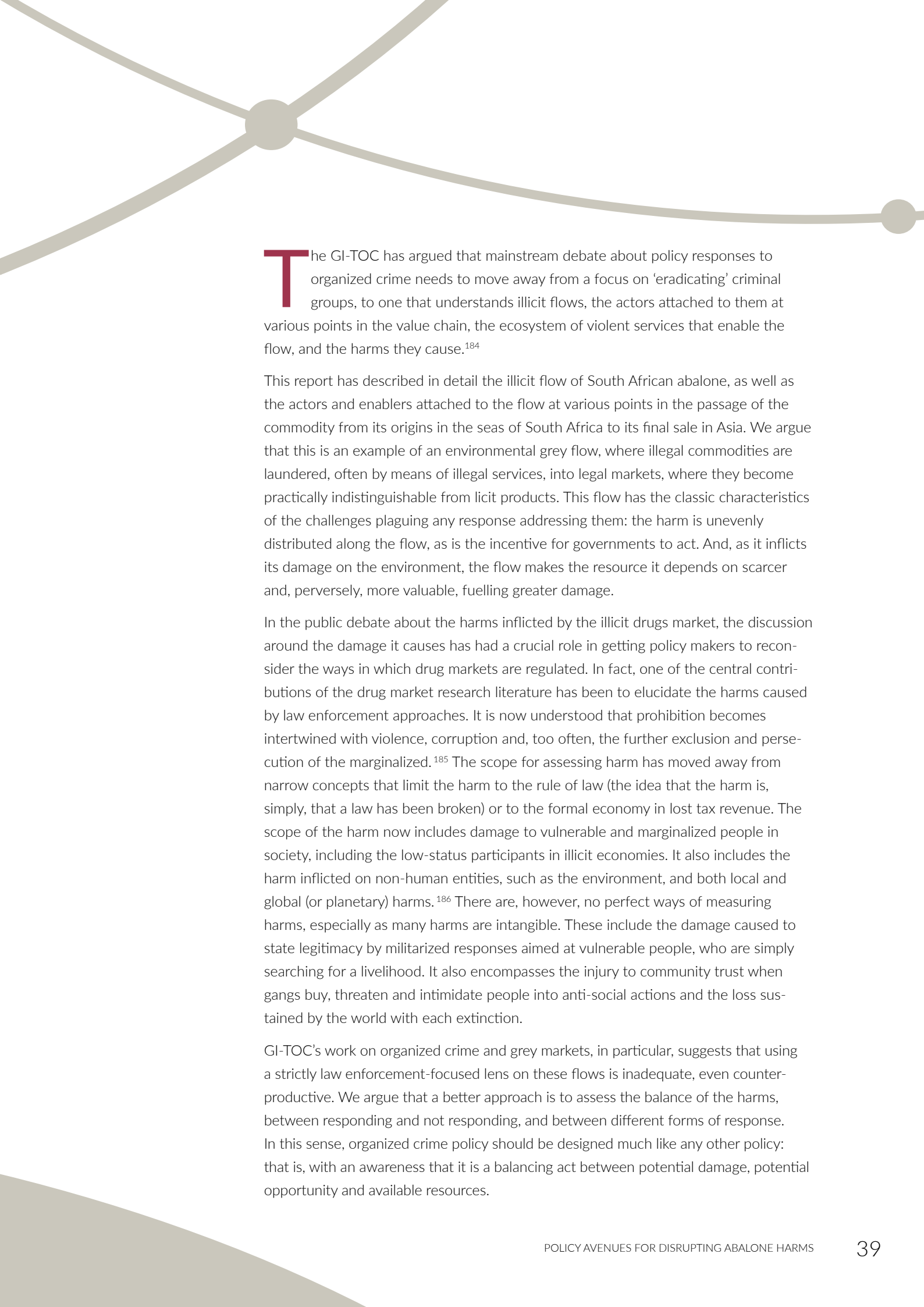
The commercial abalone fishery is regulated by the Department of Environmental Affairs and Forestry. Permits are issued to licensed abalone fishers. The Department of Environmental Affairs and Forestry also issues permits for the export of abalone. The Department of Environmental Affairs and Forestry also issues permits for the import of abalone.



POLICY AVENUES FOR DISRUPTING ABALONE HARMS

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An educational board in Kleinmond, South Africa, a poaching hotspot, providing information about wild abalone. © Rodger Bosch via Gallo Images



The GI-TOC has argued that mainstream debate about policy responses to organized crime needs to move away from a focus on ‘eradicating’ criminal groups, to one that understands illicit flows, the actors attached to them at various points in the value chain, the ecosystem of violent services that enable the flow, and the harms they cause.¹⁸⁴

This report has described in detail the illicit flow of South African abalone, as well as the actors and enablers attached to the flow at various points in the passage of the commodity from its origins in the seas of South Africa to its final sale in Asia. We argue that this is an example of an environmental grey flow, where illegal commodities are laundered, often by means of illegal services, into legal markets, where they become practically indistinguishable from licit products. This flow has the classic characteristics of the challenges plaguing any response addressing them: the harm is unevenly distributed along the flow, as is the incentive for governments to act. And, as it inflicts its damage on the environment, the flow makes the resource it depends on scarcer and, perversely, more valuable, fuelling greater damage.

In the public debate about the harms inflicted by the illicit drugs market, the discussion around the damage it causes has had a crucial role in getting policy makers to reconsider the ways in which drug markets are regulated. In fact, one of the central contributions of the drug market research literature has been to elucidate the harms caused by law enforcement approaches. It is now understood that prohibition becomes intertwined with violence, corruption and, too often, the further exclusion and persecution of the marginalized.¹⁸⁵ The scope for assessing harm has moved away from narrow concepts that limit the harm to the rule of law (the idea that the harm is, simply, that a law has been broken) or to the formal economy in lost tax revenue. The scope of the harm now includes damage to vulnerable and marginalized people in society, including the low-status participants in illicit economies. It also includes the harm inflicted on non-human entities, such as the environment, and both local and global (or planetary) harms.¹⁸⁶ There are, however, no perfect ways of measuring harms, especially as many harms are intangible. These include the damage caused to state legitimacy by militarized responses aimed at vulnerable people, who are simply searching for a livelihood. It also encompasses the injury to community trust when gangs buy, threaten and intimidate people into anti-social actions and the loss sustained by the world with each extinction.

GI-TOC’s work on organized crime and grey markets, in particular, suggests that using a strictly law enforcement-focused lens on these flows is inadequate, even counter-productive. We argue that a better approach is to assess the balance of the harms, between responding and not responding, and between different forms of response. In this sense, organized crime policy should be designed much like any other policy: that is, with an awareness that it is a balancing act between potential damage, potential opportunity and available resources.



Diving for abalone is a source of income for coastal communities but does not seem to lead to sustainable wealth.

© South African National Parks

Human harms: violence, corruption and criminalization

This report has detailed multiple instances of the harms associated with abalone poaching, including corruption, violence, exploitation and the strengthening of socially destructive organized crime groups, like gangs.

There is increasing fragmentation in the abalone poaching economy, seen through the new criminal players entering the market. This, in turn, is leading to increasing violence, through targeted assassinations, violent goods-in-transit heists between syndicates and increasing competition over turf. To the extent that abalone provides a simple input of money into the coffers of the Cape gangs, it also enables all their other activities, including extortion, gun violence and drug sales.

Some of the damage inflicted on humans by the trade is driven by the policing of it – through the criminalization of communities through the arrest of low-level participants in the trade. This criminalization contributes to impoverishment and puts strain on families' primary caregivers (both on those imprisoned and those who parent in their absence). It is also creating the incentive for the corruption of law enforcement.

Moreover, smuggling continues to depress the legal abalone industry and generates the circulation of 'dark'

money, which is hard to bank and invest legally. It is true that diving for abalone and other low-level roles in the abalone economy bring in income for coastal communities, but it does not seem to do so in a way that leads to increasing and sustainable wealth.

In addition, in South Africa, there is considerable corruption in the institutions tasked with enforcing the laws to save abalone. As argued in the section on corruption, instead of state organs having a negative feedback effect on the illicit market, reacting to its early development in a way that curtailed and weakened the development of the criminal economy created a positive loop. This had a runaway effect, ending in complete dysfunction. The continued interplay between the external environment and internal weakness mitigates strongly against a turnaround in the functioning of the institution.

While it is less specific to abalone (though probably more directly related to the organized gang phenomenon), a similar case could be made that the police are locked into a similar 'runaway corruption' effect. Indeed, these institutions are so locked into feedback loops with the illicit economy that advocating for any regular set of law enforcement responses – such as training, information-sharing and coordination – seems unlikely to break through the

threshold of change. Advocating for more regulation as a solution, if it is reliant on these institutions being functional, also seems doomed to failure.

At the same time, the ongoing enforcement policy also has financial and opportunity costs. This is because money allocated to policing the abalone

trade is not allocated to other policing needs, or to budgets that would allow for investment to tackle the socio-economic drivers of poaching in coastal communities, such as food security, housing, job creation and skills development.

Environmental harms: impact of the illegal trade on kelp forest ecology

Abalone was once an exceptionally abundant species in the kelp forest ecosystem along the western and eastern cape coasts in South Africa. In 2020, the International Union of Conservation of Nature (IUCN) added the species to its Red List of Endangered Species.¹⁸⁷ A crucial question about its decline is then what role it has in that ecosystem, and whether its removal unbalances the web of relationships that allows the South African kelp forest system to be so abundantly diverse.

The relevance of this line of enquiry relates to the prospects of abalone's extinction. In balancing harms, as we present later, the question of the material impact of abalone's extinction on other living creatures needs to be weighed. Assessing whether it

is a keystone species is one way to do so. In conservation science, a key concept used to understand this question is that of keystone species. This concept derives from a classic study of a marine ecosystem by biologist Robert Paine, which found that the removal of the top predator from an intertidal rock pool, in this case the star fish, led to a number of significant shifts and an eventual crash in the species diversity in the pool.¹⁸⁸ Paine argued that such a species act as the 'keystone' in a web of ecosystem relationships, stabilizing the system at a high level of species diversity. Such species play a 'disproportionately large role in the prevalence and population levels of other species within their ecosystem or community' and are crucial to an ecosystem's long-term sustainability.¹⁸⁹

An underwater kelp forest off Cape Town. © Roger Horrocks via Getty Images



Keystone species can be awarded this title because their hunting keeps populations of their prey from overgrazing their environment (like wolves, which hunt deer that would otherwise multiply to herd sizes through which overgrazing would become inevitable), or because their grazing methods shape habitats for other species (like elephants browsing on woody vegetation, which creates space for greater plant and animal diversity), or because they are major pollinators or seed dispersers (including some birds, bees and elephants, again).

Abalone are herbivores that graze on algae, especially kelp. Based on the abundance of abalone in these environments in the past, marine scientists interviewed for this report believe that this species once had an important ecological role, but what that role might have been – or the impacts of its interruption – are not fully understood. However, as the devastation of the abalone population has not triggered a collapse of the food web nor other noticeable shifts, it was probably not a keystone species (which grazers seldom are).

The kelp forest ecosystem might have adjusted because other grazers (primarily sea urchins) have

replaced abalone in many areas and perhaps perform similar ecological roles. In addition, commercial kelp harvesting (largely for feed for abalone farms) has probably had some balancing effect.

As the fisheries department does not have recent information about the size of the remaining wild abalone population, there is debate about the extent of the loss. In addition, some pockets of abalone are likely to always remain in areas too dangerous and inaccessible to poachers. However, our interviewees were clear that the abalone population size is likely to be a tiny fraction of its former abundance and is declining further.¹⁹⁰

In short, in South Africa, the battle to save abalone from a population collapse has already been lost. The role abalone once had in South African kelp forest ecosystems has been profoundly and perhaps irreversibly compromised. It is possible, even probable, that that transition had severe negative effects on the rest of the kelp ecosystem, but we did not record these changes at the time and now do not know what they were. It is unlikely, however, that abalone was a keystone species.

A man shucks poached abalone to be dried. © Shaun Swingler



Disrupting abalone harms: three policy avenues

While the bulk of the environmental damage from this trade – abalone’s population crash – has already occurred, the human harms are still ongoing and are getting worse. Our conclusions, bearing in mind the current distribution of harm from the flow and its future trajectory, lead us to both a philosophical and criminological argument about the policy avenues open to decision makers.

We propose three approaches that depart substantially from current methods, arguing instead for a harm-reduction approach to the illegal abalone trade.

We believe these departures are necessary because the status quo – the suite of policing action aimed at arresting poachers and their immediate bosses, and busting drying facilities, coupled with a dysfunctional system for awarding wild-harvest quotas to local communities, and virtually no action taken at any other point in the illegal flow – is fundamentally broken. If South African authorities (the only authorities currently invested in stopping the illegal trade) continue with this approach, it will lead to further abalone population declines, quite possibly to the eventual extinction of the species. In other words, choosing to continue the same approaches is itself a choice to let the abalone go extinct in the wild. Seen in that light, its high costs – the direct costs of enforcement, the opportunity costs, as well as indirect costs such as the criminalization of low-level poachers and corruption pressure on state institutions – become hard to defend.

This is necessary to say because the typical interventions recommended in reports of this nature are ‘more of the same’: remove corrupt officials, ramp up policing efforts, patrol more and arrest more, possibly in the form of defending expanded marine protected areas. Such recommendations would probably include training to customs officials in neighbouring countries, the re-establishment of specialist courts and ‘vetted unit’-type law enforcement formations, as well as increased international coordination.

As we have explained and reiterate in the recommendations that follow, such measures are not an adequate response to the political-economy factors

stacked against an effective anti-poaching-led strategy.¹⁹¹ To summarize, these include: the huge profits that foreign networks can devote to local corruption, the extremely degraded nature of South African law enforcement capabilities, the socio-economic conditions that feed into the recruitment of poachers and increase local hostility to the police, the low level of international attention to abalone as a species (for example, the absence of species ‘charisma’ to put pressure on complicit foreign administrations to take action), and a legal framework that makes it easy for trafficking networks to launder their product into ‘licit’ abalone flows.

While acknowledging the uncertainty around the question of abalone population levels as well the difficulty of measuring the extent of corruption, we believe that crucial ecological and institutional thresholds have already been breached and that we need to now consider a range of exceptional policy approaches.

We subsequently describe the hypothetical effects of our approach on the ecological health of the abalone population and its interaction with harms to coastal communities and state institutions, as well as the expected costs and risks. Each of these proposals triggers some measure of discomfort – whether it is because there is a high risk of failure or because it may fundamentally undermine philosophies that protect other species. These are all flawed options presented to meet a highly dysfunctional situation in which the status quo is also unacceptable, and they are presented here with the understanding that none offers a perfect solution.

1. Reorient resources from policing at source to campaigning at destination.

One striking characteristic of the illegal abalone trade is how almost all the action is concentrated at the source of the commodity – both the criminal violence and the enforcement – while the decision-makers who shape the criminal market are largely located in Hong Kong, where almost all the product eventually passes through. The most effective law enforcement

actions, therefore, would be in Hong Kong, where asset seizures, arrests and confiscation of the physical product would have the greatest impact on the rest of the supply chain.

An opportunity has recently been created by a shift in legislation in Hong Kong. The legislature has agreed to an amendment to the Organized and Serious Crimes Ordinance (OSCO) that will allow law enforcement agencies to freeze the assets of suspected trafficking groups. It will also give greater powers to request proof of legal import and now covers offences including the illegal import, export and re-export of rare and endangered species. Amanda Whitfort, a law professor at the University of Hong Kong, has said that these amendments will allow investigators to 'pierce the veil ... to see who are the people in positions of power who are trafficking these species through our borders'.¹⁹² In other words, the amendment will strengthen the hand of the Hong Kong state to investigate and dismantle illicit financial flows through the city.

As South African abalone is currently not CITES listed, it is not covered by the law, but South Africa could relist the species (making an exception for its frozen and fresh forms). SARS would be the government department most likely to be involved in supporting any Hong Kong-based investigation of illicit financial flows. It is also the part of the South African state recovering best (relatively speaking) from the state-capture era.

However, the problems with this approach are political and substantial. Hong Kong is a trafficking hub for a large range of endangered species, many with far more international attention than abalone. None of the externalities of the trade occur in Hong Kong, while the city's economy profits from the trade, and the South African state has no particular leverage with Hong Kong. Some part of this equation would need for shift for the Hong Kong administration to prioritize law enforcement resources towards investigating the syndicates linked to the poaching of abalone (and possibly also the smuggling of precursor chemicals and drugs for export to South Africa).

Given the very low consumer awareness about the origins of South African abalone, there is perhaps also value in raising awareness in Hong Kong and

China, and putting pressure on the seafood industry for more supply chain integrity, in order to shift consumer demand away from this product. But such campaigns are politically sensitive, can backfire, and, when effective, tend to entail years of consistent campaigning.

In summary, while these approaches are likely to address some meaningful drivers of the illicit abalone trade, they require uncertain political and social shifts in a country with no particular incentive to care about South African abalone. This a policy avenue that requires long timeframes and should be undertaken alongside other measures.

2. Stop enforcing anti-poaching laws and focus on investigating trafficking networks.

This report has made clear that poachers and the gang networks immediately recruiting and directing them may be operating at the most visible (and violent) end of the illicit flow, but all the work they do pulling abalone out of the ocean is pointless if that product is not delivered to a consumer market situated at least 12 000 kilometres away. Poachers themselves do nothing to facilitate this movement, which only happens because of the working capital that middlemen use to pay bribes and wages, and to buy stock. Enablers in legal, financial and logistics professions, coupled with criminal networks focused on drying and cross-border transport, are also essential to this flow, making their arrest highly disruptive across the criminal economy.

Law enforcement in South Africa does have a crucial role to play in using their limited capacity and resources to investigate trafficking networks and trafficking enablers, and to build strong cases against them. Sources within the Department of Forestry, Fisheries and the Environment say that a shift towards this approach is already underway in specific cases linked to terrestrial illegal wildlife flows.

We suggest this shift to be combined with an 'open sesame' approach to poaching, ceasing any investment in anti-poaching operations of the police and fisheries department. This would involve not just diminishing poaching patrols, but deliberately withdrawing anti-poaching operations for abalone specifically (and



Hawston beach, South Africa. The bulk of environmental damage from the abalone trade has already occurred, but human harms are ongoing and getting worse. © Fabio Baldini/Shutterstock

not all marine species). This could result in the remaining abalone population being harvested to the point where there is so little left that the illegal market crashes, as shipments would become so small that profits no longer cover costs of transport, staff and bribes. This has the most certain effect of shutting down the illegal flow: destroying the environmental commodity it is based on. Anecdotal reports suggest this might be where the current unprecedented levels of poaching are taking things, in any case.

Under this scenario, there would likely be an uptick in poaching activity and maybe also an intensification of conflict between poaching groups, as a 'race to the bottom' develops to collect the resource. This suggests a significant risk of a short-term increase in violence. After the crash, the ecological effects would be negative: what remains of the already devastated population would have been harvested. However, further ecosystems impacts are unlikely and it is also considered likely that abalone could survive in small numbers and sizes in inaccessible waters. They would certainly still survive in legal ranching facilities. These scenarios notwithstanding, after organized syndicates lose interest, low-level poaching would likely continue, as it did before the surge in the 1990s.

However, some positive institutional and social effects could occur soon afterwards. In terms of human costs, the flow of bribe money to state officials would stop, as they would no longer need to be bribed to forestall prosecution. There would be no arrests of poachers and the cycle of criminalization in coastal communities would be disrupted.

After the market has collapsed, there will be significantly less money flowing into these communities, but also far less incentive for organized gangs to have a presence on the coastline. This might create hardship through declines in (illicit) income, but also reduce suffering by removing the incentive for violent and armed gangs to have a presence in these small-town communities. It might also create an opportunity for the state – should it be willing – to invest in creating licit opportunities for income and employment, which would not need to compete with the high-income lifestyle of a successful poacher.

Assessing the financial costs and benefits to the state would entail calculating whether the remaining value of the resource exceeds the cost of policing it. This requires data, both about the abalone population and current enforcement costs. The latter could be deduced, in theory, using estimates of the

anti-poaching efforts, combined with data on the number of patrols, roadblocks and raids on drying facilities and warehouses. Yet, given that the fisheries department is currently unable to perform even basic abalone population surveys, the likelihood of this happening appears vanishingly remote.¹⁹³

Aside from the risks already mentioned, there is also a chance that the poaching economy would be displaced to another marine animal, but it is not obvious what this species would be. To some extent, this is already an issue in the existing problem of poaching of rock lobster and, possibly, sea cucumber.¹⁹⁴

The crucial difference between lobster and abalone, which we believe mitigates against it creating the same problems, is that it is poached for consumption primarily in the local restaurant market. It is not driven by international demand and seriously high profits. Illegal rock lobster is, therefore, not able to generate the kind of corruption pressure on state departments or finance poachers' salaries and those of others in the criminal economy. This is important to emphasize in light of the recommendation we are making that, in the short term, the South African state cannot deal with the illegal abalone economy; the nature of the demand (both in its value and its volume) driving the market is an important part of this calculation.

Another form of displacement may be from poaching to other forms of crime, such as housebreaking, home invasions, cash-in-transit heists and other high-income crimes to sustain gangster lifestyles.¹⁹⁵ This risk would need to be monitored and mitigated by programmes to replace lost incomes with licit means.

Building up the anti-trafficking capacity within law enforcement would help to mitigate these risks by monitoring for such shifts and acting against them before illegal flows or criminal dynamics become entrenched.

Lastly, this solution also poses political challenges, as it could become a potent sign that the South African state has lost its battle against the criminal networks

behind the poaching economy. This proposal could easily be portrayed – in a polity where 'strong' responses to crime are popular – as a contemptible capitulation to organized crime. This will make it unattractive to political shareholders.

Bound up with this is perhaps the most acute risk of this approach: it could undermine the strong rhetorical commitment on the part of the South African state to prevent species extinction. There are also possible legal ramifications, as this commitment is bound up in the mandates of several government organs.

It will be important to consider whether a context-bound case could be made for this approach – and defended as such – without leading to a 'slippery-slope' situation where commitment to paying for the defence of other species – most notably, rhino – is undermined. Such a proposal could conceivably be the thin edge of the wedge, driving fractures in South Africa's commitment to preventing extinction through illegal trade.

3. Repair social damage, support the licit economy and pay communities a conservation dividend.

Lastly, it is important, given what we have proposed above, that an attempt to strategically 'crash' the market is not used as an excuse to give up either on protecting the kelp forest ecosystem or on coastal communities.

The collapse of the market would have to be used as an opportunity to repair the damage caused by the illegal flow: to fix the fisheries department so that reliable marine research can inform policy and permits can be issued effectively; to repair the investigative functions of law enforcement, so that they can disrupt criminal syndicates and illicit trade routes when they form; and to create alternative economic opportunities for young men at risk of being recruited by poaching syndicates. We propose one avenue for the latter.



Will abalone retain its shine? © LCRP/Shutterstock

Accepting extinction?

The idea that it might be acceptable, based on a balance-of-harms assessment, to propose that the state desist from enforcing anti-poaching laws, has generated much internal debate. In the words of Julian Rademeyer, director of the GI-TOC's Observatory of Illicit Economies in East and Southern Africa:

This is the nub. In a country that is struggling to pull itself back from the brink of state dysfunction, that is largely unable to tackle any form of organized crime, that is desperate to rebuild broken enforcement and intelligence agencies, that cannot seem to get a handle on wildlife crime and far more pressing environmental issues, can anyone afford to send the message that we accept extinction? An extreme view then would be, why bother protecting rhinos? If they went extinct tomorrow, it would have minimal ecological impact in the big picture. Should we simply say that the state is corrupt; it cannot do what it is meant to do and therefore we should give up and, in effect, allow the state to abrogate its constitutionally enshrined responsibilities? And if we do so in this case, where do we stop?

Perhaps one of the biggest tragedies of South Africa's decades-long abalone poaching crisis is the missed opportunity it represents for local economic development in impoverished coastal communities. TRAFFIC has estimated that poached abalone constitutes South Africa's third largest export fishery by value, eclipsed only by the industrialized multimillion-dollar hake and squid industries. Money from this trade has been routed through a criminal economy that, as we and other researchers have shown, is violent, exploitative and corrosive to democratic institutions. While poaching and its related activities have provided a livelihood for many of its participants, much of the potential value of this income has been lost due to the illicit nature of the fishery. Poachers are paid in cash and cannot bank their earnings. Many of them come from impoverished backgrounds and have little financial literacy. Poaching has become a means to acquire markers of wealth, such as expensive clothes and vehicles, or buying alcohol and drugs. In interviews, poachers have described the sea as 'the bank' – a place one can return to repeatedly for cash. But to extend the metaphor, this bank is running low on reserves and the majority of its members have no savings elsewhere.

What if, instead of slashing legal quotas from the beginning of the 2000s onwards, when poaching began to escalate, the South African government had rather radically expanded access to the fishery? This question was debated at the time, but discarded in favour of a more cautious approach to preserving the abalone resource – a decision that, we must acknowledge, made sense at the time, based on scientific projections of imminent commercial extinction that only proved inaccurate in hindsight. Yet, it now seems clear that South Africa's approach to spiraling levels of poaching served only to push the fishery more firmly into the criminal economy.

Today, abalone stocks are far too low to attempt any ambitious redistribution. But abalone farming, in theory, presents another strategy for leveraging the high value of abalone to address the root causes of poaching. Abalone aquaculture is capital-intensive and highly technical in nature, presenting high barriers for entry. Typically, the jobs this industry creates are for low-skilled workers, while ownership rests with large commercial fishing companies who have invested heavily in the sector. Yet it is possible to take juvenile abalone reared in aquaculture facilities and transfer them to the sea, anchoring them in inexpensive cages and feeding them on kelp. This 'ranching' has lower input costs and is being explored as a possibility for community aquaculture development in communities where poaching has become entrenched.

Several farms have already expressed willingness to support abalone ranching projects. Local cooperatives would be responsible for seeding, feeding, cleaning, harvesting and marketing abalone produced in this way, with skills development provided by the government and private sector. Critically, these cooperatives would have an interest in protecting their cages from poaching.

Yet in order to work, these plans depend upon a high degree of community cohesion and cooperation, which is starkly at odds with the current reality of most settlements where poaching has taken root. As in many marginalized communities in South Africa, governance in these places is often divided and fractious. Powerful forces are invested in the illicit abalone economy. An instructive example, perhaps, is the perennial struggle to distribute fishing rights, a process that for more than two decades has been undermined by cronyism, factional disputes and politicking. We see no reason to believe that governance of abalone ranching would be any more straightforward.

NOTES

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