# **RESEARCH REPORT**



# CONVERGENCE OF WILDLIFE CRIME

AND OTHER FORMS OF TRANSNATIONAL ORGANIZED CRIME IN EASTERN AND SOUTHERN AFRICA

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# **ACRONYMS AND ABBREVIATIONS**

ANAC	Administração Nacional das Áreas de Conservação / National Administration of Conservation Areas (Government Agency, Mozambique)
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
DFFE	Department of Forestry, Fisheries, and the Environment (Government Dept., South Africa)
DNPW-MW	Department of National Parks and Wildlife, Malawi
DNPW-ZM	Department of National Parks and Wildlife, Zambia
DRC	Democratic Republic of Congo
DWNP	Department of Wildlife and National Parks (Botswana)
EIA	Environmental Investigation Agency
FCS	Focused Conservation
IWT	Illegal wildlife trade
LATF	Lusaka Agreement Task Force
LWT	Lilongwe Wildlife Trust
MNRT	Ministry of Natural Resource and Tourism (Tanzania)
NRCN	Natural Resource Conservation Network
SADC	Southern African Development Community
SERNIC	Serviço Nacional de Investigação Criminal / National Criminal Investigations Service (Division of the Police of the Republic of Mozambique)
UNEP	United Nations Environment Programme
USAID	United States Agency for International Development
US-DEA	United States Drug Enforcement Administration
USFWS	United States Fish and Wildlife Service
UWA	Uganda Wildlife Authority
WCP	Wildlife Crime Prevention
WCS	Wildlife Conservation Society
WCU	Wildlife crime unit
WJC	Wildlife Justice Commission
WWF	World Wide Fund for Nature



Mecula inselberg in the vast and remote Niassa Speical Reserve in northern Mozambique. Photo: John Guernier

# EXECUTIVE SUMMARY

Ivory seized from wildlife trafficker Moazu Kromah and his son's compound in Kampala at the time of Kromah's first arrest in 2017. *Photo: The EAGLE network*  he huge growth in wildlife crime during this century has captured headlines, attracted celebrity attention and public interest and generated policy discussions. Narratives have concentrated largely on the 'war on poaching' and how wildlife trafficking generates income for terrorist groups. This focus has led to overly militarized and tactical responses that have missed the real threats and challenges of wildlife crime and have broken down trust and the legitimacy of conservation efforts.

The reality is that wildlife crime has grown to become a major form of transnational organized crime, worth billions of dollars, and affecting every continent. This realization has seen a recent shift towards understanding the dynamics of this illicit economy and dismantling the organized criminal networks that underpin it. With this shift have come a few transformative successes, where patterns of wildlife crime have changed. In these cases, the killing has stopped and large volumes of wildlife products no longer transit some countries and regions. This report describes some of these cases.

As wildlife crime increased in seriousness and profitability and evolved into an organized crime type, it developed corrupt support systems and associated illicit financial flows. Reports of its convergence with other forms of organized crime have also grown. Crime convergence occurs when criminal economies, networks and/or trafficking systems mature enough for convergent relationships and systems to develop and become established. Deeper understanding of the wildlife crime value chain and its convergence with other types of organized crime will help to disrupt more wildlife trafficking networks, reversing biodiversity declines and other negative ecosystem impacts of wildlife crime.

This report aims to contribute to this understanding by analyzing the dynamics and breadth of crime convergence related to the illegal wildlife trade (IWT) in Eastern and Southern Africa, as well as where on the wildlife crime value chain convergence is happening. Using a simple system that characterizes convergence as either network, hub or broker convergence, this report draws on interviews, case studies and detailed research. It finds hub convergence to be prevalent in all of the key logistics hubs investigated, and broker convergence to be present in all of the cities and towns researched. However, network convergence – cases in which a criminal group trafficking wildlife products is involved in other types of crime – was less prevalent than expected.

The wildlife crime value chain typically starts with the poaching or illegal extraction of wildlife products and includes the various stages of trafficking these products before getting them to the final market. This report finds that most crime convergence occurs

further along the value chain, meaning that it is associated with the trafficking of wildlife products rather than the poaching of wildlife. However, the report does give an account of crime convergence linking the poaching of abalone in South Africa with local gang-related drugs markets and extortion rackets, as well as crime convergence linking the poaching of lions, pangolins and elephants in Niassa Special Reserve in northern Mozambique with illegal gemstone and gold mining and the illegal importation of pesticide poisons (for use in wildlife poaching).

Crime convergence with wildlife trafficking sees the same transporters, dealers and brokers moving multiple illicit products – for example, the illicit gemstone trade and IWT from northern Mozambique to Malawi; abalone and drugs, and rhino horn and cash-in-transit heists in South Africa; and drugs and ivory in Tanzania. At key ports and hubs, illicit wildlife products are trafficked using the same corrupt systems as other illicit commodities being trafficked through those ports or hubs – for example, tortoises, gold and heroin through Ivato International Airport in Antananarivo, and rhino horn and drugs through Maputo and OR Tambo airports.

Overall, the report details significant amounts of convergence between IWT and other types of organized crime. However, this seldom happens within one vertically integrated network. Most IWT-related crime convergence is broker or hub convergence – where either the same broker or dealer is moving or selling multiple types of illicit products, including wildlife products, or the same broker or corrupt facilitator is helping to facilitate the movement of goods through a key port or hub.

For organized wildlife crime networks to not be vertically integrated, like drugs cartels are, but rather a set of horizontally connected business entities providing goods and services to each other, means that they are not as secure as other illicit networks. This increases opportunities for law enforcement to penetrate these networks. Wildlife crime investigations can also provide easier entry points for understanding how corruption, money laundering, illicit financial flows, and smuggling through transport hubs are working for multiple crime types. Thus, deeper, and longer-term investigations into priority

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wildlife trafficking networks should be built to help understand multiple organized crime types, smuggling methods and illicit financial flows, and to identify corrupt facilitators.

This report finds that crime convergence seldom occurs at the extreme supply side (that is, the poaching end) of the wildlife crime value chain. This means that most poachers are not hardcore criminals involved in multiple types of organized crime. However, the rhino poaching illicit economy in South Africa and southern Mozambique is an exception to this trend. There is a growing body of evidence that hardened rhino poachers are also involved in cash-in-transit heists, ATM bombings and renting firearms to other criminal groups. Thus, the wildlife crime value chain and the types of people involved in it, and the kinds of crimes they are committing, need to be better understood and appropriate law enforcement action taken with the goal of dismantling the whole network, rather than simply targeting the most accessible and easily replaced people.

The report details case studies where organized wildlife crime networks have been dismantled, changing the risk dynamic for criminals, and resulting in sustainable and transformational reductions in wildlife crime. There are several critical parts to achieving this. In the simplest sense, these include, strengthening intelligence analysis, building the capacity to prioritize and target criminal networks for maximum impact, effective investigations, and ensuring effective prosecutions with deterrent sentences and financial sanctions. Strengthening courts, prosecutions capacity and the criminal justice system will have positive impacts for tackling all crime types, and for strengthening governance and rule of law more broadly.

This report finds that corruption and money laundering are fundamental to organized crime. Thus, investigating and mitigating these should be integrated into all investigations. Where hub convergence is taking place, identifying corruption and the corrupt facilitators presents an opportunity to better understand other crime types, the networks and their methods. Knowing that corruption is pervasive allows corrupt facilitators to be targeted as a focal point for gathering information and building cases. Money laundering is a common resulting crime from most organized crime, and thus should also be included in investigations, with a view to asset forfeiture and recouping the proceeds of crime.

Corruption is not only used to conduct crimes, but also to protect organized criminal groups, and it is often employed to derail investigations and prosecutions. This means that more needs to be done to identify, anticipate and manage the risks of corruption for investigations and prosecutions, as well as to build resilience to corruption within criminal justice organizations. Building resilience to corruption can be done by focusing on organizational cultures and values, inclusive and values-based leadership, selecting staff with the right qualities, attributes and values in the criminal justice system, and by developing a sense of belonging, recognition and impact among staff. Structures to identify and combat corruption also need to be built or strengthened. These should be independent, with appropriate investigations and prosecutions mandates, and safe and secure mechanisms for whistleblower access and protections.

Finally, the report makes several recommendations based on its findings and analyses. These draw on the input from and experience of the numerous people interviewed.

# Methodology

The research for this report was conducted between January 2021 and August 2022. It was carried out using two different approaches and took place in two phases. The first phase of the work involved gathering background information to understand how and where crime convergence with IWT was occurring. The approach used for this phase saw 105 interviews conducted with government officials, staff from multilateral or bilateral organizations, NGO workers and individuals in the private sector, all of whom work in roles related to combating or reducing wildlife crime or other types of organized crime, in 10 countries in Eastern and Southern Africa (see Annex). Fifteen of these interviews were with people who work on combating or reducing transnational illicit flows other than IWT. Thirty-six of the interviews were with government officials and NGO workers who are either staff of national wildlife crime units (WCUs) or work for NGOs supporting WCUs. At the end of this first phase, sites for detailed research were chosen, and a mapping report detailing this background was developed. Even after this first phase had ended, the interviews used under this first approach were continued to keep gathering as much broad background and up-to-date information on IWT-related crime convergence as possible.

The second phase, which aligned with the second approach used, involved site-level data and information gathering focused on five specific flows or hubs where we had identified a high likelihood of IWT-related crime convergence occurring. This data gathering involved a combination of local researchers and GI-TOC project staff who visited key sites and conducted interviews with government officials, NGO workers, individuals in the private sector and those involved in illicit economies. Where possible, case data was also gathered.



**FIGURE 1** Countries where in-depth interviews and focused research for this project occurred.

# INTRODUCTION

Cargo at the port of Maputo. © Corbis Saba/Corbis via Getty Images

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ocusing on crime convergence allows us to identify where crime has become systemic, entrenched and organized. Crime convergences typically occur where criminal economies, networks, and/or trafficking systems have matured enough for convergent relationships and systems to develop and become established.<sup>1</sup> While crime convergence has historically been described for other types of organized criminal activities, the focus on IWT and crime convergence is more recent. In part this is because the appreciation of the scale, value and complexity of IWT, and its recognition as a significant type of organized crime, is relatively recent.<sup>2</sup> However, detailed evidence showing crime convergence with IWT has also been lacking until recently. Furthermore, concerns have been raised that convergences between IWT and human security threats and transnational organized crime have been overstated and tend to be presented as fact, but are backed with little evidence.<sup>3</sup>

# This study in context

This study builds on previous work that more broadly identified convergence between environmental crime and other types of crime<sup>4</sup> (including terrorism, human trafficking, drug trafficking and firearms trafficking), as well as more specific work that showed the convergence of wildlife crime in Africa with drug trafficking and terrorism.<sup>5</sup> Soon after this study got underway, two detailed reports on the convergence of wildlife crime with other types of crime emerged. First, the 'Shared skies' report from the Routes Partnership describes five levels of convergence between wildlife trafficking and the trafficking of other products in the aviation industry.<sup>6</sup> Second, the Wildlife Justice Commission (WJC) report analyzes crime convergence in 12 cases that included wildlife crime, fisheries crime and timber crime.<sup>7</sup>

What sets this study apart is that it does not only focus on cases where IWT-related crime convergence is known to be occurring. Rather, it tries to identify how broadly IWT-related crime convergence is occurring across Eastern and Southern Africa, as well as where on the wildlife crime value chain convergence is occurring.

One of our more interesting discoveries is that we did not find convergence everywhere we looked. In some instances where we thought convergence was happening, with one network being involved in trafficking wildlife products as well as other products, we found that this was not the case. We did, however find that hub convergence is prevalent in all key logistics hubs that we investigated, meaning that multiple illicit products converge to be trafficked through these hubs using established corrupt systems. We also found broker convergence in all the cities and towns where we looked for it.

# The wildlife crime value chain

Wildlife crime encapsulates a range of criminal acts and actors. Generally, it describes a value chain that incorporates unlawful hunting, capturing, killing and the removal of species; processing and movement of the product through middlemen and suppliers; transportation and smuggling through domestic and international borders; and sale to the end buyer or consumer. The actors involved in IWT include poachers, middlemen, processors, transporters, traders/market sellers and consumers.<sup>8</sup>

For this analysis, it is worth dividing wildlife crime into two specific stages: the *poaching* of the animal or product, and the *trafficking* of the extracted product to market. Poaching of an animal or illegal extraction of an environmental product is typically the first step in the value chain of wildlife crime. Wildlife trafficking is conceptually and functionally different to wildlife poaching and much more akin to other forms of illicit trafficking and transnational organized crime.<sup>9</sup> Finally, corruption is central to wildlife crime and fundamental to wildlife trafficking. Although less vital for poaching, it can still play a critical role, especially for high-value wildlife products that are difficult to access.<sup>10</sup>



**FIGURE 2** Generalized wildlife crime value chain showing (for different parts of the value chain) which agencies typically have law enforcement mandate, the types of criminals involved and the kinds of corrupt activities that may occur.



Tactical Response Team officers arrest pangolin traffickers, Johannesburg, March 2021. © Luca Sola/AFP via Getty Images

Wildlife crime is generally low-risk and lightly penalized compared to other forms of serious crime, and some criminal networks test routes and methods with wildlife products before using them for higher-stakes criminal activities.<sup>11</sup> However, the current trend in wildlife crime is increasingly sophisticated criminal networks, using increasingly refined methods to source and transport a range of products across multiple borders to reach destination markets.<sup>12</sup> As the illicit trade in wildlife evolves to counter continuous strategic and tactical developments in law enforcement and anti-poaching, criminal networks have developed complex financial mechanisms to fund their activities and evade detection.<sup>13</sup> Networks are opportunistic and flexible, and are able to both adapt to changes in market demands and capitalize on opportunities to diversify products in trade.<sup>14</sup> High-value wildlife products have, in many ways, become just another valuable commodity that organized criminal networks acquire and traffic from source site to destination market. As such, once wildlife products are being trafficked, they take on the characteristics of most other illicit flows and should be viewed through that lens and included more centrally in global efforts to tackle transnational organized crime.



A shipment of heroin and methamphetamine seized in Nacala, 24 March 2021.  $\ensuremath{\mathbb{C}}$  SERNIC

riminal markets converge when organized criminal groups operate across multiple illicit businesses or purchase illicit goods or services from other criminal groups, or from the same corrupt facilitators. Criminal markets also converge with licit markets when organized criminal groups seek to conceal activities through front companies or purchase audit, banking and legal services that support criminal activity. States or sites with good infrastructure and markets but weaker institutions are more likely to serve as hubs of the illicit global economy.<sup>15</sup>

The most complete form of crime convergence occurs when an organized criminal group operates in multiple illicit markets. This can be to increase profits; diversify risks; reduce operational costs; respond to shifts in supply, demand or law enforcement; or to increase revenues. In 2021, Europol estimated that 40% of organized criminal groups operating in Europe are involved in more than one criminal activity.<sup>16</sup> Other research into organized criminal groups that traffic human beings found that they are also involved in activities such as drug trafficking, illegal fishing, environmental crimes, arms trafficking, maritime piracy and tobacco smuggling.<sup>17</sup>

Transactional convergence occurs when organized criminal groups purchase goods or services from one another. This is more likely to occur in instance where the criminal groups are not in direct competition with each other but operate in different criminal markets.<sup>18</sup> Certain licit service providers may also become known among criminal groups for providing specialist services, for example, banking, accounting, legal counsel and shipping companies (see, for example, the Panama Papers leaks, from which, in addition to wealthy clients and high-profile politicians, Europol identified 3 469 probable matches with suspected criminals on its databases).<sup>19</sup>

Facilitators play an important role in converging criminal markets, especially when they bundle licit and illicit services to help criminal groups navigate specific links in illicit commodity chains. A key role that facilitators plays is managing corruption at strategic ports, border crossings and other choke points.

Certain geographic locations are especially conducive to criminal market operations. These are typically in states with institutional weakness (as this enables criminal groups to corrupt or evade government officials) but with good transportation infrastructure and services, and sufficiently large licit economies to conceal illicit activity.<sup>20</sup> Many of the major hubs in the illicit global economy are also hubs of the licit economy, for example, Bangkok, Dubai and Rotterdam. In Africa, organized criminality is concentrated in the region's largest economies: Ethiopia, Kenya, Nigeria and South Africa, which also feature the most developed transportation hubs.<sup>21</sup>

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# Crime convergence with illegal wildlife trade

#### **Early examples**

Evidence for the convergence of wildlife crime with other crime types has been growing over the last decade. One of the earliest IWT-related crime convergence cases saw 31 members of the Rathkeale Rovers, an Irish organized criminal gang involved in multiple criminal markets across Europe,<sup>22</sup> arrested for crimes involving the theft and trafficking of rhino horns between 2010 and 2013.<sup>23</sup> In the Czech Republic, an investigation launched in 2013 into Vietnamese criminal groups found that they were involved in trafficking both high-value wildlife products (including rhino horn, tiger body parts and bear bile) as well as precursors for synthetic narcotics.<sup>24</sup>

At the same time, similar evidence has been collected as part of the US Drug Enforcement Administration (US-DEA) investigation into the Akasha organized crime family in Kenya for drug trafficking.<sup>25</sup> The Akasha family has a history in drug trafficking going back at least one generation. They allegedly became involved in ivory trafficking after entering into a trucking business with Feisal Ali Mohammed, a man presented by Kenyan prosecutors and the media as an ivory trafficking 'baron' with links to the Kromah cartel. In 2016, Ali was sentenced to 20 years in prison in connection with the seizure of two tonnes of ivory. That conviction was subsequently overturned after it was found to be 'unconstitutional'



and based on questionable or insufficient evidence.<sup>26</sup> Investigators believe that the family then became more vested in both ivory and rhino horn trafficking, financing purchases and helping with shipping rhino horn from Mozambique to Kenya and then to Asian markets.<sup>27</sup> In an undercover recording made on 25 April 2014, Ibrahim Akasha, the younger of the Akasha brothers, discusses selling ivory: 'I have ivory here from Botswana, from Mozambique, from all over. I have a lot here and it sells ... I have ivory, rhino horn.'<sup>28</sup> The Akashas were indicted for heroin trafficking, weapons offences and corruption, but are

Kenyan national Feisal Mohammed, convicted for owning a supply of more than 2 000 kilograms of ivory, is acquitted of all charges by a Kenyan court, August 2018. © Andrew Kasuku/ AFP via Getty Images believed to be linked to 13 large ivory seizures since 2013, with a combined weight of over 30 tonnes.  $^{\mbox{\tiny 29}}$ 

#### A growing body of evidence

In 2015, a growing number of INTERPOL national offices were reporting that environmental crimes were increasingly associated with other crime types, and environmental crime was becoming associated with organized criminal groups. In 2016, Interpol and the UN Environment Programme (UNEP) found that of 69 INTERPOL

member countries, 84% had observed a convergence between environmental crime and other types of serious crime. The reported convergences included corruption (42%), counterfeiting (39%), drug trafficking (36%), cybercrime (23%) and financial crime (17%).<sup>30</sup>

An unpublished, classified study of data from the US intelligence community found that two-thirds of the actors and networks associated with wildlife trafficking in East Africa overlapped with narcotics networks, along with other priority threats. The study promoted the utility of merging data across multiple sectors and commodities to identify interconnections that may otherwise be missed and taking a 'commodity-agnostic' approach to tackling criminal networks.<sup>31</sup>

An academic study published in 2020 analyzed 106 transnational environmental crime cases (including wildlife, timber and natural minerals smuggling) with links to other serious crimes to identify the main types of convergence.<sup>32</sup> The most common trend identified was criminal groups diversifying into environmental crime in response to changing conditions – some groups transformed with complete 'career shifts', while others chose to dominate a market. The second most common form was criminal groups that maintained flexible operations across multiple illicit commodities and used their expert knowledge to opportunistically become involved in environmental crimes, such as their established access to strategic smuggling routes. To a lesser extent, convergence was found between licit and illicit markets, with the use of legitimate companies to camouflage criminal activities.

The WJC's in-depth analysis of 12 cases of convergence found that convergence occurs:<sup>33</sup>

- Opportunistically on an ad-hoc basis (such as heroin trafficking in the Kromah case);
- As a 'career shift' in response to changing conditions;
- As part of a diversification strategy to maintain flexible criminal operations;
- Transactionally when criminal groups in different markets purchase or exchange goods or services;
- Where the crimes are embedded to such an extent that they are inextricably linked, and neither could take place without the support of the other (for example, where systemic corruption facilitates the trafficking of a high-value product through a key port); or
- Where a criminal group has access to a key transport route and diversifies into other types of smuggling.

The WJC highlighted that corruption and bribery were present in all 12 cases, and thus corruption should not be viewed as a convergent crime, but rather as a common underlying factor present in almost every case. They also pointed out that money laundering is a common resulting crime because of the profits that are made from wildlife crime.

A 2021 TRAFFIC report analyzed 1 321 wildlife seizure records from 2004 to 2019, drawn from its Wildlife Trade Information System, which had links with other forms of crime and/or the seizure of other commodities. The most common convergences found were corruption (53%), illicit drugs (14%), fraud (13%), firearms (9%) and money laundering (6%).<sup>34</sup>

Finally, reviewing this literature shows how increased globalization and international trade have enabled criminal organizations to pursue new global illicit markets. Criminal groups are often benefiting from the same technology, transportation and infrastructure developments that enable legitimate industries to conduct business across borders. With wildlife crime, criminal groups may also be motivated to diversify their activities by the potential for high profits combined with relatively weaker legislation and lower criminal penalties for these activities in many countries compared to other more traditional crimes, such as drug trafficking.

# Case studies – dismantling transnational organized wildlife crime networks

These cases resulted in the dismantling of two of the largest wildlife trafficking networks operating in sub-Saharan Africa over the last decade. Both offer valuable

#### The Kromah cartel

Based out of Uganda, the Kromah cartel gained notoriety as the first major wildlife crime group to have its leaders extradited to the US specifically to face wildlife trafficking charges, although the indictment also included charges of conspiracy to possess and distribute 10 kilograms of heroin.<sup>35</sup> The investigation that led to this indictment was coordinated by the US Fish and Wildlife Service (USFWS) Office of Law Enforcement, working in tandem with the Uganda Wildlife Authority (UWA) and the Natural Resource Conservation Network (NRCN), a Ugandan NGO that supports wildlife crime investigations and prosecutions as well as anti-corruption work.<sup>36</sup>

The genesis for this US-coordinated investigation and the indictment of the Kromah group was twofold. First, the Akasha case had prompted a closer working relationship between the US-DEA and the USFWS Office of Law Enforcement, even though the charges in that case related to drug trafficking, weapons and corruption, and not wildlife trafficking.<sup>37</sup> Second, despite Moazu Kromah and his sons having been arrested in February 2017 with 1 303 kilograms of ivory in their Kampala house, the case was not progressing through the Ugandan court system and concerns of corruption hindering the case were being raised.<sup>38</sup> This was perhaps not surprising, given that an internal INTERPOL document referring to Kromah was found in the house where he



was arrested.<sup>39</sup> At the time, the UWA, who made the arrest, and the NRCN described Kromah as being at 'the centre

Kromah at Entebbe airport, Uganda, before being extradited to the United States. Photo: National Resource Conservation Network lessons for investigating and prosecuting organized wildlife crime networks.

of a vast ring of organized criminals ... connected to at least four other major criminal syndicates ... supplying the biggest wildlife criminal syndicates worldwide.<sup>40</sup>

One of the investigators present at Kromah's 2017 arrest recalled, 'Immediately, he was arrested, there in his house, he offered me US\$15 000 to help make the case go away. He knew that we had everything.<sup>441</sup>

The Kromah investigation unfolded using an undercover source who penetrated the network and documented the selling and shipping of 10 tonnes of ivory and 190 kilograms of rhino horn, as well as international payments, some of which went through US financial institutions.<sup>42</sup> Four leaders of the cartel were indicted for the wildlife charges, and only two of these for the heroin-related charges. Moazu Kromah, a Liberian national, was arrested in Kampala and expelled from Uganda to the US in June 2019. In March 2022, Kromah pled guilty to three wildlife trafficking charges committed in Africa but transacted in US dollars, and on 18 August 2022, he was finally sentenced to 63 months in jail - including the 42 months already served.<sup>43</sup> Amara Cherif, a Guinean national, was arrested in Senegal shortly after Kromah was arrested. Cherif was also extradited to the US and has entered a plea agreement on the wildlife trafficking charges; at time of writing, he is still awaiting sentencing. Mansur Mohamed Surur and Abdi Hussein Ahmed, both Kenyan nationals, were charged on the same indictment with the same wildlife and money laundering offences, in addition to a charge alleging conspiracy to possess and distribute 10 kilograms of heroin to a New York buyer. They were separately arrested in Kenya in 2021 and 2022, respectively. Surur was extradited to the US in January 2022 and has entered a plea agreement. Ahmed was extradited to the US in September 2022 and awaits trial (at time of writing).<sup>44</sup> A fifth Kenyan national, Badru Abdul Aziz Saleh, was added to the indictment on the same

conspiracy to traffic heroin offence, but with no wildlife offences included. Saleh has also been extradited to the US and awaits trial.

The timeline of the investigation, and the pattern of charges, suggests that the heroin trafficking offences were an opportunistic add-on rather than an example of a network that was consistently trafficking both wildlife products and drugs.

However, since the 2019 indictment of the Kromah cartel leaders, other information has come to light, suggesting that Kromah and his co-conspirators received extremely light sentences. The Kromah network has now been linked to over 100 ivory seizures since mid-2012, totalling approximately 117.2 tonnes.<sup>45</sup> This information comes from Kenyan court records from ongoing prosecutions for ivory trafficking, documents and phone records from Kromah's 2017 Kampala arrest, and DNA analyses on 49 different ivory seizures between 2012 and 2019. The DNA analyses repeatedly found tusks from the same individual or close relatives in separate seizures that were containerized in, and transited through, common African ports, suggesting considerable connectivity between traffickers operating in different ports.<sup>46</sup> Documents found in Kromah's house in 2017 listed previous shipments totalling thousands of kilogrammes of ivory and rhino horn, with one of the buyers listed as Vixay Keosavang of Laos, wanted by

the USFWS with a US\$1 million reward, and Vannaseng Trading, another Laotian trafficking operation, which illegally provided Moazu Kromah with US\$190 000 between 2014 and 2017.<sup>47</sup> Kromah has also been linked as a major supplier to the Chinese Shuidong network, and to the recently arrested Malaysian national Teo Boon Ching, who was a buyer and specialist transporter for Vietnamese and Chinese syndicates.<sup>48</sup>

This in-depth review of the Kromah case reveals a key point: Despite probably being the largest ivory trafficking syndicate across Eastern, Central and West Africa, the Kromah cartel did not engage in significant crime convergence. It also raises two questions: First, the investigative approach of focusing on an undercover source to gather evidence to build a case and only presenting that evidence and not the full extent of their criminal activities may have resulted in Kromah receiving a far lighter sentence than hoped for - could it have been done differently? Second, the experiment of indicting the network leaders in US courts has resulted in plea bargains and sentences that are far lower than they would have received in African courts. However, there are very real concerns that high level criminals such as Kromah have corrupt support that allows them to evade justice in African courts. What can be done better for African courts to be more robust and deliver their deterrent sentences?



**FIGURE 3** Social-network analysis from Kromah's phone seized in 2017 reveals him to be part of a large transnational network, showing him at the centre of 495 contacts of which 49% are in East Africa, 36% in West Africa, 9% in South East Asia, 3% in North America, 1% in Europe and 1% in the Middle East and North Africa.

SOURCE: Jacopo Costa, Social network analysis applied to illegal wildlife trade between East Africa and Southeast Asia, Working Paper 35, Basel Institute on Governance, March 2021

#### The Lin network

The Lin network was one of the largest wildlife trafficking groups to have operated in Southern Africa. Based in Malawi, they bought pangolin scales, ivory and rhino horn from across the region and exported them directly to major wildlife traders in Asia.49 The origins of the ivory smuggling network can be traced to the 1980s, with the most recent network leader, a Chinese national named Lin Yun Hua, arriving in Malawi in 2014.<sup>50</sup> Lin was also involved in buying gemstones, both licit and illicit from Malawi and Mozambique.<sup>51</sup> (Illicit gemstones are often smuggled across the border into Malawi from artisanal mining sites in northern Mozambique.)<sup>52</sup> Lin was known to purchase both valuable stones as well as bulk low-value stones (for example, rose quartz) which are typically bought by weight in sacks and then exported to Asia in containers.53

In 2017, 330 kilograms of ivory were discovered in Bangkok airport, shipped from Malawi, hidden in sacks of low-quality gemstones.<sup>54</sup> While this case could not be explicitly tied to Lin, local gemstone dealers repute that he was a close associate of Gambian national and Malawian resident Madi Conteh, who was arrested in connection with this shipment.<sup>55</sup>

As a Malawian gemstone trader who was close to Lin put it: 'There were times when Lin would buy rose quartz and other low-grade gems for a not-so-good price. I never understood why. He was so careful with price for other gems. When Conteh was arrested, it made some sense, because we knew Lin also bought ivory and lion claws.'<sup>56</sup>

Lin was arrested in August 2019 on rhino horn trafficking charges, after a three-month manhunt. He faced trial along with 14 of his gang members, 10 Chinese

nationals and four Malawian nationals, all of whom were convicted. Lin was convicted for wildlife trafficking and money laundering offences and was sentenced to 14 years in prison.<sup>57</sup> The court cases lasted two years and severely tested the integrity of Malawi's criminal justice system. Threats to the trial came from corrupt approaches, high-level interference, and implicit threats of violence to key witnesses.<sup>58</sup> As a Malawian government investigator involved in the case revealed, 'One of his associates offered me US\$30 000. They were trying everything to stop the case.'59 These threats were addressed by providing security for key witnesses, private sector prosecutors were assigned to support the government prosecutors, high-level court monitors were present in court for every session (including ambassadors from other countries on key occasions) and the case was continually kept in the press.

While in the end there was no conclusive evidence of crime convergence with the Lin network (beyond money laundering, which we consider to be a common resulting crime from wildlife trafficking), information on the convergence between the illicit gemstone trade and wildlife trafficking from Mozambique to Malawi has become pervasive and deserves more investigation.<sup>60</sup>

Malawi's ability to successfully investigate, prosecute and convict Yunhua Lin is the result of a concerted effort, led by the Department of National Parks and Wildlife (DNPW), to strengthen their internal capacity to investigate and build cases against organized wildlife traffickers, using operational principles reminiscent of major organized crime investigations units.<sup>61</sup> The final, pivotal part was active courtroom monitoring, which included co-prosecution with the state, high-profile court monitors and press engagement.<sup>62</sup>

## A simplified model of convergence

# Common factors: Corruption and money laundering

Corruption was mentioned as a key part of the criminal process in more than 80% of the interviews conducted. Generally, corruption supports the existence of organized crime, because corrupt public officials protect organized criminal groups from law enforcement and facilitate the movement of illicit goods across borders.<sup>63</sup>

Corruption occurs at multiple points along the wildlife crime value chain. Although this can be at the site of poaching or illegal extraction, it almost always occurs during the transport and trafficking process, when illegal wildlife products are moved to destination markets, through checkpoints and often across international borders. It also often occurs at the market site where the illegal products are promoted and sold. At another level, corruption often occurs around the investigation, prosecution and sometimes the judicial processes related to tackling organized wildlife crime networks. This can make it challenging to successfully convict the organized criminals who orchestrate poaching and trafficking networks.<sup>64</sup>

Illicit financial flows and money laundering were apparent in all the cases that we directly researched, or followed up on, for this project. However, financial crimes were only mentioned by the experienced investigators we interviewed, and wildlife criminals are seldom charged with money laundering offences. However, this is changing, as exemplified by the Kromah and Lin cases (see the case studies above) and, more recently, by a case in South Africa in which two field rangers in the Kruger National Park were arrested on money laundering and corruption charges.<sup>65</sup> These field rangers had been providing tactical information to rhino poaching syndicates, but the money laundering charges were easier to pursue than charges related to wildlife crime and opened a mechanism for asset seizure.<sup>66</sup>

Given the prevalence of corruption and money laundering in all major wildlife crime cases, we chose not to include them as convergent crime types. Rather, we have focused on convergence with other illegal products and other crime types.

Our research for this report, and the cases that we mapped and analyzed from Eastern and Southern Africa, highlighted three main types of convergence that we use to characterize our analysis throughout this report. Although there is some overlap between these three types of convergence, the classification system helps to understand exactly what is happening with these overlapping criminal economies and what actions can be taken in response.

# Defining convergence types

#### **Network convergence**

When the same organized criminal networks are trading in multiple commodities.

We see network convergence in the Rathkeale Rovers, Czech Republic, Akasha, Kromah and Lin cases described above, as well as in the gangs and networks involved in the illicit abalone economy in South Africa.

#### Hub convergence

When multiple commodities (being trafficked by different networks) pass through a critical transport hub or some other bottleneck, typically with the support of a corrupt facilitator or broker.

We see hub convergence at key transport hubs and ports, often in countries or cities with good transport infrastructure where significant amounts of licit trade are occurring (for example, the main airports and seaports in Kenya and South Africa, and in European cities like Rotterdam).

#### **Broker convergence**

When local brokers or dealers source multiple types of products to sell on into various criminal economies. This typically occurs lower down in the criminal value chain, where products are sourced. We separate this from hub convergence, which is specific to a geographic location or transport hub.

We see broker convergence in cities known for their criminal markets and also sites at which multiple products sought for criminal markets are found.



Hawston beach, South Africa, is one of several sites of abalone smuggling in the Western Cape. © Fabio Baldini/Shutterstock

e define network convergence as the same organized criminal networks trading in multiple commodities. This was the primary convergence type we were looking for, but we found very few examples of it.

# **Abalone trafficking in Southern Africa**

The abalone illicit economy has been described in numerous detailed reports and in the 2018 book *Poacher: Confessions from the Abalone Underworld.*<sup>67</sup> For our research for this report, we specifically focused on the parts of this illicit economy where crime convergence occurs and tried to understand and describe that convergence.

South Africa is the global hotspot for abalone poaching. Abalone are marine molluscs (snails) mostly found in cold coastal waters. They have been harvested for centuries for food and are used as decorative shells. While most global demand is now met by farmed abalone, there is still a preference for wild-caught abalone in the East Asian market.<sup>68</sup> Abalone is traded variously live, fresh, frozen, canned and dried. Packaging and price differ according to an elaborate system of grading based on country of origin, species and size.<sup>69</sup>

The endemic species found in South African waters is *Haliotis midae*, locally known as perlemoen. It is both farmed and illegally traded as wild-harvested abalone. Wild South African abalone is one of the most expensive varieties, after premium Japanese abalone, because it is caught in the wild, is large and dries well.<sup>70</sup> The South African abalone illicit economy is more than 30 years old. This criminal economy has matured and evolved over time into a structured, lucrative and sometimes violent system that includes multiple convergences and, in some cases, value exchanges where abalone are traded for other goods or services.

South Africa's illicit abalone economy can be divided into three stages.<sup>71</sup> First, abalone are poached from coastal waters, bought, collected and stored. This stage is largely overseen by local criminal groups in the coastal areas where the abalone is poached. Next, the refrigerated wet abalone are moved to processing facilities, typically remote farms in the interior of South Africa, where they are dried in a complicated process that has a significant impact on the quality of the product and its price. This process is overseen by the abalone syndicates who control the trade in South Africa, but the drying facilities are often managed by local criminal networks.

Finally, the dried abalone are then transferred to the main abalone syndicates who arrange for their final transport out of South Africa. In the past, abalone were smuggled directly from South Africa to Hong Kong for onward sale in East Asia. However, over the last decade, this has changed, and most abalone are now exported through neighbouring countries in the Southern African Development Community (SADC) region, from where they are air freighted to Hong Kong.<sup>72</sup>

#### Crime convergence in South Africa's abalone illicit economy: Supply side

Poached abalone is taken from the sea by divers from marginalized coastal fishing communities in the Western and Eastern Cape provinces of South Africa.<sup>73</sup> This poaching economy has largely fallen under the control of gangs who manage multiple criminal economies in these coastal communities, including the local drugs economy, illegal firearms market and protection rackets (see the case study below).<sup>74</sup> These gangs set the price for the abalone that they purchase and use criminal violence to maintain this price and to exclude outside buyers from procuring abalone directly from the divers operating in their geographic area. As one interviewed abalone diver put it, 'Better the devil you know. We sell to the gangs we know, because when new gangs arrive there is often violence.'

# The crime boss who built an empire on abalone and drugs

Ernie 'Lastig' Solomon was a South African gang boss from the Western Cape whose decades-long rule over a vast criminal empire came to an end when he was assassinated in Johannesburg in November 2020. Solomon's Terrible Josters gang reportedly controlled drug retail markets in parts of Cape Town and the Cape south coast, and manufactured meth and trafficked other illicit substances. This range of criminal activities was enabled by numerous individuals, from farmers who rented him locations for meth labs to Russian, Chinese and other South African criminal figures.<sup>75</sup>

A well-placed gang source described him as 'a violent opportunist who almost single-handedly pulled abalone into South Africa's criminal economy'.<sup>76</sup> Originally from Hawston, a fishing community, now abalone-poaching hotspot, on the Cape south coast, Lastig started in the 1990s by using violence and threats of violence to extort a tax from abalone and crayfish divers for every catch.<sup>77</sup> He used his earnings to buy drugs for distribution in the area, later expanding into drug manufacturing, extortion and criminal violence more broadly across the Western Cape, and then into cigarette and alcohol trafficking during South Africa's COVID-19 lockdowns.<sup>78</sup>

Lastig opportunistically moved into the abalone criminal economy just as it was booming. His simple business model was to control the source of abalone, exchange abalone for methamphetamine precursors (for a large markup in value), and then manufacture the meth, and distribute and sell it into the Western Cape's socially and economically impoverished communities. This model provided two sources of profit and allowed rapid expansion into abalone-fishing communities across the Cape. Recognizing the opportunity, other gangs followed and the profits from abalone have helped to fund the growth in gang-related control of multiple criminal economies in the Western Cape – among others, the drugs economy,<sup>79</sup> weapons markets<sup>80</sup> and violent extortion.<sup>81</sup>

Although there are stories of abalone divers receiving drugs in exchange for their catch,<sup>82</sup> and of divers working to pay off drug-related debts to the gangs,<sup>83</sup> most of the divers prefer to be paid cash for their catch.<sup>84</sup> Prices dropped during the COVID-19 pandemic to between R400 and

R600 per kilogram,<sup>85</sup> but they have since rebounded to between R700 and R1 000 per kilogram (February 2022).<sup>86</sup> The wet abalone are stored locally in refrigerators before being sold and moved. Home owners local to the main dive sites are often paid a small rental fee to keep large refrigerators on their property.<sup>87</sup>

## Case study - assassinations for abalone

Interviews with Western Cape gang members revealed several mentions of Western Cape gangs making use of hitmen from Gauteng-based Chinese criminal organizations to carry out assassinations on their behalf, with payment being made by the gangs in abalone. Only one of these references included details that were substantiated by multiple interviews. In this event, a Cape Town gang leader wanted a criminal rival living in Durban to be assassinated. He paid another local Western Cape gang to do this on his behalf, paying them in abalone. The second gang then exchanged the abalone with a Gauteng-based Chinese criminal group with whom they had an existing abalone-trading relationship. This Chinese group provided base chemicals for drug manufacturing (ephedrine) and undertook the assassination as their part of the exchange.<sup>88</sup>

Typically, the local gangs then sell or exchange the wet abalone directly to Chinese buyers. In Cape Town, the wet abalone can be sold to Chinese buyers for R2 000–R2 200 per kilogram.<sup>89</sup> However, at this stage, abalone are often exchanged for drugs and sometimes other criminal services. The drugs exchanged are mostly synthetic drugs, including methamphetamine (known locally as tik), methaqualone (used to produce Mandrax) and sometimes cocaine (see the case study 'abalone for cocaine').<sup>90</sup> The criminal services sometimes exchanged include providing stolen vehicles or property (for example, remote farms or smallholdings) for drying the abalone. In some instances, criminal violence has also been exchanged for abalone (see the case study 'assassinations for abalone').<sup>91</sup>

## Case study - abalone for cocaine

Southern Africa – and South Africa, in particular – is playing a growing role in the global cocaine trafficking market, with increasing quantities of cocaine being trafficked through the region. At the same time, there is a growing domestic cocaine market in South Africa. Chinese criminal networks in South Africa were well placed to take advantage of this opportunity. They already play an importation and wholesale distribution role in South Africa's domestic synthetic drugs markets and are involved in the logistics side of the illicit abalone trade. Thus, they are used to moving and protecting large shipments of illicit goods nationally within South Africa. Interviewees from Western Cape gangs told us that the Chinese abalone buyers now also offer cocaine in exchange for dried abalone.<sup>92</sup> This was substantiated by both local and international law enforcement officials who spoke of Chinese criminal networks in South Africa buying quantities of cocaine on landing in South Africa, both for supply to local markets and, increasingly, for export to other international markets.<sup>93</sup>

One interviewee from a criminal organization that buys wet abalone from poachers and then dries it and sells it to the Chinese abalone syndicates, described a system whereby abalone is exchanged for cocaine: 'We exchanged 1.5 tonnes of [dried] abalone for coke and ephedrine to make *tik*. The abalone went on a truck to Gauteng, and we received the coke in Cape Town. It cost nearly R3 million in bribes and security for transport. We cut the coke to make up that cost.'<sup>94</sup>

# Crime convergence in South Africa's abalone illicit economy: Distribution

Chinese criminal syndicates operating in South Africa and neighbouring countries control the purchasing of dried abalone and its smuggling to Hong Kong. Key figures in these same syndicates also operate legal import/export companies, which are used to import legal and illegal products into South Africa. These goods are provided by the abalone buyers in Hong Kong and are used as a value exchange for the smuggled abalone, negating the need to move money from Hong Kong to South Africa to purchase the dried abalone in South Africa. These shipments back to South Africa often include precursors for synthetic drugs, which are then exchanged directly with the gangs for abalone.<sup>95</sup> Dried abalone is air-freighted from Southern Africa to Hong Kong. In the 1990s and early 2000s, most abalone was smuggled directly out of South Africa to Hong Kong. However, this has changed with abalone now being exported from other countries in the SADC region. Abalone is transported across South Africa's borders and has been exported from the Democratic Republic of Congo (DRC), Mozambique, Namibia, Zambia and Zimbabwe. Note that exporting abalone from any SADC country other than South Africa is not illegal, as *H. midae* is not CITES-listed. Thus, once South African abalone is in a neighbouring country, and if all of the correct permitting and export procedures are followed, it has in effect become a legal product for export. However, sometimes the shipments are mis-declared on import or export and then seized.<sup>96</sup>



FIGURE 4 Global routes of illicit H. midae trade and associated global drug flows.

Law enforcement agencies in Mozambique, Namibia and Zambia are starting to pay attention to the trafficking of abalone through their countries, as related intelligence is showing them that the same companies and individuals involved in exporting abalone are often involved in exporting other illegal wildlife products or in other illicit activities.<sup>97</sup> Canine sniffer-dog units at Maputo International Airport have recently been trained to detect abalone as well as other illicit wildlife products.<sup>98</sup> Regional bodies are also working to ensure that the abalone trade is raised in regional forums for tackling  $\rm IWT.^{99}$ 

Abalone is also still smuggled out of South Africa by air. Our research for this report has shown that there are well-established corrupt systems at South Africa's main cargo airport in Johannesburg to facilitate the export of dried abalone, along with rhino horn, drugs and other products (see the section on OR Tambo International Airport under Hub convergence).

Year	Dried abalone (kg)	Frozen abalone (kg)
2019	157 855	1 090
2020	91 983	2 935
Jan-Mar 2021	22 032	214

FIGURE 5 Abalone declared on arrival into Hong Kong SAR with origin as Zambia.

# IWT and the heroin economy

Over the last few years – in particular, since the 2018 London IWT conference – reports, policy briefings and media articles are more commonly referring to links between IWT and drug trafficking.<sup>100</sup> However, are these spurious claims or is there real evidence for this?

A global analysis of the convergence of environmental crime with other serious crimes found that most environmental crime cases with links to drugs originated in South America (46%).<sup>101</sup> Our background research for this report, including internet searches and interviews, found very few substantiated cases from Eastern and Southern Africa where there was network convergence between IWT and drug trafficking.<sup>102</sup> Specific cases were:

- The abalone illicit economy and drug distribution and trafficking convergences, as discussed immediately above;
- The Akasha network, described in the background section above, a primarily heroin trafficking network linked to ivory trafficking through a transport business, which boasted about having access to rhino horn; and
- The Kromah network, described in the case study, primarily an ivory and rhino horn trafficking network, which appeared to opportunistically engage in heroin trafficking.

For this report we explicitly set out to find examples of network convergence where either a primarily heroin trafficking network was involved in IWT, or a network primarily complicit in IWT was involved in heroin trafficking. During the background work for the mapping report, we asked interviewees about crime convergence between illicit-drug economies (especially heroin) and IWT in Madagascar, Malawi, Mozambique, Namibia, South Africa, Tanzania, Uganda and Zambia. We focused on heroin because this is a trade with a decades-long history in many countries in the region.<sup>103</sup> Furthermore, the heroin trade makes use of centuries-old trading relationships centred on the Swahili coast, which have included ivory trade on at least two occasions in the past – the eighteenth and nineteenth centuries and the 1980s and 1990s.<sup>104</sup> Thus, the networks involved in heroin trafficking are often well established and may be able to diversify into other products more easily.

We did not find any other clear or substantiated examples of network convergence involving heroin trafficking and IWT. We found cases of hub convergence, where heroin trafficking and IWT overlap, at Maputo airport in Mozambique (see 'Maputo airport trafficking' below) and at Ivato airport in Antananarivo, Madagascar (see section below). We found numerous opportunistic cases of convergence, where low-level traffickers transporting goods across borders, or lowlevel brokers in cities, mentioned that they could find both heroin and wildlife. These cases are covered in the section 'IWT, heroin and other products' below. Finally, we received fairly good reports of network convergence between heroin trafficking and IWT in Uganda, but although we undertook detailed follow-up research, we were unable to substantiate this network convergence - see 'Ugandan brokers with multiple illicit products'.

# Case study – Ugandan brokers with multiple illicit products

Following up on information suggesting a specific convergence of heroin and ivory trafficking in Kampala, we undertook detailed research into IWT and drug trafficking convergence in Uganda. A Ugandan GI-TOC analyst and researcher undertook the primary research, interviewing23 people and gathering court records. The interviewees included police officers, counter-narcotics officers, wildlife officials, anti-corruption officials and lawyers, NGO workers and investigative reporters. The fieldwork was supported and corroborated by 12 additional interviews undertaken by a GI-TOC senior analyst. These interviews were conducted with wildlife crime specialists from NGOs, advisors supporting the Ugandan wildlife crime unit (WCU), private sector security people, and the USFWS and US-DEA regional attachés.<sup>105</sup>

We found no evidence of network convergence between heroin trafficking and IWT in Uganda. We did, however, find broker convergence and reports of hub convergence. The broker convergence reported is low level, involving: brokers in Kampala who look for buyers for ivory and pangolin scales, which they have trafficked from more remote areas, also speak about being able to procure minerals and sometimes small quantities of drugs. Broker convergence was also reported between gold and ivory trafficking, with dealers in the border towns of Arua and Goli (on the Ugandan border with the DRC) trafficking both ivory and gold from the DRC and the Central African Republic (CAR) into Uganda, sometimes for sale in Kampala and sometimes for onward trafficking into Kenya via Busia or Malaba border points.

Case records confirm this picture. The NRCN, a Ugandan counter wildlife crime and anticorruption NGO, have kept case records related to wildlife crime since 2015. None of the 549 cases have involved prosecutions for both wildlife and drugs trafficking (see Figure 6). In a few instances, wildlife crime defendants have been charged with drug possession for small quantities of drugs. Drug seizure records from the Ugandan police force show the same trend: large numbers of arrests with small quantities seized (see Figure 7).

Year	Cases	Arrested suspects	Conviction rate
2015	16	33	63%
2016	46	94	90%
2017	72	160	95%
2018	98	182	92%
2019	110	195	99%
2020	94	157	99%
2021	108	166	100%
2022 (to Feb)	5	9	
Totals	549	996	

**FIGURE 6** Case numbers, arrests and conviction figures for wildlife crime cases that the NRCN has supported in Uganda, 2015–2022.

SOURCE: NRCN records

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NRCN and UWA officers familiar with the Moazu Kromah case stressed that Kromah had developed expansive informal networks, based on social connections. He used these informal networks to buy wildlife products from local dealers and poachers, and to work with local people who helped with temporary storage and safe transportation of these products

to Kampala. Intelligence from the case suggests that there is a high likelihood that these same loose networks, the connection of middlemen and transporters, serve as the distributors for heroin in Uganda.<sup>106</sup>

The head of anti-narcotics in Uganda also emphasized the close relationship between drugs and wildlife at the broker level. According to the Commissioner, while the organized crime groups importing drugs into Uganda are different from those exporting wildlife products from Uganda, brokers or middlemen in Kampala deal in multiple illicit products, using motorcycle and vehicle spare-parts shops, as well as hotels, as fronts for their businesses. These brokers/middlemen connect buyers, sellers and traffickers and use their legal businesses to collect and distribute illicit goods, including drugs and wildlife products.<sup>107</sup>

Finally, it is worth noting that in recent years, analysts and international law enforcement officials have observed a change in drug trafficking patterns through Uganda.<sup>108</sup> Heroin and cocaine landing in Kenya and Tanzania is trafficked overland and via Lake Victoria into Uganda, variously feeding a growing domestic market, supplied onward to regional markets, or with Uganda used as a hub for onward transport to larger markets in Europe and North America.<sup>109</sup> This includes an increase in heroin moving by air to India (see 'Maputo airport trafficking').<sup>110</sup>

Year	Cases	Suspects arrested	Drugs seized at Entebbe airport (kg)			
			Heroin	Cocaine	Meth	Cannabis
2017	2 854	2 264	45.46	12.78	4.3	0
2018	2 890	3 590	31.75	3.0	0.69	5.93
2019	2 750	3 738	123.07	2.9	0	1.05
2020	1 714	2 391	29.44	0	0	8.11
2021	1 668	1 774	21.07	17.34	0.66	0.63

**FIGURE 7** Drug-related arrests nationally, and drug seizures at Entebbe airport, 2017–2021. SOURCE: Uganda Police Force annual crime reports, https://www.upf.go.ug/annual-crime-report-20.

#### IWT, heroin and other products – lowlevel overlaps

From the rest of our background research, including all the interviews, we did not find any other cases of network convergence with IWT and the heroin economy. We did find a few low-level examples of broker and hub-type convergence between IWT and the heroin trade.

#### Malawi

Heroin and cocaine trafficking through Malawi is on the rise.<sup>111</sup> Heroin moves in from Mozambique to the east, some intended for the small domestic market, some exiting from the main international airport in Lilongwe using mules bound for Europe, and some moving overland to South Africa.<sup>112</sup> Drug trafficking through Malawi to Europe is heavily connected to West African gangs resident in Malawi.<sup>113</sup> Our research for this report did not find any major crime convergence between the heroin economy in Malawi and IWT. However, during our research into overlaps between the gemstone trade and IWT, we twice came across brokers in Lilongwe who had both heroin and cocaine on offer. One occasion involved a Tanzanian and a Zambian broker who reside in Malawi. A reputable Malawian gemstone trader who knows these brokers said of them, 'They are stone dealers, but they are conmen. They will do anything for money. They have connections in Nacala and Maputo and bring drugs from Mozambique. [The broker from Zambia] says he has one kilogram of cocaine right now. They are well connected, [The broker from Zambia] was married to a police officer, but not any more. They will deal in anything. If you want wildlife, they will find it.'114 The second occasion involved a Malawian broker who sold gems in Lilongwe but was also known to import drugs from Mozambique, and was given as a contact who could provide wildlife products. This broker owns a second-hand Japanese car import and sales business in Lilongwe – a secure front for regularly moving vehicles in from Mozambique, and for bank deposits of cash.

#### Northern Mozambique

Heroin has been trafficked through northern Mozambique since at least the mid-1990s.<sup>115</sup> Previous GI-TOC research, including numerous interviews with people involved in both the IWT and heroin illicit economies in northern Mozambique, failed to find any crime convergence between them.<sup>116</sup> Similarly, interviews and research for this report failed to find any crime convergence between IWT and the heroin economy in northern Mozambique. The only potential overlaps may be hub convergence at Pemba and Nampula airports. Research for this report, and previous GI-TOC work, detailed corrupt systems that support the trafficking of numerous products through these airports (see below). In the past, rhino horn has been trafficked through Pemba airport,<sup>117</sup> and with heroin being trafficked through other airports in the region by mules,<sup>118</sup> there is no reason to suscept that heroin is not leaving Pemba and Nampula airports this way as well. For completeness, previous work has flagged that a well-known, long-standing and major drug trafficker based in Pemba, Mozambique made overtures to purchase ivory in 2014 at the height of the elephant poaching crisis in northern Mozambique.<sup>119</sup> However, for unknown reasons he never followed through with these purchases and has never again been associated with the ivory trade.

#### Tanzania

Recent research on Tanzania's heroin economy found that it is substantially more complicated than previously believed.<sup>120</sup> The decades of impunity that traffickers have enjoyed mean that there are now multiple entry points, and many competing or concurrent channels of supply. Heroin is distributed in Tanzania with various levels of purity, volume and regularity, and the market is run by groups and networks of various sizes, with few barriers to entry for aspiring traffickers and dealers. Heroin and cocaine leave with couriers by air directly to Europe and are shipped in DHL packages. This transhipment is linked to West African and Latin American gangs.<sup>121</sup> Wildlife crime investigators in Tanzania concur that convergence happens at a local level in the movement and distribution of both heroin and wildlife products.<sup>122</sup> lvory and heroin are sometimes moved on the same in-shore dhows that transport licit and illicit goods along the Tanzanian coast to or from major towns and markets. Similarly, the same people involved in transporting wildlife products towards main centres are also involved in transporting heroin out into the regional centres of Tanzania for local markets.<sup>123</sup> While there is reliable information that a significant number of ivory traders from the recent past, when elephant poaching and ivory trafficking was a major issue in Tanzania, were also involved in the heroin economy, and used money from heroin trafficking to fund the purchase of large quantities of ivory, this now seems to have stopped. There have been no arrests or prosecutions of these individuals, but Tanzania's focus over the last five to seven years on disrupting and dismantling ivory trafficking networks seems to have changed the risk dynamic, and these individuals are no longer involved in IWT.124

#### Zambia

Recent research on Zambia's heroin economy has found that it has a larger domestic market than expected, and that Kenneth Kaunda airport in Lusaka plays an important node in shipping heroin to Europe.<sup>125</sup> The heroin enters Zambia overland from Tanzania and Mozambique. Wildlife crime case records from October 2018 to March 2022 show 25 cases, involving 41 arrested suspects, where drugs (specifically marijuana and cannabis) were confiscated during operations conducted by the DNPW in different parts of the country.<sup>126</sup> In one case in 2018, 100 tonnes of cannabis were found and seized during a bushmeat operation.<sup>127</sup> None of the cases involved IWT and heroin. However, recent collaboration and intelligence sharing between the DNPW, the NGO Wildlife Crime Prevention (WCP) and the Zambian Drugs Enforcement Commission has brought to light one case where a known cocaine distributor in Lusaka is associated with the local trafficking and collection of wildlife products from around Zambia. This person of interest also co-owns a general dealer and transport company with connections to South Africa.

Examples of hub convergence, where we see IWT and heroin trafficking from different networks converge and pass through the same key trafficking hub (typically important ports) are covered in the section on hub convergence below.

# **Convergence by poachers**

#### The challenge of militarized antipoaching responses

The act of poaching has raised a key challenge for tackling wildlife crime that has resulted in well-intentioned responses with negative consequences. Poaching almost always results in dead or distressed wildlife, often charismatic species like elephant, rhinos and large carnivores. This drives public sentiment to harshly target poachers for law enforcement action. In Eastern and Southern Africa, this is coupled with a lot of crossover between former military personnel and wildlife conservation officials, advisors and consultants. These drivers have resulted in a militarized response to law enforcement using counterinsurgency type tactics to reduce wildlife crime by focusing on stopping poaching.

This focus has had many negative consequences. It has resulted in increased surveillance of local communities, over-reach of legal instruments (for example, home searches, and stop and search), human rights abuses and the increased use and normalization of violence, and the alienation of conservation law enforcers from local people. This leads to a breakdown in trust and legitimacy between local people and conservation law enforcement; it has negative mental health and social consequences for field rangers; it can undermine social structures in economically deprived societies; and it can criminalize poor people who engage in a crime because of extreme circumstances.<sup>128</sup> These responses exacerbate the power asymmetries that shape the lives of both people who undertake conservation law enforcement on the ground, and those who live locally with the negative consequences of both enforcement and criminal networks. Ultimately, this can result in 'contested legality', where the laws around protected areas are disputed, and 'contested illegality', where there is disagreement by significant sectors of society over whether an act is illegal.<sup>129</sup>

Recent experience from tackling wildlife crime in the region has shown that transformative success in tackling wildlife crime has not come from robust militarized anti-poaching responses, but rather by dismantling the organized criminal networks that are buying and moving the products. Furthermore, a recent regional review of wildlife crime approaches found that protected-area-based law enforcement has been successful when holistic approaches have been used. This has included focusing on leadership; staff motivation; coordination with other local law enforcement agencies; using intelligence; strengthening the whole law enforcement chain from scene of crime to prosecution; and integrated approaches that include community engagement, human-wildlife conflict mitigation and co-existence measures, and monitoring systems.<sup>130</sup>

#### Poachers as violent criminals

There are, however, violent criminals involved in poaching. This is more common in places where violent crime occurs, which is often in areas with structural inequalities, where local people find it hard to see a future and a way out of dire circumstances, and where there is a history of violence being used to maintain power. We also see violent criminals involved in poaching where there is a vacuum left by an absent state, where law enforcement is mistrusted and largely corrupted, and where there are few formal sector opportunities for employment. When this has happened over a long period, alternative illicit economies flourish, criminal governance arises and organized crime becomes entrenched.

The abalone illicit economy is one sector in which this happens (see above). However, it also occurs in the rhino poaching economy in South Africa, southern Mozambique and Zimbabwe, where violence is common and rhino poaching bosses are often involved in multiple crime types. This is a type of network convergence at the level of the violent criminal,



Poached elephants found in the Niassa Reserve. Photo: Alastair Nelson

using violence to access multiple high-value products that are then sold into or laundered through various criminal economies.

Other examples of this type of convergence at the level of the violent criminal could be categorized as crimeswitching behaviour. In northern Tanzania in the early 1990s, rhino and elephant poaching gangs switched to robbing tourists at gunpoint in the Serengeti National Park and in the Ngorongoro Conservation Area.<sup>131</sup> Recent interviews in the Kruger National Park in South Africa indicate that seasoned rhino poachers are undergoing a similar change to what happened in Tanzania in the 1990s and are moving into other illicit economies.<sup>132</sup> This may be driven by the decline in rhino numbers, the dehorning programme, and the changing risk environment following recent arrests of poachers.

## The violent poaching and cash-heist ringleader

Petros Sydney Mabuza (57), a notorious cash-in-transit heist and rhino poaching syndicate ringleader, was shot and killed in June 2021 in the town of Hazyview in Mpumalanga province, South Africa. Mabuza – dubbed 'Mr Big' by the press and also known by his clan name, Mshengu – was said to be involved in a range of criminal activities, including cash-in-transit heists, loansharking and extortion. He owned several properties and was heavily involved in the minibus-taxi industry.<sup>133</sup>

Mabuza's involvement in rhino poaching dated to at least 2005, but it was only in 2018 that he was arrested and charged. Legal proceedings are continuing against Mabuza's co-accused, former police officer 'Big Joe' Nyalunga.<sup>134</sup> In 2020, the lead investigator in the case, Lieutenant-Colonel Leroy Bruwer, was ambushed and killed by hitmen.<sup>135</sup> Some of Bruwer's colleagues believe Mabuza was behind the murder.

# HUB CONVERGENCE

Nampula airport, Mozambique. © Gianluigi Guercia/AFP via Getty Images

e define hub convergence as multiple commodities (being trafficked by different networks) passing through a critical transport hub or some other bottleneck, typically with the support of a corrupt facilitator or broker.

# Mozambique: Convergence in trafficking through Maputo, Nampula and Pemba airports

Interviews conducted during the mapping phase of the research for this report, and previous GI-TOC work, uncovered hub convergence in Mozambican airports. Maputo, Nampula and Pemba airports were identified as key hubs through which multiple commodities, including wildlife products are trafficked. Pemba and Nampula airports were specifically identified by GI-TOC work focusing generally on illicit flows in northern Mozambique,<sup>136</sup> as well as specific work on gemstone trafficking in the same area,<sup>137</sup> and interviews with key sources.<sup>138</sup> Interviews,<sup>139</sup> other IWT-related reports<sup>140</sup> and media articles<sup>141</sup> identified Maputo airport as a key trafficking hub for multiple illicit flows. Maputo airport has the third-most recorded wildlife trafficking seizures of all African airports between 2016 and 2018.<sup>142</sup>

#### **Revisiting Pemba and Nampula airports: A convergence approach**

For this report we conducted interviews in Pemba and Nampula to ensure that the trafficking systems that had been described previously are still in place, to document more recent developments, and to ensure that we understood the convergence there as best possible.<sup>143</sup> We commissioned more detailed research into the systems in operation at Maputo airport. Eight interviews were conducted (including people within both the passenger and the cargo terminals), all of whom requested to remain anonymous and off the record. See the case study for a detailed description of the systems in operation at Maputo airport.

We found that traffickers moving illicit products through these three airports remain specific to their products. No overlaps or convergences in the trafficking networks moving illicit goods through these airports were identified or detected in the interviews and media searches. This, however, should not dismiss the possibility of network convergence existing where the same network is moving multiple products through these ports.
In northern Mozambique, gemstones, cash, some gold and some wildlife products (mostly rhino horn and lion body parts) are shipped out of Pemba and Nampula airports.<sup>144</sup> In Maputo, drugs, wildlife products and some cash are trafficked through the airport. In all three airports, there are well-known and coordinated systems where government officials (police officers in Pemba, Nampula and Maputo cargo terminal, and an officer from the Ministry of Agriculture Inspection Department in Maputo passenger terminal) operate as the key contacts for smuggling goods through the airports.<sup>145</sup> Once contacted, these officials set the price for how the trafficking will occur, make the necessary arrangements and make other payments to those involved at the airports. In Pemba airport, this key official has on some occasions been contacted by senior officers from Maputo who have requested assistance for a traveller to move cash through the airport.<sup>146</sup>

### Case study – Maputo airport trafficking

Maputo airport is an important export hub for wildlife products and is also used to import and export drugs. Rhino horn and lion body parts are currently the main wildlife products moved through this airport.<sup>147</sup>Cocaine,heroinandmethamphetaminesareexportedfromMaputoairport,mostlytoEurope, but also to India.<sup>148</sup>Cocaine is imported by couriers mostly travelling from Brazil. More recently, there have been several cases where heroin has been exported to India using couriers from both Maputo airport<sup>149</sup> and OR Tambo airport in Johannesburg.<sup>150</sup> This movement is significant because the heroin originates from Afghanistan, then moves overland to the Makran coast, by sea to northern Mozambique, overland to Maputo, and sometimes Johannesburg, and is finally couriered by air to the Indian subcontinent. It is believed that this new route is a result of the hardening of the India-Pakistan border in 2018.<sup>151</sup> Given that the heroin travels all the way to Southern Africa and that these two airports are used as the critical export hubs shows that the traffickers are confident in the entrenched corrupt systems that they have in place in these two ports.

Trafficking through Maputo airport passenger terminal is mostly controlled by two officials who work for the Ministry of Agriculture Inspection Department, which is based at the airport: a senior official and his assistant.<sup>152</sup> There are at least four methods used to traffic goods for export through the passenger terminal at Maputo airport, depending on the size of the goods and the staff on duty:

- Checked baggage or hand luggage containing both drugs and wildlife (contraband) is allowed to pass through the scanners. This is considered the riskiest method, as records can be checked during a later investigation.
- 2. Luggage is smuggled to the airside part of the airport by catering companies, tags are created by a check-in clerk, and baggage handlers place the tagged bag onto the correct aircraft for a passenger to collect on arrival (only confirmed for rhino horn).<sup>153</sup>
- Staff who work in the duty-free area carry drugs and wildlife products with them through a lax search system and then hand the goods to passengers in the boarding area.
- 4. Couriers try to evade detection by carrying goods in or on their person without support from corrupt officials.<sup>154</sup>

Cocaine is mostly imported through the passenger terminal of Maputo airport, using two main methods:

- 1. Couriers carrying it in body cavities, or on their person or in hand luggage; or
- 2. In larger quantities in checked luggage, which is left on the baggage carousel to be taken into the lost and found storage, from where it is either later collected, or brought out by a corrupt police official.<sup>155</sup>

Trafficking through Maputo airport cargo terminal is mostly controlled by an official from the Environmental Division of the Mozambican Police. This key individual is observed to have a lifestyle that is beyond the means of a mid-level government employee in Mozambique. Contraband is moved into the cargo terminal in three main ways:

- Through the scanners at entry points this is sometimes done in cleaning carts which are not well checked, or using a forklift which drops goods on the landside of the scanner, and then drives around the scanner to collect them from the airside;
- Hidden among other goods where they are difficult to detect (for example, in 2021, 50 rhino horns were hidden in among live crabs and lobsters,<sup>156</sup> which were shepherded through the cargo terminal by a cargo official from Ethiopian airlines);<sup>157</sup> and
- 3. In catering and delivery vans which are not properly inspected at the vehicle entrance to the airside part of the airport.<sup>158</sup>

An analysis of court records for cases related to Maputo airport from 2016 to 2021 revealed that there were no records of convergence for any specific trafficking case. During this period, 108 people were arrested at the airport on drug trafficking charges. The following drugs were seized: 65 kilograms of cocaine, 81.5 kilograms of heroin, 85.5 kilograms of methamphetamine, 70 kilograms of ephedrine, 202.5 kilograms of miraa/khat and 1.4 kilograms of ecstasy. From 2016 to 2021, only 12 people were arrested for wildlife trafficking, and all were either Chinese or Vietnamese nationals. Seven of these cases involved rhino horn, four involved ivory and one involved pangolin scales. One of the rhino horn cases also involved lion teeth and claws.

## Madagascar: Convergence in trafficking through multiple ports

Madagascar's unique biodiversity has long been sought after by specialist collectors. This demand has increased significantly over the past decade, particularly with the growth of an internet-based live pet trade in South-East Asia, in some part driven by a desire for status on social media.<sup>159</sup> At the same time, Madagascar is increasing being used as a drug trafficking hub.<sup>160</sup> From interviews and previous GI-TOC work in Madagascar we had learned that Madagascar's main international airport, Ivato airport in the capital Antananarivo, is a hub for both wildlife trafficking and drug trafficking. Thus, we chose Ivato as one of our study sites for this report.

### Ivato International Airport, Antananarivo

We used a local researcher, whom the GI-TOC has used in the past, to conduct research on the trafficking of wildlife products and other illicit goods through lvato airport. Sixteen people were interviewed, six on the record, three on the record anonymously, and seven off the record. In addition, relevant court records were analyzed and interrogated.

The research found that the most trafficked products through lvato airport are gold, drugs (heroin, cocaine and methamphetamines) and wildlife products, comprising mostly endemic tortoises and reptiles (chameleons and geckos). All these products are exported,



Antananarivo airport is reportedly used by wildlife trafficking networks. © Pierre-Yves Babelon/Getty Images

but cocaine is also imported into Madagascar, most likely for onward export, as the local drugs market in Madagascar is very small.<sup>161</sup> The wildlife products are mostly trafficked for the specialist live pet trade in South-East Asia and some parts of Europe.<sup>162</sup>

There is no clear evidence that any of the trafficking networks moving illicit goods through lvato airport are involved in more than one type of product, meaning that there is no evidence of network convergence. However, we did find that the facilitators who helped to move the goods through the airport, and the corrupt officials involved, could all be contacted to move any type of product through the airport.

Wildlife products are trafficked in personal luggage. Tortoises can be taped up and transported in checked luggage, but reptiles and sometimes tortoises are carried in hand luggage or on someone's person. Well-established wildlife trafficking networks working out of Antananarivo use trafficking facilitators to help them move tortoises and reptiles through Ivato airport. The most well-established wildlife trafficking networks in Madagascar are typically run or overseen by significant Asian wildlife traffickers.<sup>163</sup>

'One of the problems we have with tortoises is that they're such a good animal to smuggle. They don't easily die. You just push the head and the legs back in the shell, you wrap tape around it, and then you just stuff them in.'

RICHARD LEWIS, MADAGASCAR PROGRAMME DIRECTOR OF THE DURRELL WILDLIFE CONSERVATION<sup>164</sup>

Increasingly, Madagascar is emerging as a significant drugs transhipment hub.<sup>165</sup> This is due to a number of factors, including its weak security infrastructure, ease of corruption, increased law enforcement in East Africa, the insurgency in northern Mozambique, and to a lesser extent, because of its proximity to the small but pervasive drugs markets in the Seychelles (with the highest per capita heroin use globally), Mauritius, Reunion and Mayotte.<sup>166</sup> The most common illicit product trafficked through lvato airport is gold, which is mostly taken to Dubai. In 2016, Dubai recorded US\$121 million more gold imports from Madagascar than were recorded as exports from Madagascar.<sup>167</sup> Large shipments are moved on private aircraft, and smaller shipments of sometimes tens of kilograms are trafficked in hand luggage.<sup>168</sup> Heroin and methamphetamines are mostly trafficked to Madagascar by sea from the Makran coast or Iran and Pakistan. Normally this involves a transfer at sea because the distance from the Makran coast to northern Madagascar is too far for the traditional drug trafficking Jelbut dhows to reach. While some cocaine also comes by sea from South America, cocaine also arrives by air from Brazil, Bolivia and Colombia, carried by drug mules, either in body cavities or in luggage. Ivato airport is increasingly being used to transport drugs to Europe and other distant markets using drug mules.

Wildlife products, drugs and gold are moved through lvato airport in several ways:

- Known facilitators are paid a fee to arrange for hand luggage to be collected on arrival at the airport, taken through scanners and returned to the passenger in the VIP lounge – this mechanism is especially used for larger quantities of gold and for sensitive high-value reptiles (for example, certain chameleon species);
- The same facilitators also arrange for specific marked pieces of checked baggage containing contraband to pass through scanners undetected;
- Opportunistic traffickers take their chance carrying smaller amounts of drugs, or small numbers of tortoises in their hand luggage or taped to their body; and
- Larger-volume shipments of gold are driven into the airside part of the airport uninspected and flown out of the country using private airlines.

In terms of arrests, a review of police records for arrests at lvato airport from 2018 to 2020, revealed that 40 people (27 men and 13 women) were arrested for drugs trafficking during this period. They were arrested for carrying heroin, cocaine, and methamphetamines. The volumes were unfortunately not recorded. No records are available for arrests of traffickers of gold or wildlife.

### Mahajanga seaport – the broker

GI-TOC work has previously identified Mahajanga port in north-west Madagascar as a hub where tortoise trafficking, the smuggling of migrants and cannabis trafficking all convened for transport to the Comoros. Our work showed that different networks brought these products and people to Mahajanga, where brokers helped them find passage to the Comoros and facilitated the movement of goods through checks in the port. On arrival at capital city Moroni, the goods were then collected separately, with different small boats meeting larger vessels and illicit goods separately transferred and landed.<sup>169</sup> This was a clear example of both hub and broker convergence, but explicitly not network convergence.

For this report we interviewed two investigators<sup>170</sup> who had recently researched tortoise trafficking through Mahajanga port to the Comoros, from where the tortoises are exported to their destination market in South-East Asia – either directly by air from Moroni or by sea to Tanzania and then by air. We found that the illicit goods move on the passenger ferry and on smaller cargo vessels that ply the route between Mahajanga and Moroni. In Mahajanga, there is a specific customs-clearing agent who assists with the customs clearance of these small-volume cargoes going to Moroni. Investigations have shown that this broker plays a crucial role in facilitating the movement of both illicit and licit shipments. This agent is approached when the tortoise traffickers need to move tortoises to Moroni, and he will find passage on a small vessel, and then bribe customs officials to allow goods on that vessel to pass undetected. From interviews with undercover sources in the tortoise trafficking networks, the investigators confirm that the same broker also arranges the passage of cannabis to the Comoros and is approached by brokers who specialize in arranging the movement of migrants from Madagascar to the Comoros and on to Mayotte, a French island that is part of the Comorian archipelago.

This case exemplifies the key role that brokers play in facilitating the convergence of illicit goods trafficked

through an important transport hub, both in terms of arranging onward transport, and in terms of taking care of the corruption required to move illicit goods through the port.

## South Africa: Convergence in trafficking through OR Tambo International Airport, Johannesburg

OR Tambo International Airport in Johannesburg is a major trafficking hub for all sorts of illicit commodities, particularly wildlife products. Between 2016 and 2018, OR Tambo recorded the second-largest number of wildlife trafficking seizures of all African airports and the most for rhino horn<sup>171</sup> and drugs.<sup>172</sup>

While specific research was not conducted into trafficking at OR Tambo airport, the airport was mentioned twice during interviews focusing on convergence in the abalone trade, highlighting two incidences in which trafficking was conducted. The first incident involved bribes paid directly to customs officers to allow marked bags to pass through a scanner undetected onto a flight to Hong Kong. These bags contained dried abalone. The fee paid was allegedly roughly R1 500 per bag (approximately US\$90 at the time of the event), which is a relatively low sum for this illegal act.<sup>173</sup> As one investigator said, 'This is an exceptionally small amount of money to be taking the risk of passing illegal goods through a scanner and onto a plane. It suggests that this is a regular occurrence.'

The second incident involved a private-sector shipping agent who exports goods through OR Tambo airport. During an active investigation, an undercover source was party to a shipment of dried abalone being dropped at this shipping agent's premises for special packaging in order to be shipped undetected to Hong Kong via airfreight. On the premises, this source saw and photographed other items, including rhino horn and drugs being specially packaged for export via OR Tambo airport.<sup>174</sup>

# BROKER CONVERGENCE

Artisanal miners in Montepuez, Mozambique. Our research found crime convergence between gemstone trafficking and IWT. © John Wessels/AFP via Getty Images

e define broker convergence as occurring when local brokers or dealers source multiple types of products to sell on into various criminal economies. This typically occurs lower down on the criminal value chain, where products are sourced. We separate this from hub convergence, which is specific to a geographic location or transport hub.

### Gemstones, IWT and other commodities in northern Mozambique

Northern Mozambique has a long history of weak governance and criminal economies.<sup>175</sup> Over the past three decades, this has resulted in it being a key landing and transit point in the heroin trade's southern route,<sup>176</sup> an epicentre of elephant poaching<sup>177</sup> (and, later, ivory trafficking from East Africa),<sup>178</sup> a major source of illegal hardwood logging and timber trafficking,<sup>179</sup> a transit point for the smuggling of people to South Africa,<sup>180</sup> and a flashpoint over artisanal-mining rights with an illicit gemstones trade.<sup>181</sup> More recently, it has become a site of violent insurgency founded on discontent where an extremist group is committing atrocities in the name of establishing its own brand of religious government.<sup>182</sup>

Given this well-established convergence of criminal economies in one geographic area, northern Mozambique became one of our study sites to determine whether and how crime convergence with IWT occurs. In the past, our interviews with those involved in these illicit economies (as well as multiple interviews for this report with government officials, police officers and international investigators) had generally ascertained that even during the height of the elephant poaching crisis, and the associated short time when Pemba port became a key hub for shipping ivory from East Africa, there was negligible network convergence between the different economies, except for ivory and timber trafficking.<sup>183</sup> Up until 2017/18 when ivory poaching, and ivory trafficking out of Pemba port, came to an abrupt halt, ivory and timber had often been sourced by the same buyers in northern Mozambique, and ivory had also frequently been shipped from Pemba port, hidden among timber.<sup>184</sup>

Our background and mapping research highlighted three possible current areas of crime convergence with IWT. First, the export of small high-value wildlife products through



Officers of the Mozambique Forestry Police search a truck for illegally sourced timber. © John Wessels/AFP via Getty Images

Pemba and Nampula airports (for example, rhino horn).<sup>185</sup> Second, a link between the trade in carnivore body parts and artisanal gemstone mining in Niassa Reserve and gemstone trafficking to Malawi. And third, a slightly different but nonetheless interesting link between disaffected poachers in Niassa Reserve and recruitment into the local violent extremist group. For this report we conducted research into all three of these areas. We had investigated the trafficking of goods through Pemba and Nampula airports under previous work, but we updated it for this report (see section on hub convergence and trafficking through Pemba and Nampula airports above). The second and third areas of crime convergence with IWT in northern Mozambique are addressed directly below.

### IWT and illicit gemstone trafficking: From Niassa province to Malawi

We undertook field research into this criminal economy in October and November 2021. The field researcher was previously known in the area as a gemstone buyer from Malawi, which allowed him to access people in the criminal economies. The research question was whether there are current overlaps between the gemstone trade and IWT from Msawize in Niassa Special Reserve, where rubies and other gemstones are artisanally mined, along the transport routes that lead to Malawi, and in Lilongwe where the gemstones are sold. Thirty people were interviewed (19 Mozambicans and 11 Malawians), including poachers, wildlife and gemstone dealers, motorbike-taxi operators, fishers, lodge workers and a police officer. The fieldwork was supported and corroborated by 20 additional interviews undertaken by a GI-TOC senior analyst. These were conducted with government officials in Malawi and Mozambique, conservationists working in Niassa Special Reserve in Mozambique, advisors supporting WCUs in both countries, private-sector security people, and the USFWS and US-DEA regional attachés in Eastern and Southern Africa.<sup>186</sup>

### The impact of law enforcement action on IWT and bulk gemstone trafficking

One pervasive finding was that recent events in Malawi and Mozambique have changed the risk dynamic for IWT and reduced this illegal trade. In Malawi, the dismantling of the Lin network and conviction of 14 people, including 10 Chinese nationals (see the case study 'dismantling transnational organized wildlife crime networks') has significantly reduced the demand for illegal wildlife products in Malawi in general, and for bulk quantities of ivory in particular. While there is still some demand, it is for small quantities (for example, small amounts of ivory), small and easy to conceal products (for example, lion teeth and claws), or live pangolins which have not been attracting attention from the authorities. As one broker who worked for Lin facilitating the movement of wildlife products across the border put it, 'Since Lin was jailed, my business has been in demise. I am really feeling it financially.'

In northern Mozambique, law enforcement action targeting ivory poachers and traffickers has also changed the perception of risk. Coupled with the increased security presence because of the Cabo Delgado insurgency, those involved in wildlife crime were circumspect and spoke about a decline in general demand, and particularly high profit margin items such



Elephants and Mariri inselberg, Niassa Reserve. © Colleen Begg

as ivory. While aware of a demand for lion body parts, a few wildlife traders said that these were low value and not that sought after, but if requested, they could source them.

However, we found that there are still a few wildlife traders operating in this area who have trusted long-term relationships with buyers, and they are still sourcing and transporting wildlife products, including ivory, lion teeth and claws and pangolin scales. One interviewee, based in the Malawian border town of Chiponde, described having a few pieces of ivory buried in his house, which he was planning to transport to Blantyre to sell to a Chinese national who was returning to Malawi in November 2021. Others described fulfilling regular orders for lion teeth and claws from Malawi – more detail below.

At the same time as the declining demand for ivory, there has been a decline in the demand for low-grade gemstones in Malawi. Yunhua Lin was one of the buyers, and since the arrests, this bulk market has declined. As one gemstone trader in Chiponde, who used to supply Lin with Mozambican gemstones, put it, 'Since they were arrested, business has been tough, as many Chinese are very afraid. As such, it's like they have gone into hibernation.' This correlation in declining demands supports the hypothesis that the bulk gemstone trade was being used as a vehicle to smuggle other high-value products (for example, ivory) out of Malawi. Particularly because the demand for high-quality gemstones from Mozambique continues.

### Current crime convergence between IWT, gemstone trafficking and pesticide smuggling

Our research found current and ongoing crime convergence between gemstone trafficking and IWT from Niassa Special Reserve in northern Mozambique into Malawi, as well as linkages involving the smuggling of pesticide poisons from Malawi into Mozambique for use in wildlife poaching. Wildlife traders in Malawi are still placing orders for small quantities of ivory, pangolin scales, and lion teeth and claws with their trusted brokers. These brokers are mostly Malawian gemstone traders who have long-established relationships of trust with local brokers in Niassa province in northern Mozambique, as well as with transporters and brokers who facilitate smuggling across the border.



FIGURE 8 The illicit gemstone economy and carnivore body part trades around Niassa Special Reserve in northern Mozambique.

The local brokers in Niassa, based in either the provincial capital of Lichinga or the border town of Mandimba, contract poachers to source wildlife products from Niassa Reserve. The poachers set the conditions, for example, requiring the broker to hire a rifle or provide poison. Rifles can be rented from individuals who hold firearms specifically for that purpose, other poachers and sometimes from law enforcement officials.<sup>187</sup> More recently, poaching activities in Niassa Reserve, especially for killing lion, have been carried out using poisons. The favoured poison is an aldicarb pesticide branded Temik (also known as Temic), which is banned in Mozambique but more easily available in Malawi. The poachers ask the brokers tasking them for the order to provide them with Temik. Poachers working around the artisanal gemstone-mining areas in western Niassa Reserve often request Malawian miners to bring Temik back with them from Malawi. Thus, the smuggling of this poison from Malawi into Mozambique is intertwined with the illicit gemstone trade, with the poison brought into Mozambique by Malawian gemstone dealers crossing to buy gemstones and smuggle them back into Malawi.

The wildlife products for this market are mostly sourced from the western side of Niassa Reserve,<sup>188</sup> from around the small settlement of Msawize, an artisanal-mining site for rubies and other gemstones,

and the district town of Mavago. These products flow, together with gemstones, via Mavago, to the provincial capital of Lichinga. They are sometimes also sourced from around alluvial gold-mining sites in the south of the reserve, flowing via the district town of Marrupa to Lichinga. From Lichinga, the wildlife products and gemstones either flow overland south-west to the border post at Mandimba/Chiponde and then on to Lilongwe, or west to Lake Niassa/Malawi, where they travel by fishing boat from Meponda to Senga in Malawi, and on to Lilongwe.

At all stages of this criminal economy, IWT, the gemstone trade (licit and illicit) and the smuggling of poison are completely intertwined. As a gemstone trader from Malawi, who buys in northern Mozambique, put it: 'The relationship between minerals and gems and the wildlife trade is like two sides of a coin. The miners poach at night, or they protect the poachers. The local gem dealers provide the wildlife. [The gemstones and illicit wildlife products] are smuggled across the border together, and then wildlife traders traffic the animal parts by mixing them with stones which have legal export documentation. Such kind of exports always involves corrupt custom and police officials who let it pass during cargo clearance and inspection in the ports.'

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Al-Shabaab fighters in Quissanga, March 2020. Photo: Telegram

uring our interviews in and around Niassa Special Reserve for other research for this report, we became aware of a different type of crime-related convergence. This convergence sees an overlap between the recruitment of fighters for the extremist group fighting an insurgency in Cabo Delgado province (a terrorismrelated offence in Mozambique), wildlife poaching and illegal mining in Niassa Reserve, and the style of law enforcement used to combat these crimes.

Our best option for researching and understanding this link would have been to interview fighters recruited into al-Shabaab – as the Islamic State-affiliated extremist insurgent group is known locally in northern Mozambique (not to be confused with al-Shabaab in Somalia, which is a different group with different extremist ideologies). However, other researchers already interviewing incarcerated fighters, and police contacts in Mozambique, assured us that interned fighters do not give any responses when interviewed.<sup>189</sup> However, we came across two opportunities that allowed us to conduct deeper research. First, a wildlife crime investigator working in Niassa Reserve knew family members of two recruits who had joined al-Shabaab, and second, an investigative reporter we have previously worked with identified and interviewed two former al-Shabaab fighters who were then resident in Marrupa district town, just south of the reserve.

### **Illicit economies in Niassa Special Reserve**

Niassa Special Reserve is one of the largest protected areas in Africa. It is remote and wild, with sandy, unproductive soils, and the dominant vegetation type is miombo woodland. Tsetse fly, which causes trypanosomiasis (or sleeping sickness) in domestic livestock is endemic. These two factors limit the productivity of farming. The people resident in the reserve depend on subsistence shifting agriculture, fishing for household consumption, and some cash income, as well as other non-timber forest products (for example, honey gathering and the collection of traditional medicines).

Ivory poaching boomed in Niassa Reserve between 2009 and 2017, a period in which more than 10 000 elephants were killed.<sup>190</sup> In 2015/16, alluvial gold deposits were also found in the reserve, and these have been illegally exploited since.<sup>191</sup> While these illegal activities attracted people from outside the area, young people living within the





Illegal gemstone mining site at Msawise, Niassa Reserve. Photo: Supplied

Shelters, tools and materials of illegal artisanal miners in Niassa Reserve being burned. Photo: Supplied

reserve who sought a cash-based lifestyle rather than pursuing subsistence agriculture became involved too. Besides being active participants as poachers or miners, locals and outsiders have also occupied diverse roles to support these illicit economies, including guides, porters, cooks and ivory transporters. Many of the people involved in ivory poaching transitioned to roles in alluvial gold mining.<sup>192</sup>

The law enforcement response to ivory poaching started with a traditional anti-poaching response of trying to find and engage poachers in the field. But the size of the reserve meant that this very quickly evolved into an intelligence-led approach, where the main poachers, owners of the firearms and the buyers were targeted.<sup>193</sup> As one law enforcement advisor reflected, 'It was hard to get the police and courts to care about elephant poaching, but when we started targeting illegal firearms, the people who owned and rented them, and the people bringing them over the border, we had a lot more interest and success. State security even got involved at one stage.'<sup>194</sup> This intelligence-led and focused approach had little negative impact on the local people involved in the poaching economy.

However, the law enforcement response to alluvial gold mining has been more robust. Miners' belongings and tools have been seized and confiscated and sometimes destroyed in front of them.<sup>195</sup> This has led to frustration among young residents of the reserve, who feel that the government has forgotten about them and are thus now violently spurning their opportunities for cash income. This discontent led to riots in Mecula town, the district capital in the centre of the reserve, in December 2018. One young miner and one police officer were killed in the violence.<sup>196</sup> As one interviewee stated:

Children are packed into open classrooms that were built 20 to 30 years ago with no proper walls or roofs, but the conservation organizations can bring planes and helicopters to protect wildlife. Then the only impact people feel is law enforcement burning their stuff when they are mining. They feel that government has forgotten them, all the money is spent in Maputo, and they are left to starve.

### Case study – Al-Shabaab recruitment

One of the early leaders of al-Shabaab, Maulana Ali Cassimo, had worked in Niassa Reserve as a district government official from 2014 until July 2017, when he disappeared, presumably to join al-Shabaab. Interviews with his colleagues from that time highlight how he stridently remonstrated with the authorities about their attitude towards artisanal miners, particularly how law enforcement officers were destroying their possessions and detaining them, arguing that agriculture in the reserve is unproductive and the people have no alternatives.<sup>197</sup>

Our research for this report corroborated this sense of aggravation among youth who had been recruited into al-Shabaab from Niassa Reserve. Our interviews for this report centred on four young men who had joined al-Shabaab. We found that these young men were aware that elephant poaching was illegal and accepted the law enforcement response to poaching. However, they felt that alluvial gold was a resource that should be available to the people living within the reserve to access and make a living from. They considered that government investment in education in the villages in the reserve had reduced over time, and that the



A burned-out vehicle belonging to one of the Niassa Special Reserve safari operators, in Lichengue village, Niassa Reserve, which had not previously seen violence due to the conflict. © ANAC

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government was just taking money for itself and not helping the people. All four young men had been detained by law enforcement for their mining activities and had had their equipment and belongings confiscated or destroyed when their simple living quarters were burned. This had caused feelings of helplessness and frustration, which ultimately led to their recruitment into al-Shabaab, heeding a call to join the fight against an illegitimate government that only takes from the people.<sup>198</sup>

We include this case study because we find the interaction between multiple drivers all leading to the criminal recruitment of young people into a terrorist organization extremely interesting, and it provides us with insights into how it might be possible to prevent this in the future. The drivers leading to this recruitment include being involved in criminal economies (in this case, wildlife poaching and illegal artisanal mining), weak local governance and service delivery, and robust law enforcement leading to a sense of humiliation, unfairness and despair.

# ANALYSIS

COLAS

Mahajanga harbour, Madagascar. © Chris Hellier/Alamy Stock Photo

### **Summary of findings**

his study has determined how broadly IWT-related crime convergence is occurring across Eastern and Southern Africa, characterized the types of convergence occurring, and determined where on the wildlife crime value chain convergence is occurring. To achieve this, we undertook 105 interviews across 10 countries with government officials and other people working to counter wildlife crime and other types of organized crime. We have used a simple system that characterizes convergence as either network, hub, or broker convergence. We undertook detailed research in several sites to describe and characterize exactly how convergence is occurring.

We did not find convergence everywhere that we looked. We found network convergence to be less common than we had expected from the narratives in reports, media articles and policy discussions. We found hub convergence in all key logistics hubs that we investigated, with multiple illicit products converging to be trafficked through these hubs using established corrupt systems. We also found broker convergence in all the cities and towns where we looked for it.

Looking specifically at the wildlife crime value chain, we found that most crime convergence took place further along the value chain, associated with the trafficking of wildlife products rather than the poaching of wildlife. However, we discovered crime convergence linking the poaching of abalone in South Africa with local gang-related drugs markets and extortion rackets, as well as crime convergence linking the poaching of lions, pangolins and elephants in Niassa Special Reserve in northern Mozambique with illegal gemstone and gold mining, and the illegal importation of pesticides. We found crime convergence with wildlife trafficking where the same transporters, dealers and brokers are moving multiple illicit goods, for example, the illicit gemstone trade and IWT from northern Mozambique to Malawi, abalone and drugs in South Africa, and drugs and ivory in Tanzania. We also found crime convergence with wildlife trafficking at key ports and hubs where illicit wildlife products are exported using the same corrupt systems as other goods being trafficked through those ports or hubs, for example, tortoises, gold and heroin from Ivato airport, and rhino horn and drugs from Maputo and OR Tambo airports.

We excluded corruption and money laundering as convergent crime types because they were factors common to almost all the cases that we researched. Furthermore, corruption was mentioned as a key part of the criminal process in more than 80% of the interviews undertaken. Illicit financial flows and money laundering were apparent in all the cases that we directly researched for this project. However, financial crimes were only mentioned by experienced investigators whom we interviewed, and wildlife criminals are seldom charged with money laundering offences. In summary, there are significant amounts of crime convergence between IWT and other organized crime types. However, this convergence seldom happens within one vertically integrated network. The majority of it can be characterized as either broker or hub convergence, where we either see the same broker or dealer moving or selling multiple types of illicit products, including wildlife products, or the same broker or corrupt facilitator aiding the movement of goods through a key port or hub.

### What does this mean?

First, at the broadest level, we found significant convergence between IWT and other types of organized crime. However, most of this convergence is hub or broker convergence, not network convergence. This follows a general pattern and understanding that most IWT crime networks are not vertically integrated, like drugs cartels are, but rather a set of horizontally connected business entities providing goods and services to one another.<sup>199</sup> Thus it holds that IWT crime networks are not as secure as other illicit networks, as there are often multiple transactions involved in organized wildlife crime. This means that there is ample opportunity for these networks to be penetrated, and then for informants to be protected by distancing them from the investigation long before any law enforcement action takes place. Wildlife crime investigations also provide easier cases for understanding how corruption, money laundering, illicit financial flows and smuggling through transport hubs is working for multiple crime types. This point is strengthened by its exception, which is the illicit abalone economy in South Africa, which is reputedly difficult to penetrate because of the seeming control of one major syndicate. This monopoly allows the syndicate to predict the entry of all abalone into the supply chain, making it difficult to use reverse entrapments for entry.<sup>200</sup> The concluding point from this is that deeper and longer-term investigations into priority wildlife trafficking networks should be built to help understand multiple organized crime types, smuggling methods and illicit financial flows, and to identify corrupt facilitators.

Second, crime convergence across the whole region seldom occurs at the extreme supply side (the poaching end) of the wildlife crime value chain. This means that most poachers are not hardened criminals involved in multiple organized crime types. However, there are specific examples in South Africa where there is overlap between established abalone and rhino-horn poaching networks and other organized crime activities, including violent crime. This general finding does not equate well with most counter wildlife crime narratives in the media or in society, where poaching and trafficking are conflated, and the messaging that wildlife crime is increasingly recognized as an organized crime type results in poachers, suspected poachers and people 'profiled' as poachers, often being labelled as organized criminals and subject to overly robust law enforcement. This can lead to a breakdown in trust and legitimacy between local people and conservation law enforcement, and can result in 'contested legality', where the laws around protected areas are disputed, and 'contested illegality', where there is debate by significant sectors of society over whether an act is illegal or not.<sup>201</sup> Ultimately, under certain conditions, legal contestation and overly robust law enforcement can lead to violent rebellion - see the example from northern Mozambique above. The concluding point from this is that the same methods of law enforcement should not be used along the whole wildlife crime value chain. Rather, the wildlife crime value chain and the types of people involved in it, and the types of crimes they are committing, need to be better understood for appropriate law enforcement action to take place with the goal of dismantling the whole network, not just targeting the easiest people.

Third, the Kromah and Lin cases, the Mateso case from northern Mozambique, and other examples of targeted law enforcement action in the region where organized wildlife crime networks have been dismantled, show that targeting and dismantling high profile organized wildlife crime networks can change the risk dynamic for criminals and have a sustained and transformative impact on wildlife crime.<sup>202</sup> However, there are a number of critical parts to achieving this that are often overlooked. Intelligence analysis needs to be used to identify, prioritize and target the most important and 'impactful' organized crime network for the crime type/area - in a general sense, criminal organizations also conform to the 80/20 principle, with 80% of crimes committed by 20% of criminals. Capacity to undertake targeted investigations into the prioritized criminal organization needs to be in place; this includes secure and trusted investigations units, and both informal and formal methods of communication with similar units in neighbouring countries, and other countries in the crime value chain. This should also include capacity for financial investigations and targeting corrupt facilitators. There needs to be a jurisdiction where the case can be successfully prosecuted, deterrent sentences passed for those convicted, and financial proceeds forfeited, with the knowledge that the sentences will be served, and the assets and financial proceeds will go to the state. The concluding point from this is that while there has been decent investment in building investigations capacity, there has been less investment so far in strengthening intelligence targeting and ensuring effective prosecutions.<sup>203</sup> Strengthening courts, prosecutions capacity and the criminal justice system, more broadly, will have positive effects on tackling all crime types, and for strengthening governance and rule of law in general.

Finally, the general prevalence of corruption and money laundering within organized crime means that investigating and mitigating these specific crimes need to be integrated into all investigations. Where hub convergence is taking place, identifying corruption and the corrupt facilitators presents an opportunity to better understand the other crime types, the networks and their methods. Thus, knowing that corruption is pervasive allows corrupt facilitators to be targeted as a focal point for gathering information and building cases. There is already a recognition that money laundering is a common resulting crime from most organized crime, and in the wildlife sector, capacity needs to be built to better investigate these types of crimes, to employ asset forfeiture and to recoup the proceeds of crime. This capacity is not built quickly, as it can require developing or strengthening legislation. Encouragingly, this process has started in a few places, but this needs to continue and spread to all countries in the region.

Meanwhile, corruption is not only used to conduct crimes, but also to protect organized criminal groups, and is often employed to derail investigations and prosecutions. This means that more needs to be done to identify, anticipate and manage the risks of corruption for investigations and prosecutions, as well as to build resilience to corruption within criminal justice organizations. Building resilience to corruption can be done by focusing on organizational cultures and values, inclusive and values-based leadership, selecting staff with the right qualities, attributes and values, and by developing a sense of belonging, recognition and impact among staff. Structures to identify and combat corruption also need to be built or strengthened. These should be independent, with appropriate investigations and prosecutions mandates, and safe and secure mechanisms for whistleblower access and protections.

RECOMMENDATIONS

A counter-trafficking team member holds a pangolin rescued during a joint operation with the South African Police Service, March 2021. © Luca Sola/AFP via Getty Images

urrent responses to tackling wildlife crime in the region have tended to focus on the poaching act, which is only the start of the wildlife crime value chain. The poaching act seldom involves hardened, violent and organized criminals, although there are exceptions, and is where recruits are very often vulnerable and most easily replaced. Exceptions to this mostly occur with high-value wildlife products (for example, abalone and rhino horn), where the poaching networks become embedded over time and get involved in other illicit economies, or where hardened criminals are drawn into these networks.

Where counter-wildlife trafficking responses have happened, these have often been hampered by not involving organized crime specialists with the expertise to build broad and effective cases that bring enough evidence to dismantle a whole network with deterrent sanctions. However, there are examples where law enforcement action focused on dismantling specific organised wildlife crime networks has resulted in transformational disruption of these illicit markets in a few countries or places. Where effective capacity for investigations has been built, the challenge arising is timely and successful prosecutions with equitable and deterrent sentencing, including loss of criminal proceeds through asset forfeiture and financial penalties. Finally, this work and other GI-TOC studies, as well as work done by the WJC and others, are confirming that corruption, illicit financial flows, money laundering and certain types of crime convergence are ubiquitous in organized wildlife crime. This offers both strategic and tactical opportunities for improving law enforcement action to tackle wildlife crime, and other organized crime types.

1. Develop, as far as possible, a nuanced and deep understanding, and descriptive model of the wildlife crime value chain in the country or area of interest. This should include understanding the source of the wildlife products and who is sourcing them, the local markets and trafficking methods, as well as facilitators supporting various part of this value chain. This model should pay specific attention to crime convergence along this value chain – is it occurring at a network level, or at a specific hub site, or are certain brokers involved in crime convergence? It should also pay specific attention to identifying corrupt facilitators, and what else they may be involved in, as well as how related illicit financial flows and money laundering are happening.

This depth of understanding will ensure that law enforcement action is effective and transformative, and does not only target the most vulnerable and easily replaced people in the criminal value chain. It should also result in actions that reduce criminality and improve local governance more broadly, not only for wildlife crime.

2. Develop and support national WCUs with the capacity to identify, target and disrupt the priority organized wildlife crime groups in that country. WCUs must be resilient to corruption, with effective leadership. They should have good intelligence analysis and targeting capabilities, broad investigative mandates and capacities, and trustbased working relations with similar units in other countries. WCUs should ideally have seconded officials from key partner agencies, for example, the prosecuting authority, crime intelligence and possibly the customs authority. They should also engage and work closely with the national prosecuting authority in each country, as well as with similar specialist organized crime units nationally (for example, counter-narcotics units, financial crime and intelligence units, etc). WCUs can operate as 'pockets of effectiveness',<sup>204</sup> showing that rule of law is possible and helping to motivate action in other units. Furthermore, in almost all countries in the region, regular police investigators are overloaded with cases and under-resourced, so specialist units play a critical role in being able to target and disrupt organized crime groups.

The analysis from the research for this report shows that organized wildlife crime groups are relatively easy to penetrate compared to other organized criminal groups, and that there is general crime convergence at hubs and through brokers. Thus, investigations into organized wildlife crime groups can be used to disrupt broader organized crime networks by focusing on convergent trafficking hubs and brokers, corrupt facilitators, and illicit financial flows and money laundering processes.

**3.** Continue strengthening the prosecutions and criminal justice systems. All crimes converge in the courts, and the criminal justice system is critical to showing rule of law and governance, especially in remote areas. Firstly, there should be

a focus on improving the quality of the cases that are sent to prosecutors by investigators. In some countries, rapid reference guides for investigators and prosecutors have been developed and proven to be extremely effective. Where possible, and especially for important cases, prosecutors should be brought into investigations early on to ensure that cases are well prepared. There should also be greater support to prosecutors and the courts, so that cases can progress through the court more effectively and as fast as possible, so that justice happens more quickly and the opportunity for corruption in the courts is lessened.

Conservation organizations are often among the few long-term civil society organizations working in remote rural areas. Hence, counter-wildlife crime interventions should also focus on strengthening rural courts and criminal justice systems more broadly, not only for wildlife crime, which will improve overall governance and rule of law, and reduce general criminality.

Support proactive court-monitoring systems 4. which can be used to both strengthen the capacity of prosecutors and to help mitigate corruption in the courts. This report, and others, shows that there are still major weaknesses and sentencing discrepancies in the court system. There has been, and still is, a lot of investment into strengthening policy and legislation, and improving the capacity of prosecutors and the courts in the region. Passive court monitoring and trend analyses of the data help identify where there are weaknesses in existing legislation that need addressing, or where there are capacity gaps to fully implement current legislation. Active court monitoring can be used to mitigate corruption by explicitly monitoring key court cases where there are corruption risks - if necessary using high-profile figures and journalists. Active court monitoring to reduce corruption can also help to protect prosecutors and the judiciary from corrupt advances and threats by providing them an external fallback defence as to why they cannot go along with the threat or advance.

Court monitoring should be undertaken by an independent body that nonetheless has a close working relationship with the investigating and prosecuting authorities in that country so that resulting analyses and information can be shared to strengthen and improve the judicial system.

5. Identify the corrupt facilitators and the key individuals managing illicit financial flows and build broader investigations and multiple cases around these central cogs. The extent of crime convergence that we found suggests that these individuals will be supporting multiple crime types. This is especially apparent, as most of the crime convergence that we found is either hub or broker convergence – where key individuals are playing a role in multiple illicit economies. Corrupt facilitators will not only be helping to protect and facilitate the trafficking of illicit products and other criminal activities, but will also be helping to protect the criminals and criminal networks by actively derailing investigations and court cases.

WCUs, other organized crime units and anticorruption units should actively target these corrupt facilitators, as they are likely to be connected to multiple illicit markets, thereby providing the opportunity to disrupt multiple organized crime groups, and possibly change the risk dynamic of operating through a specific trafficking hub.

Anti-corruption units and agencies more generally need to be strengthened. First, these should be as independent as possible within their context, with appropriate investigations and prosecutions mandates, and safe and secure mechanisms for whistleblower access and protections. As far as possible, they should be provided external support and trusted partnerships developed to build their capacity and improve their resource base.

6. Build informal collaboration and relationships between specialist investigations units and prosecuting authorities, both nationally (for example, WCUs, counter-narcotics units, anti-corruption unts, financial investigations centres and customs investigations units in the same country), and transnationally (for example, WCUs and other units in neighbouring countries or other countries along a criminal value chain). Our background interviews highlighted informal networks among investigators as being extremely important. They are typically trust-based and allow priority cases to be built based on where the intelligence/evidence is leading. These relationships can be built through joint training and capacity building and by support to jointly work on priority cases.

7. Both formal and informal mechanisms for transnational cooperation to target priority organized crime networks need to be strengthened. Too often this is taken to mean establishing new coordination structures that draw on already limited resources, time and capacity. Coordination and cooperation are costly, so it should be entered into with circumspection. Best practice from the region suggests that two broad approaches work. First, focus less on 'forcing' transnational cooperation by establishing formal cooperation mechanisms, but rather focus on identifying cases, networks and routes that are operating transnationally. From this, support bottom-up transnational investigations which draw together units and investigators from neighbouring countries. This uses cases and 'the work' to set the cooperation agenda. Where the volume of cases and joint work results in regular and ongoing transnational cooperation between two or more states, then more formal mechanisms and agreements can be established to support and backstop this cooperation.

Secondly, there are specific cases where transnational cooperation mechanisms will not develop naturally, and clearly need to be developed. One example is cases where Asian criminal networks are operating in African countries and trafficking products to and from Asia, and where no law enforcement relationship between the two countries exists. Support agencies, be they intergovernmental, multilateral, bilateral or civil society organizations can play a key role in supporting this type of transnational cooperation. However, the technical law enforcement officers working in the national governments need to be clear that these are priority illicit markets and that the investment in transnational cooperation will most likely lead to disrupting or impacting priority networks and illicit flows, as cooperation can be costly for underresourced agencies.

# ANNEX: INTERVIEWS CONDUCTED

DATE	NAME	ORGANIZATION	COUNTRY	POSITION	LOCATION
27 Oct 2020	James Bampton	WCS	Mozambique	Country Director	Zoom
10 Jan 2021	Omardine Omar	Carta Mocambique	Mozambique	Investigative journalist	Maputo
11 Jan 2021	Ryan Olson	US-DEA	Mozambique	Attaché	Maputo
11 Jan 2021	Derek Littleton	Luwire (Niassa Reserve)	Mozambique	CEO	Maputo
13 Jan 2021	Carlos Lopes Pereira	ANAC	Mozambique	Director, Law Enforcement	Maputo
13 Jan 2021	Nathan Sage	USAID	Mozambique	Biodiversity Team Lead	Zoom
13 Jan 2021	Joao Fernando	USAID	Mozambique	Biodiversity Officer	Zoom
14 Jan 2021	N/A	WCS	Mozambique	Wildlife crime analyst	Maputo
20 Jan 2021	Arlindo Chissale	Pinnacle News	Mozambique	Investigative journalist	Nampula
22 Jan 2021	Nilton Cuna	WCS	Mozambique	Niassa Programme Director	Maputo
23 Jan 2021	Mahavir	Montepuez Ruby Mining	Mozambique	Security Manager	Montepuez
23 Jan 2021	N/A	SERNIC	Mozambique	Senior Investigator	Montepuez
24 Jan 2021	Magnus van der Merwe	Montepuez Ruby Mining	Mozambique	Security Director	Zoom
24 Jan 2021	Estacio Valoi	Moz24h Agency	Mozambique	Investigative journalist	Pemba
25 Jan 2021	Agostinho Jorge	Mariri (Niassa Carnivore Project)	Mozambique	Conservation Director	Zoom
25 Jan 2021	N/A	Customs	Mozambique	Customs officer	Pemba
25 Jan 2021	N/A	Conservation Synergies	Fast Africa	Investigator	Pemba
27Jan 2021	Tamrini Said	Department of Forestry and Environment	Zanzibar	CITES officer	Zanzibar
27 Jan 2021	N/A	N/A	Zanzibar	Drugs trafficking insider	Zanzibar
28 Jan 2021	Pat McDarby	US-DEA	Tanzania	Attaché	Dar
Feb 2021	Phil Alegranti	USFWS	Tanzania	Attaché	Dar
Feb 2021	Tim Davenport	WCS	Tanzania	Country Director	Zoom
L Feb 2021	Ben Jones	UK-FCDO	Tanzania	Organized crime advisor	Dar
2 Feb 2021	Robert Mande	Wildlife Division, MNRT	Tanzania	Head Anti-Poaching Task Force	Dar
7 Feb 2021	Krissie Clark	PAMS Foundation	Tanzania	Executive Director	Zoom
11 Feb 2021	N/A	LWT	Malawi	Mentor/advisor	Zoom
14 Feb 2021	N/A	LWT	Malawi	Investigator	Zoom
l6 Feb 2021	Adam Brown	Anuera	East Africa	CEO	Zoom
26 Feb 2021	Antony Alexander	Peace Parks Foundation	Mozambique	Special Projects Manager	Zoom
26 Feb 2021	, Brighton Kumchedwa	DNPW-MW	Malawi	Director	Zoom
26 Feb 2021	Alex Chunga	DNPW-MW	Malawi	Senior Parks and Wildlife Officer, Law Enforcement	Zoom
26 Feb 2021	Ed Sayer	Frankfurt Zoological Society	Zambia	Country Director, North Luangwa National Park	Zoom
26 Feb 2021	Patience Gandiwa	Zimbabwe Parks and Wildlife Management Agency	Zimbabwe	Transfrontier Conservation Area Director	Zoom
28 Feb 2021	Hugo van der Westhuizen	Frankfurt Zoological Society	Zimbabwe	Director, Gonarezhou Conservation Trust	Zoom
2 Mar 2021	Craig Hay	WWF	Southern Africa	Regional Law Enforcement Advisor	Zoom
3 Mar 2021	Andrew Chomba	DNPW-ZM	Zambia	Assistant Director, Conservation	Zoom
5 Mar 2021	Barry de Klerk	Namibian Police Force and Blue Rhino Task Team	Namibia	Deputy Commissioner and Head, Blue Rhino Task Team	Zoom
5 Mar 2021	Vincent Guillemin	Blue Rhino Task Team	Namibia	Senior Analyst	Zoom
3 Mar 2021	Jo Tagg	Rooikat Trust	Namibia	Director	Zoom
3 Apr 2021	Frances Craigie	DFFE	South Africa	Head of Enforcement	Pretoria
8 Apr 2021	Max Baloyi	DFFE	South Africa	Programme Officer	Pretoria

DATE	NAME	ORGANIZATION	COUNTRY	POSITION	LOCATION
8 Apr 2021	Gen Johan Jooste	DFFE	South Africa	Project Lead	Pretoria
8 Apr 2021	Kobus de Wet	SANParks	South Africa	Head, Environment and Corporate Investigations	Pretoria
8 Apr 2021	Jo Shaw	WWF	South Africa	Lead, Wildlife Programme	Pretoria
9 Apr 2021	Russ Stanford	USFWS	South Africa	Attaché	Pretoria
20 May 2021	Col Johan Jooste	Directorate for Priority Crime Investigation (Hawks), South African Police Service	South Africa	Head, Endangered Species Unit	Hoedspruit
14 Jun 2021	Jason Eligh	GI-TOC	Regional	Senior Analyst – drug flows	Zoom
9 Jul 2021	Adrian Kholi	DWNP	Botswana	Head, Law Enforcement	Zoom
11 Jul 2021	Mary Rice	EIA	Regional	Executive Director	Zoom
12 Jul 2021	Steve Carmody	WJC	Regional	Head of Investigations	Zoom
12 Jul 2021	Tim Wittig	United for Wildlife and Focused Conservation	Regional	Head of Intelligence	Zoom
13 Jul 2021	Jonny Vaughan	LWT	Malawi	Executive Director	Zoom
15 Jul 2021	Julian Rademeyer	GI-TOC	South Africa	Director, Regional Observatory	Zoom
12 Aug 2021	Adam Pires	TRAFFIC	Regional	Project Manager	Zoom
5 Oct 2021	Ryan Olson	US-DEA	Mozambique	Attaché	Maputo
12 Oct 2021	N/A	Private	Mozambique	Law enforcement advisor	Pemba
13 Oct 2021	Yacub Osman	Business Owner	Mozambique	CEO	Pemba
15 Oct 2021	Adriano Nuvunga	Centro Para Democracia e Desenvolvimento	Mozambique	Executive Director	Pemba
26 Oct 2021	Sarah Stoner	WJC	Regional	Head of Intelligence	Zoom
19 Jan 2022	Simone Haysom	GI-TOC	Regional	Senior Analyst	Zoom
31 Jan 2022	Pat McDarby	US-DEA	South Africa	Attaché	Cape Town
31 Jan 2022	Tim Burlingame	US-DEA	South Africa	Head of Intelligence	Cape Town
1 Feb 2022	Tim Wittig	United for Wildlife and Focused Conservation	Regional	Head of Intelligence	Cape Town
2 Feb 2022	Kimon de Greef	N/A	South Africa	Abalone trade expert	Cape Town
3 Feb 2022	Wim Brown	Focused Conservation	Regional	CEO	Franschhoek
15 Feb 2022	Russ Stanford	USFWS	South Africa	Attaché	Pretoria
28 Feb 2022	N/A	WCS	Mozambique	Wildlife crime analyst	Maputo
28 Feb 2022	Derek Littleton	Luwire (Niassa Reserve)	Mozambique	CEO	Maputo
1 Mar 2022	Keith Begg	Mariri (Niassa Carnivore Project)	Mozambique	Operations Director	Maputo
9 Mar 2022	Patricia Raxter	United for Wildlife and Focused Conservation	Regional	Senior Analyst	Franschhoek
11 Apr 2022	Kerri Rademeyer	WCP	Zambia	Executive Director	Lusaka
12 Apr 2022	Lusizi Mwale	DNPW-ZM	Zambia	Principle Wildlife Warden	Lusaka
10 May 2022	Chizamsoka Manda	GIZ / SADC	Regional	SADC LEAP Technical Advisor	Maputo
10 May 2022	Carlos Lopes Pereira	ANAC	Mozambique	Director, Law Enforcement	Maputo
10 May 2022	Andrew Chomba	DNPW-ZM	Zambia	Director	Maputo
10 May 2022	Edward Chilufya	DNPW-ZM	Zambia	Principle Wildlife Warden, Intelligence and Investigations	Maputo
10 May 2022	Edward Phiri	LATF	Regional	Director	Maputo
11 May 2022	Alex Chunga	DNPW-MW	Malawi	Senior Parks and Wildlife Officer, Law Enforcement	Maputo
11 May 2022	Miles Zidana	DNPW-MW	Malawi	Parks and Wildlife Officer / Head, WCU	Maputo
11 May 2022	Silvanus Okudo	Wildlife Division, MNRT	Tanzania	Tourism and Hunting	Maputo

DATE	NAME	ORGANIZATION	COUNTRY	POSITION	LOCATION
11 May 2022	Mlage Kabange	Tanzania Wildlife Authority	Tanzania	Law enforcement	Maputo
12 May 2022	N/A	ANAC	Mozambique	Wildlife crime analyst	Maputo
12 May 2022	David Ucama	ANAC	Mozambique	Lawyer	Maputo
12 May 2022	Cornelio Miguel	ANAC	Mozambique	Head of CITES and Research	Maputo
29 May 2022	Tim Burlingame	US-DEA	South Africa	Head Intelligence	Greyton
16 Jun 2022	Vincent Guillemin	Blue Rhino Task Team	Namibia	Senior Analyst	Windhoek
20 Jun 2022	Cathy Dreyer	SANParks	South Africa	Head Ranger, Kruger National Park	Zoom
5 Jul 2022	Russ Stanford	USFWS	South Africa	Attaché	Pretoria
5 Jul 2022	Johan Botes	Focused Conservation	South Africa	Project Manager	Pretoria
7 Jul 2022	Kimon de Greeff	Investigative reporter	South Africa	Abalone trade expert	Cape Town
8 Jul 2022	Markus Burgener	TRAFFIC	South Africa	Abalone trade expert	Cape Town
8 Jul 2022	Nicola Okes	TRAFFIC	South Africa	Abalone trade expert	Cape Town
29 Jul 2022	Agostinho Jorge	Mariri (Niassa Carnivore Project)	Mozambique	Conservation Director	Signal
3 Aug 2022	Cathy Dreyer	SANParks	South Africa	Head Ranger, Kruger National Park	Skukuza
14 Aug 2022	Carmen van Tichelen	DFFE	South Africa	Chief Analyst	Kasane
15 Aug 2022	Barry de Klerk	Namibian Police Force and Blue Rhino Task Team	Namibia	Deputy Commissioner and Head, Blue Rhino Task Team	Kasane
15 Aug 2022	Miles Zidana	DNPW-MW	Malawi	Parks and Wildlife Officer / Head, WCU	Kasane
15 Aug 2022	Mayeso Mtweya	Malawi Police Service	Malawi	Police officer	Kasane
15 Aug 2022	Jack MacMahon	WCP	Zambia	Strategic Development Manager	Kasane
15 Aug 2022	Lloyd Kabwela	DNPW-ZM	Zambia	Principal Wildlife Ranger Investigations	Kasane
16 Aug 2022	Jo Tagg	Rooikat Trust	Namibia	Director	Kasane
16 Aug 2022	Richard Morley	Focused Conservation	Uganda	Technical Advisor	Kasane
16 Aug 2022	Adrian Kohli	DWNP	Botswana	Head, Law Enforcement	Kasane
19 Aug 2022	Adam Pires	TRAFFIC	Regional	Project Manager	Kasane
19 Aug 2022	Mike Strang	WWF	Namibia	Project Manager, Counter Wildlife Crime Project	Kasane

### NOTES

- 1 Michelle Anagnostou, Synthesizing knowledge on crime convergence and the illegal wildlife trade, *Environmental Challenges*, 5 (2021), https://www.sciencedirect.com/ science/article/pii/S2667010021002018.
- 2 Tim Wittig, IV. Poaching, Wildlife Trafficking and Organised Crime, Whitehall Papers, 86, 1 (2016), 77–101, https://doi.org/10.1080/02681307.2016.1252127; Christopher Nellemann et al, World Atlas of Illicit flows, GI-TOC, 2018, https://globalinitiative.net/wp-content/ uploads/2018/09/Atlas-Illicit-Flows-FINAL-WEB-VERSION-copia-compressed.pdf.
- 3 Frances Massé et al, Conservation and crime convergence? Situating the 2018 London illegal wildlife trade conference, *Journal of Political Ecology*, 27, 1 (2020), 23–42, https://journals.librarypublishing.arizona.edu/jpe/ article/id/2142/.
- 4 INTERPOL, Environmental crime and its convergence with other serious crimes, 30 October 2015, https://www. interpol.int/content/download/5086/file/INTERPOL%20 Strategic%20Report%20-%20Environmental%20 Crime%20and%20its%20Convergence%20with%20 other%20Serious%20Crimes.pdf.
- 5 TNRC, Understanding crime convergence to better target natural resource corruption, February 202, https:// www.worldwildlife.org/pages/tnrc-blog-understandingcrime-convergence-to-better-target-natural-resourcecorruption.
- 6 C4ADS, Shared skies: Convergence of wildlife trafficking with other illicit activities in the aviation industry, March 2021, https://routespartnership.org/industry-resources/ publications/sharedskies.
- 7 WJC, Convergence of wildlife crime with other forms of organized crime, May 2021, https://wildlifejustice.org/ wp-content/uploads/2021/05/Crime-Convergence-Report-2021.pdf.
- 8 Daan van Uhm et al, Corruption within the illegal wildlife trade: A symbiotic and antithetical enterprise, *The British Journal of Criminology*, 58, 4 (2018), 864–885, https://doi. org/10.1093/bjc/azx032.
- 9 SADC, Situational analysis of LEAP implementation, emerging trends and challenges for wildlife crime in the SADC region, 2022, https://drive.google.com/ file/d/1dhoY77O7tOaQsonAofpTKbTyNKQK\_Uv7/ view?usp=sharing.

- 10 Ibid.
- 11 TNRC, Understanding crime convergence to better target natural resource corruption, WWF, 2021, https:// www.worldwildlife.org/pages/tnrc-blog-understandingcrime-convergence-to-better-target-natural-resourcecorruption.
- 12 Interviews with Tim Wittig, United for Wildlife and FCS, 12 July 2021 (via Zoom) and 1 February 2022 (Cape Town); interviews with Steve Carmody, WJC, 12 July 2021 (via Zoom) and 29 October 2021 (Cape Town).
- 13 Interview with Sarah Stoner, WJC, 26 October 2021, via Zoom.
- 14 Interview with Wim Brown, FCS, Franschhoek, 3 February 2022.
- 15 Phyllis Dininio and MSI, Strengthening rule of law approaches to address organized crime: Criminal market convergence, USAID, March 2020, https://globalinitiative. net/wp-content/uploads/2020/03/ROL-and-OC-White-Paper-4-Criminal-Market-Convergence-March-2020.pdf.
- 16 Europol, European Union Serious and Organised Crime Threat Assessment: A corrupting influence: The infiltration and undermining of Europe's economy and society by organized crime, Publications Office of the European Union, 2021, https://www.europol.europa.eu/publicationevents/main-reports/european-union-serious-andorganised-crime-threat-assessment-socta-2021.
- Organisation for Economic Co-operation and Development, Illicit trade: Converging criminal networks, 2016, https://www.oecd.org/fr/publications/chartingillicit-trade-9789264251847-en.htm.
- 18 Phyllis Dininio and MSI, Strengthening rule of law approaches to address organized crime: Criminal market convergence, USAID, March 2020, https://globalinitiative. net/wp-content/uploads/2020/03/ROL-and-OC-White-Paper-4-Criminal-Market-Convergence-March-2020.pdf.
- 19 David Pegg, Panama Papers: Europol links 3,500 names to suspected criminals, *The Guardian*, 30 November 2016, https://www.theguardian.com/news/2016/dec/01/ panama-papers-europol-links-3500-names-to-suspectedcriminals.
- 20 Europol, European Union Serious and Organised Crime Threat Assessment: Crime in the age of technology, European Police Office, 2017, https://www.europol. europa.eu/publications-events/main-reports/

european-union-serious-and-organised-crime-threatassessment-2017.

- 21 ENACT, Africa Organised Crime Index 2021: Evolution of crime in a Covid world, 2021, https://enact-africa. s3.amazonaws.com/site/uploads/2021-11-25-oci-final.pdf.
- 22 Daan van Uhm and Rick Nijman, The convergence of environmental crime with other serious crimes: Subtypes within the environmental crime continuum, *European Journal of Criminology*, 19, 4 (2020), 542–561, https://doi. org/10.1177/1477370820904585.
- 23 SEEJ-Africa, Eight convicted in France of ivory and rhino horn trafficking offences, 9 September 2021, https:// www.seej-africa.org/international/eight-convicted-infrance-of-ivory-and-rhino-horn-trafficking-offences/.
- 24 CITES, Trade in rhino horns in the territory of the Czech Republic, SC66, Doc. 51.1, Annex 6, https://cites.org/ sites/default/files/eng/com/sc/66/E-SC66-51-01-A6.pdf.
- 25 KTN News Kenya, Secret video of Akashas in underworld narcotics dealings leaked, 2017, https://www.youtube. com/watch?v=ejH9Bv7lhPc; see Department of Justice, Manhattan U.S. Attorney announces arrival of four defendants from Kenya charged with trafficking in massive quantities of heroin and methamphetamine, 2017, https:// www.justice.gov/usao-sdny/pr/manhattan-us-attorneyannounces-arrival-four-defendants-kenya-chargedtrafficking; interview with Wim Brown, FCS and former US-DEA special agent, Franschhoek, 3 February 2022.
- 26 Africa News, Kenya: alleged ivory trafficker acquitted on appeal, 4 August 2018, https://www.africanews. com/2018/08/04/kenya-alleged-ivory-traffickeracquitted-on-appeal/; Jerome Starkey, Ivory baron remanded in Kenyan jail, *The Times*, 31 December 2014, https://www.thetimes.co.uk/article/ivory-baronremanded-in-kenyan-jail-3m6g7g6kv9p; Paula Kahumbu, Kenya jails ivory kingpin for 20 years, *The Guardian*, 23 July 2016, https://www.theguardian.com/environment/ africa-wild/2016/jul/23/kenya-jails-ivory-kinpin-for-20years; see *Feisal Mohamed Ali v Republic* (2018), https:// kenyalaw.org/caselaw/cases/view/158158/%20%20.
- 27 Interview with Wim Brown, FCS, Franschhoek, 3 February 2022.
- 28 Tristan McConnell, 'They're like the mafia': The super gangs behind Africa's poaching crisis, *The Guardian*, 19 August 2017, https://www.theguardian.com/ environment/2017/aug/19/super-gangs-africa-poachingcrisis.
- 29 Civil Society Observatory of Illicit Economies in Eastern and Southern Africa, Mombasa is in decline as a transnational trafficking hub for ivory, Risk Bulletin – Issue 1, GI-TOC, November 2019, https://globalinitiative.net/ analysis/esaobs-risk-bulletin-1/.
- 30 Interpol and UNEP, Strategic Report: Environment, Peace and Security - A convergence of threats, 2016, https:// wedocs.unep.org/handle/20.500.11822/17008.
- 31 Gloria Freund, former Combating Wildlife Trafficking lead at the US Office of the Director of National Intelligence, speaking unofficially on these findings at the WJC's UN Convention against Transnational Organized Crime Conference of the Parties side event in October 2020,

https://vimeo.com/470939942; WJC, Convergence of wildlife crime with other forms of organized crime, May 2021, https://wildlifejustice.org/wp-content/ uploads/2021/05/Crime-Convergence-Report-2021.pdf.

- 32 Daan P Van Uhm and Rick CC Nijman, The convergence of environmental crime with other serious crimes: Sub-types within the environmental crime continuum, *European Journal of Criminology*, 19, 4 (2020), https://journals. sagepub.com/doi/full/10.1177/1477370820904585.
- 33 WJC, Convergence of wildlife crime with other forms of organised crime, 2021, https://wildlifejustice.org/ wp-content/uploads/2021/05/Crime-Convergence-Report-2021.pdf.
- 34 TRAFFIC, Initial analysis of the financial flows and payment mechanisms behind wildlife and forest Crime, March 2021, https://www.traffic.org/publications/reports/ case-digest-an-initial-analysis-of-the-financial-flows-andpayment-mechanisms-behind-wildlife-and-forest-crime/.
- 35 US Department of Justice, Members of African criminal enterprise charged with large-scale trafficking of rhinoceros horns and elephant ivory and heroin distribution, 2019, https://www.justice.gov/usao-sdny/pr/ members-african-criminal-enterprise-charged-large-scaletrafficking-rhinoceros-horns.
- 36 Interview with Sam Friberg, USFWS Office of Law Enforcement, 14 June 2019, via WhatsApp.
- 37 US Department of Justice, Former leader of violent Kenyan organized crime family sentenced to 25 years in prison for narcotics, weapons, and obstruction offenses, 2019, https://www.justice.gov/usao-sdny/pr/ former-leader-violent-kenyan-organized-crime-familysentenced-25-years-prison-narcotics; interview with USFWS attaché in Tanzania, Dar es Salaam, 1 February 2021; interview with US-DEA attaché in Tanzania, Dar es Salaam, 28 January 2021; interview with Wim Brown, FCS, Franschhoek, 3 February 2022.
- 38 Civil Society Observatory of Illicit Economies in Eastern and Southern Africa, Recent high-profile arrests by US and Chinese law-enforcement agencies have dismantled major wildlife trafficking networks that operated across the continent, Risk Bulletin – Issue 3, GI-TOC, January 2020, https://globalinitiative.net/esaobs-risk-bulletin-3/.
- 39 Interview with Vincent Opyene, NRCN, Kampala, May 2018.
- 40 Chris Morris, Moazu Kromah and the case of the West African ivory cartel, International Policy Digest, 24 August 2019, https://intpolicydigest.org/moazu-kromah-and-thecase-of-the-west-african-ivory-cartel/.
- 41 Interview with NRCN investigator, Livingstone, November 2019.
- 42 Interview with Sam Friberg, USFWS Office of Law Enforcement, WhatsApp, 14 June 2019.
- 43 Larry Neumeiste, Rhino horns trafficker sentenced to over 5 years in prison, *Washington Post*, 18 August 2022 https://www.washingtonpost.com/national/ rhino-horns-trafficker-sentenced-to-over-5-yearsin-prison/2022/08/18/1072a4e4-1f3b-11ed-9ce6-68253bd31864\_story.html.

- 44 Lawrence Baraza, Kenya extradites second most wanted drug criminal to US, Kenyans.co.ke, 4 September 2022, https://www.kenyans.co.ke/news/79186-kenyaextradites-second-most-wanted-drug-criminal-us.
- 45 Chris Morris, African courts need to take the lead in trying traffickers, International Policy Digest, 8 September 2022, https://intpolicydigest.org/african-courts-need-to-takethe-lead-in-trying-traffickers/.
- 46 Samuel Wasser et al, Elephant genotypes reveal the size and connectivity of transnational ivory traffickers, *Nature Human Behaviour*, 6 (2022), 371–382, https://www.nature. com/articles/s41562-021-01267-6; Daniel Stiles, Open and not shut: Ivory trafficking court cases in East Africa linked to the Kromah cartel, Medium, 29 August 2022, https://medium.com/@danielstiles/open-and-not-shutivory-trafficking-court-cases-in-east-africa-linked-to-thekromah-cartel-79ea7a4594cb; Chris Morris, African courts need to take the lead in trying traffickers, International Policy Digest, 8 September 2022, https://intpolicydigest. org/african-courts-need-to-take-the-lead-in-tryingtraffickers/.
- 47 Daniel Stiles, Open and not shut: Ivory trafficking court cases in East Africa linked to the Kromah cartel, Medium, 29 August 2022, https://medium.com/@danielstiles/openand-not-shut-ivory-trafficking-court-cases-in-east-africalinked-to-the-kromah-cartel-79ea7a4594cb.
- 48 Environmental Investigation Agency (EIA), Exposing the hydra: The growing role of Vietnamese syndicates in ivory trafficking, EIA London, 2018, https://reports. eia-international.org/exposingthehydra/; Chris Morris, A Malaysian national and his ivory connection to Africa, The Journal of African Elephants, 11 July 2022, https://www. africanelephantjournal.com/a-malaysian-national-and-hisivory-connection-to-africa/.
- 49 Civil Society Observatory of Illicit Economies in Eastern and Southern Africa, The tide is turning in Malawi's investigation of transnational wildlife trafficking, Risk Bulletin – Issue 4, January 2020, https://globalinitiative. net/analysis/esaobs-risk-bulletin-4/; Rachel Nuwer, A taste for pangolin meat and the fall of an African wildlife cartel, The New York Times, 18 October 2021, https://www.nytimes.com/2021/10/18/science/malawipoaching-wildlife.html.
- 50 Julian Newman, Twenty years since a massive ivory seizure, what lessons were learned?, The Journal of African Elephants, 25 July 2022, https://www. africanelephantjournal.com/twenty-years-since-amassive-ivory-seizure-what-lessons-were-learned/.
- 51 Interview with gemstones investigator from Malawi, 18 January 2021 (Nampula) and 14 February 2021 (via Zoom); interview with wildlife crime investigator from the LWT, 11 February 2021, via Zoom.
- 52 Marcena Hunter et al, Scratching the surface: Tracing coloured gemstone flows from Mozambique and Malawi to Asia, GI-TOC, 2021, https://globalinitiative.net/analysis/ gemstone-flows-mozambique-malawi-asia/.

- 53 Interview with gemstone investigator from Malawi, 18 January 2021 (Nampula) and 14 February 2021 (via Zoom).
- 54 AP News, Thailand seizes 422 pieces of smuggled elephant tusks, 7 March 2017, https://apnews.com/article/ a547770a3eaf41a783405fca44e41143; LWT, Gambian arrested in Malawi for ivory seized in Thailand, 1 July 2017, https://www.lilongwewildlife.org/2017/07/01/ gambian-arrested-malawi-ivory-seized-thailand/.
- 55 Interview with gemstone investigator from Malawi, Nampula, 18 January 2021.
- 56 Interview with gemstone trader from Malawi, 14 February 2021, via Zoom.
- 57 EIA, Yunhua Lin, notorious kingpin of wildlife crime syndicate, is jailed for 14 years in Malawi, 28 September 2021, https://eia-international.org/news/yunhua-linnotorious-kingpin-of-wildlife-crime-syndicate-is-jailed-for-14-years-in-malawi/.
- 58 Interview with LWT senior investigator, 14 February 2021, via Zoom; interview with Malawian Department of National Parks and Wildlife (DNPW) investigator, Maputo, 10 May 2022.
- 59 Interview with Malawian government investigator centrally involved in the Lin case, Kasane, 15 August 2022.
- 60 Interview with Derek Littleton, Luwire concession in Niassa Reserve, Maputo, 11 January 2021; interview with Carlos Lopes Pereira, Administração Nacional das Áreas de Conservação (National Administration of Conservation Areas) (ANAC), Maputo, 13 January 2021; interview with gemstones investigator from Malawi, 18 January 2021 (Nampula) and 14 February 2021 (via Zoom); interview with Nilton Cuna, WCS Niassa Programme Director, Maputo, 22 January 2021; interview with Agostinho Jorge, Conservation Director, Mariri concession in Niassa Reserve, 25 January 2021, via Signal; interview with wildlife crime investigator from LWT, 11 February 2021, via Zoom.
- 61 Civil Society Observatory of Illicit Economies in Eastern and Southern Africa, The tide is turning in Malawi's investigation of transnational wildlife trafficking, Risk Bulletin – Issue 4, GI-TOC, January–February 2020, https://globalinitiative.net/analysis/esaobs-risk-bulletin-4/.
- 62 Interview with LWT staff member, 13 July 2021, via Zoom.
- 63 UN Office on Drugs and Crime, Links between organized crime and corruption, 2021, https://www.unodc.org/ e4j/en/organized-crime/module-4/key-issues/links-tocorruption.html.
- Tanya Wyatt et al, Corruption and wildlife trafficking: Three case studies involving Asia, Asian Criminology, 13 (2018), 35–55, https://link.springer.com/article/10.1007/ s11417-017-9255-8.
- 65 TimesLIVE, Kruger Park field rangers arrested by the Hawks, 25 April 2022, https://www.timeslive.co.za/news/ south-africa/2022-04-25-kruger-park-field-rangersarrested-by-the-hawks/.
- 66 Interview with Cathy Dreyer, Head Ranger SANParks-Kruger National Park, Skukuza, 3 August 2022.

- 67 See, for example, Nicola Okes et al, Empty shells: An assessment of abalone poaching and trade from southern Africa, TRAFFIC, 2018, https://www.traffic. org/publications/reports/empty-shells/; Wilson Lau, An assessment of South African dried abalone *Haliotis midae* consumption and trade in Hong Kong, TRAFFIC, 2018, https://www.traffic.org/site/assets/files/2235/traffic-hkabalone-report.pdf; Kimon de Greef and Simone Haysom, Disrupting abalone harms: Illicit flows of *H. midae* from South Africa to East Asia, GI-TOC, February 2022, https:// globalinitiative.net/analysis/abalone-south-africa-eastasia/.
- 68 UN Food and Agriculture Organization, Globefish, Information and analysis on world fish trade report: Abalone production continues to grow, coupled with continuing demand, prices high and stable, 3 July 2017, https://www.fao.org/in-action/globefish/market-reports/ resource-detail/en/c/902597/.
- 69 Kimon de Greef and Shuhood Abader, Poacher: Confessions from the Abalone Underworld. Cape Town: Kwela, 2018; Kimon de Greef and Simone Haysom, Disrupting abalone harms: Illicit flows of *H. midae* from South Africa to East Asia, GI-TOC, February 2022, https://globalinitiative.net/ analysis/abalone-south-africa-east-asia/.
- 70 Wilson Lau, An assessment of South African dried abalone Haliotis midae consumption and trade in Hong Kong, TRAFFIC, 2018, https://www.traffic.org/site/assets/ files/2235/traffic-hk-abalone-report.pdf.
- 71 Kimon de Greef and Shuhood Abader, Poacher: Confessions from the Abalone Underworld. Cape Town: Kwela, 2018; Kimon de Greef and Simone Haysom, Disrupting abalone harms: Illicit flows of *H. midae* from South Africa to East Asia, GI-TOC, February 2022, https://globalinitiative.net/ analysis/abalone-south-africa-east-asia/; interview with former Hawks Endangered Species Unit investigator, Pretoria, 5 July 2022; interview with USFWS attaché for Southern Africa, Pretoria, 5 July 2022; interview with Markus Burgener and Nicola Okes, TRAFFIC, Cape Town, 8 July 2022.
- 72 Nicola Okes et al, Empty shells: An assessment of abalone poaching and trade from southern Africa, TRAFFIC, 2018, https://www.traffic.org/publications/reports/emptyshells/.
- 73 Kimon de Greef and Shuhood Abader, Poacher: Confessions from the Abalone Underworld. Cape Town: Kwela, 2018; Kimon de Greef and Simone Haysom, Disrupting abalone harms: Illicit flows of *H. midae* from South Africa to East Asia, GI-TOC, February 2022, https://globalinitiative.net/ analysis/abalone-south-africa-east-asia/.
- 74 Civil Society Observatory of Illicit Economies in Eastern and Southern Africa, Interlocking networks between Cape crime families may be enabling audacious and disruptive underworld power struggles, Risk Bulletin – Issue 8, May–June 2020, https://globalinitiative.net/wp-content/ uploads/2020/06/Civil-Society-Observatory-of-Illicit-Economies-in-Eastern-and-Southern-Africa-Risk-Bulletin-8. pdf; interview with former Hawks Endangered Species Unit investigator, Pretoria, 5 July 2022; interviews with Kimon de Greef, Cape Town, 2 February and 7 July 2022.

- 75 Civil Society Observatory of Illicit Economies in Eastern and Southern Africa, The assassination of South African gangster Ernie 'Lastig' Solomon points to a major reconfiguration in the Western Cape underworld, Risk Bulletin – Issue 14, GI-TOC, December 2020– January 2021, https://globalinitiative.net/wp-content/ uploads/2020/12/GI-TOC-RB14.pdf.
- 76 Interview with gang leader, Western Cape, February 2022.
- 77 Interviews with gang members involved in the illicit abalone trade, Western Cape, February and July 2022; interview with former Hawks Endangered Species Unit investigator, Pretoria, 5 July 2022; interviews with Kimon de Greef, Cape Town, 2 February and 7 July 2022.
- 78 Civil Society Observatory of Illicit Economies in Eastern and Southern Africa, The assassination of South African gangster Ernie 'Lastig' Solomon points to a major reconfiguration in the Western Cape underworld, Risk Bulletin – Issue 14, GI-TOC, December 2020– January 2021, https://globalinitiative.net/wp-content/ uploads/2020/12/GI-TOC-RB14.pdf.
- 79 Kimon de Greef and Simone Haysom, Disrupting abalone harms: Illicit flows of *H. midae* from South Africa to East Asia, GI-TOC, February 2022, https://globalinitiative.net/ analysis/abalone-south-africa-east-asia/.
- 80 Jenni Irish-Qhobosheane, How to silence the guns?
   Southern Africa's illegal firearms markets, GI-TOC,
   September 2021, https://globalinitiative.net/wp-content/
   uploads/2021/09/GITOC-ESA-Obs-How-to-silence-the-guns-Southern-Africas-illegal-firearms-markets.pdf.
- 81 GI-TOC, Strategic Organised Crime Risk Assessment: South Africa, GI-TOC, September 2022, https:// globalinitiative.net/analysis/assessing-south-africaorganized-crime-risk/.
- 82 Interviews with gang members involved in the illicit abalone trade, Western Cape, February and July 2022.
- 83 Kimon de Greef and Shuhood Abader, *Poacher: Confessions from the Abalone Underworld.* Cape Town: Kwela, 2018.
- 84 Interview with former Hawks Endangered Species Unit investigator, Pretoria, 5 July 2022; interviews with Kimon de Greef, Cape Town, 2 February and 7 July 2022.
- 85 Kimon de Greef and Simone Haysom, Disrupting abalone harms: Illicit flows of *H. midae* from South Africa to East Asia, GI-TOC, February 2022, https://globalinitiative.net/ analysis/abalone-south-africa-east-asia/.
- 86 Interview with gang leader, Western Cape, February 2022.
- 87 Interviews with gang members involved in the illicit abalone trade, Western Cape, February and July 2022.
- 88 Interviews with gang members involved in the illicit abalone trade, Western Cape, February and July 2022.
  89 Ibid.
- 90 Kimon de Greef and Simone Haysom, Disrupting abalone harms: Illicit flows of *H. midae* from South Africa to East Asia, GI-TOC, February 2022, https://globalinitiative. net/analysis/abalone-south-africa-east-asia/; interviews with gang members involved in the illicit abalone trade, Western Cape, February and July 2022; interview with former Hawks Endangered Species Unit investigator, Pretoria, 5 July 2022.

- 91 Interviews with gang members involved in the illicit abalone trade, Western Cape, February and July 2022; interview with former Hawks Endangered Species Unit investigator, Pretoria, 5 July 2022.
- 92 Interviews with gang members involved in the illicit abalone trade, Western Cape, February and July 2022.
- 93 Interview with former Hawks Endangered Species Unit investigator, Pretoria, 5 July 2022; interview with international law enforcement official, South Africa, January 2022.
- 94 Interview with gang leader, Western Cape, July 2022.
- 95 Interviews with US-DEA Head of Intelligence for Africa, 31 January 2022 (Cape Town) and 29 May 2022 (Greyton); Jason Eligh, A synthetic age: The evolution of methamphetamine markets in Eastern and Southern Africa, GI-TOC, March 2021, https://globalinitiative.net/ analysis/meth-africa/.
- 96 In 2021, a shipment of abalone was seized at Lusaka airport cargo terminal because it was mis-declared as dried fish. Interview with Lusizi Mwale, DNPW, Lusaka, 12 April 2022.
- 97 Interview with Barry de Klerk, Namibian Police Force, 5 March 2021, via Zoom; interview with Lusizi Mwale, DNPW, Lusaka, 12 April 2022; interview with Kerri Rademeyer, WCP, Lusaka, 11 April 2022; interview with Vincent Guillemin, Blue Rhino Task Team, Windhoek, 16 June 2022.
- 98 Interview with Maputo airport canine unit advisor, ANAC, Maputo, 28 February 2022.
- 99 Interview with Edward Phiri, Director of the LATF, Maputo, 10 May 2022; interview with Chizamsoka Manda, GIZ / SADC-LEAP Technical Advisor, Maputo, 10 May 2022.
- 100 Nigel South and Tanya Wyatt, Comparing illicit trades in wildlife and drugs: An exploratory study, *Deviant Behavior*, 32, 6 (2011), 538–561, https://doi.org/10.10 80/01639625.2010.483162; Tim Wittig, IV. Poaching, Wildlife Trafficking and Organised Crime, Whitehall Papers, 86, 1 (2016), 77–101, https://doi.org/10.10 80/02681307.2016.1252127; Daan P Van Uhm and Rick CC Nijman, The convergence of environmental crime with other serious crimes: Sub-types within the environmental crime continuum, *European Journal of Criminology*, 19, 4 (2020), https://journals.sagepub.com/ doi/full/10.1177/1477370820904585; Daan van Uhm, et al, Connections between trades and trafficking in wildlife and drugs, *Trends in Organised Crime*, 24 (2021), 425–446, https://doi.org/10.1007/s12117-021-09416-z.
- 101 Daan P Van Uhm and Rick CC Nijman, The convergence of environmental crime with other serious crimes: Sub-types within the environmental crime continuum, *European Journal of Criminology*, 19, 4 (2020), https://journals. sagepub.com/doi/full/10.1177/1477370820904585.
- 102 Tim Wittig, IV. Poaching, Wildlife Trafficking and Organised Crime, Whitehall Papers, 86, 1 (2016), 77–101, 2016, https://doi.org/10.1080/02681307.2016.12521
  27; interviews with US-DEA attaché for Mozambique, Maputo, 11 January 2021 and 5 October 2021; interview with US-DEA attaché for Tanzania, Dar es Salaam,

28 January 2021; interview with USFWS attaché for Eastern Africa, Dar es Salaam, 2 February 2021; WJC, Convergence of wildlife crime with other forms of organized crime, May 2021, https://wildlifejustice.org/ wp-content/uploads/2021/05/Crime-Convergence-Report-2021.pdf; Daan van Uhm et al, Connections between trades and trafficking in wildlife and drugs, Trends in Organised Crime, 24 (2021), 425–446, https:// doi.org/10.1007/s12117-021-09416-z; interviews with the US-DEA Head of Intelligence for Africa, 31 January 2022 (Cape Town) and 29 May 2022 (Greyton); interview with Wim Brown, FCS, Franschhoek, 3 February 2022; interviews with USFWS attaché for Southern Africa, Pretoria, 15 February 2022 and 5 July 2022; interview with Edward Phiri, Director of the LATF, Maputo, 10 May 2022.

- 103 Simone Haysom, Peter Gastrow and Mark Shaw, The heroin coast, ENACT, June 2018, https://globalinitiative. net/analysis/the-heroin-coast-a-political-economy-alongthe-eastern-african-seaboard/.
- 104 Alastair Nelson, A triangle of vulnerability: Changing patterns of illicit trafficking off the Swahili coast, GI-TOC, June 2020, https://globalinitiative.net/wp-content/ uploads/2020/06/Triangle-of-Risk.-web.pdf; Keith Somerville, *Ivory: Power and poaching in Africa*, London: Hurst publishers, 2016.
- 105 Interview with US-DEA attaché for Tanzania, Dar es Salaam, 28 January 2021; interview with Ben Jones, organized crime specialist, FCDO, Dar es Salaam, 1 February 2021; Interview with USFWS attaché for Eastern Africa, Dar es Salaam, 2 February 2021; interview with Adam Brown, Anuera, 16 February 2021, via Signal; interviews with Tim Wittig, United for Wildlife and FCS, 12 July 2021 (via Zoom) and 1 February 2022 (Cape Town); interview with Steve Carmody, WJC, Zoom, 12 July 2021 (via Zoom) and 29 October 2021 (Cape Town); interviews with US-DEA Head of Intelligence for Africa, 31 January 2022 (Cape Town) and 29 May 2022 (Greyton); interview with Wim Brown, FCS, Franschhoek, 3 February 2022; interview with Rich Morley, FCS, Kasane, 16 August 2022.
- 106 Interview with NRCN analyst, Kampala, 27 June 2022.
- 107 Interview with Senior Police Officer, Anti-Narcotics Department, Kampala, 23 May 2021.
- 108 Civil Society Observatory of Illicit Economies in Eastern and Southern Africa, Heroin, cocaine and marijuana markets in Uganda are changing, Risk Bulletin – Issue 6, GI-TOC, March–April 2020, https://globalinitiative. net/wp-content/uploads/2020/04/RB6.03.04.web\_. pdf; interview with US-DEA attaché for Tanzania, Dar es Salaam, 28 January 2021; Interview with Ben Jones, Organized crime specialist, FCDO, Dar es Salaam, 1 February 2021; Interviews with US-DEA Head of Intelligence for Africa, 31 January 2022 (Cape Town) and 29 May 2022 (Greyton).
- 109 Simone Haysom, From the maskani to the mayor: The political economy of heroin markets and East and Southern Africa, Enact Research Paper, Issue 13, February 2020, https://enactafrica.org/research/research-papers/

from-the-maskani-to-the-mayor-the-political-economyof-heroin-markets-ineast-and-southern-africa; Enact, Africa organized crime index 2021, Uganda, https://africa. ocindex.net/country/uganda; Interview with Senior Police Officer, Anti-Narcotics Department, Kampala, 23 May 2021.

- 110 Andrew Bagala, Inside Uganda's dark world of drug cartels, Monitor, 20 May 2022, https://www.monitor.co.ug/ uganda/news/national/inside-uganda-s-dark-world-ofdrug-cartels-3821600.
- 111 Interviews with US-DEA Attaché for Mozambique and Malawi, Maputo, 11 January 2021 and 5 October 2021; Interviews with US-DEA Head of Intelligence for Africa, 31 January 2022 (Cape Town) and 29 May 2022 (Greyton).
- 112 Jason Eligh, A shallow flood: The diffusion of heroin in Eastern and Southern Africa, GI-TOC, 28 May 2020, https://globalinitiative.net/analysis/heroin-east-southernafrica/.
- 113 Interview with former UK National Crime Agency investigator with significant experience in Malawi, 11 February 2021, via Signal.
- 114 Interview with gemstone dealer, Lilongwe, 22 June 2021.
- 115 Simone Haysom, Peter Gastrow and Mark Shaw, The heroin coast, ENACT, June 2018, https://globalinitiative. net/analysis/the-heroin-coast-a-political-economyalong-the-eastern-african-seaboard/; Alastair Nelson, A triangle of vulnerability: Changing patterns of illicit trafficking off the Swahili coast, GI-TOC, June 2020, https://globalinitiative.net/wp-content/uploads/2020/06/ Triangle-of-Risk.-web.pdf.
- 116 Julia Stanyard et al, Insurgency, illicit markets and corruption: The Cabo Delgado conflict and its regional implications, GI-TOC, February 2022, https:// globalinitiative.net/analysis/mozambique-cabo-delgadoconflict/; Prem Mahadevan and Alastair Nelson, Crime, conflict and corruption: Nampula as a smuggling hub, GI-TOC, April 2022, https://globalinitiative.net/analysis/ crime-conflict-corruption-nampula/; Civil Society Observatory of Illicit Economies in Eastern and Southern Africa, The evolution of the illicit economy in northern Mozambique, Risk Bulletin - Issue 17, GI-TOC, March-April 2021, https://globalinitiative.net/wp-content/ uploads/2021/04/GITOC-East-and-Southern-Africa-Risk-Bulletin-17.pdf; Alastair Nelson, A triangle of vulnerability: Changing patterns of illicit trafficking off the Swahili coast, GI-TOC, June 202, https://globalinitiative.net/wpcontent/uploads/2020/06/Triangle-of-Risk.-web.pdf.
- 117 Hizidine Achá, Chinese couple arrested with 3.6 Kg of rhino horn at Pemba airport – Mozambique, Club of Mozambique, sourced from O País, 23 August 2018, https://clubofmozambique.com/news/chinese-couplearrested-with-3-6-kg-of-rhino-horn-at-pemba-airportmozambique/.
- 118 See sections in this report on Ivato airport in Antananarivo, Maputo airport, and OR Tambo airport in Johannesburg.
- 119 Interview with Derek Littleton, Luwire concession in Niassa Reserve, Maputo, 11 January 2021; interviews with

Carlos Lopes Pereira, Director of Law Enforcement and Protection, ANAC, Maputo, 13 January 2021; interview with ivory trafficking investigator, Pemba, 25 January 2021.

- 120 Jason Eligh, A shallow flood: The diffusion of heroin in Eastern and Southern Africa, GI-TOC, 28 May 2020, https://globalinitiative.net/analysis/heroin-east-southernafrica/.
- 121 Interview with UK National Crime Agency investigator, Dar es Salaam, 1 February 2021.
- 122 Interview with US-DEA attaché for Tanzania, Dar es Salaam, 28 January 2021; interview with USFWS attaché for Eastern Africa, Dar es Salaam, 2 February 2021; interview with Robert Mande, Head National Task Force Anti-Poaching, Wildlife Division, Ministry of Natural Resource and Tourism (MNRT), Dar es Salaam, 2 February 2021; interview with Krissie Clark, PAMS, 9 February 2021, via Zoom.
- 123 Interview with Robert Mande, Head National Task Force Anti-Poaching, Wildlife Division, MNRT, Dar es Salaam,2 February 2021; interview with Krissie Clark, PAMS, 9 February 2021, via Zoom.
- 124 Interview with Robert Mande, Head National Task Force Anti-Poaching, Wildlife Division, MNRT, Dar es Salaam, 2 February 2021.
- 125 Jason Eligh, A shallow flood: The diffusion of heroin in Eastern and Southern Africa, GI-TOC, 28 May 2020, https://globalinitiative.net/analysis/heroin-east-southernafrica/; interviews with US-DEA attaché for Mozambique and Zambia, Maputo, 11 January 2021 and 5 October 2021.
- 126 WCP internal report on the connection between trades/ trafficking in wildlife and drugs, 14 April 2022.
- 127 Rural news, 100 tonnes of cannabis confiscated in Mpika, Lusaka Times, 2 October 2018, https://www.lusakatimes. com/2018/10/02/100-tonnes-of-cannabis-confiscatedin-mpika/.
- 128 Francis Massé, Conservation law enforcement: Policing protected Areas, Annals of the American Association of Geographers, 110, 3 (2019), 758–773, https://doi.org/10.1 080/24694452.2019.1630249; Sade Moneron et al, The people beyond the poaching: Interviews with convicted offenders in South Africa, TRAFFIC, September 2020, https://www.traffic.org/beyond-the-poaching/.
- 129 Annette Hübschle, Contested illegality: Processing the trade prohibition of rhino horn, *The architecture of illegal markets*, edited by Jens Beckert and Matias Dewey. Oxford University Press, 2017, 177–197.
- 130 SADC, Situational analysis of LEAP implementation, emerging trends and challenges for wildlife crime in the SADC region, 2022, https://drive.google.com/ file/d/1dhoY77O7tOaQsonAofpTKbTyNKQK\_Uv7/ view?usp=sharing.
- 131 Personal communication between Alastair Nelson of the GI-TOC and the late Dr Markus Borner (Frankfurt Zoological Society), the late Joe ole Kuwai (Frankfurt Zoological Society), and the late Justin Hando (Tanzania National Parks Authority).

- 132 Interviews conducted by Julian Rademeyer of GI-TOC in the Kruger National Park, September 2022.
- 133 Peter Borchert, Mabuza's assassination—the death of an alleged kingpin and the complex social fabric of rhino poaching, Rhino Review, 30 June 2021, https:// rhinoreview.org/mabuzas-assassination-the-death-of-analleged-kingpin-and-the-complex-social-fabric-of-rhinopoaching/.
- 134 Arisa Janse van Rensburg, Poaching syndicates: Big Joe and Mr Big's run-ins with the law, *Lowvelder*, 21 September 2018, https://lowvelder.co.za/451463/poachingsyndicates-big-joe-mr-bigs-run-ins-law/.
- 135 Iliana Magra and Lynsey Chutel, A Detective Pursued Rhino Poachers. Now He's Dead, *New York Times*, 19 March 2020, https://www.nytimes.com/2020/03/19/ world/europe/south-africa-rhino-poaching-leroy-bruwer. html.
- 136 Julia Stanyard et al, Insurgency, illicit markets and corruption: The Cabo Delgado conflict and its regional implications, GI-TOC, February 2022, https:// globalinitiative.net/analysis/mozambique-cabo-delgadoconflict/; Prem Mahadevan and Alastair Nelson, Crime, conflict and corruption: Nampula as a smuggling hub, GI-TOC, April 2022, https://globalinitiative.net/analysis/ crime-conflict-corruption-nampula/; Civil Society Observatory of Illicit Economies in Eastern and Southern Africa, The evolution of the illicit economy in northern Mozambique, Risk Bulletin - Issue 17, GI-TOC, March-April 2021, https://globalinitiative.net/wp-content/ uploads/2021/04/GITOC-East-and-Southern-Africa-Risk-Bulletin-17.pdf; Alastair Nelson, A triangle of vulnerability: Changing patterns of illicit trafficking off the Swahili coast, GI-TOC, June 2020, https://globalinitiative.net/wpcontent/uploads/2020/06/Triangle-of-Risk.-web.pdf.
- 137 Marcena Hunter et al, Scratching the surface: Tracing coloured gemstone flows from Mozambique and Malawi to Asia, GI-TOC, November 2021, https://globalinitiative. net/analysis/gemstone-flows-mozambique-malawi-asia/.
- 138 Interview with investigative reporter Arlindo Chissale, Nampula, 20 January 2021; interview with investigative reporter Estacio Valoi, Pemba, 24 January 2021.
- 139 Interviews with US-DEA attaché for Mozambique, Maputo, 11 January 2021 and 5 October 2021; interview with Carlos Lopes Pereira, ANAC, Maputo, 13 January 2021; interview with investigative reporter Omardine Omar, Maputo, 10 January 2021; interviews with US-DEA Head of Intelligence for Africa, 31 January 2022 (Cape Town) and 29 May 2022 (Greyton); interviews with USFWS attaché for Southern Africa, Pretoria, 15 February 2022 and 5 July 2022.
- 140 USAID, In plane sight: Wildlife trafficking in the air transport sector, 2017, https://routespartnership.org/ industry-resources/publications/in-plane-sight/view.
- 141 O País, Mozambique: Police seize nine kilograms of heroin at Maputo airport, Club of Mozambique, 26 July 2019, https://clubofmozambique.com/news/ mozambique-police-seize-nine-kilograms-of-heroin-atmaputo-airport-137859/; Joseph Hanlon, Mozambique: Brazilian cocaine baron caught in Maputo, AllAfrica, 17

April 2020, https://allafrica.com/stories/202004170180. html; AllAfrica, Mozambique: Three drug mules held at Maputo airport, 10 February 2014, https://allafrica.com/ stories/201402110108.html; Club of Mozambique, Drug mule stopped at Maputo airport with 38 cocaine capsules in stomach, 5 August 2022, https://clubofmozambique. com/news/drug-mule-stopped-at-maputo-airport-with-38-cocaine-capsules-in-stomach-222239/.

- 142 USAID, Runway to extinction: Wildlife trafficking in the air transport sector, 2019. https://routespartnership. org/industry-resources/publications/routes\_ runwaytoextinction\_fullreport.pdf.
- 143 Interview with law enforcement advisor, Pemba, 13
   October 2021; communication with investigative reporter
   Arlindo Chissale from Nacala, 25 February 2022, via
   WhatsApp; interview with Derek Littleton, Luwire
   concession in Niassa Reserve, Maputo, 28 February 2022.
- 144 Prem Mahadevan and Alastair Nelson, Crime, conflict and corruption: Nampula as a smuggling hub, GI-TOC, April 2022, https://globalinitiative.net/analysis/crimeconflict-corruption-nampula/; Civil Society Observatory of Illicit Economies in Eastern and Southern Africa, Risk Bulletin – Issue 17, GI-TOC, March–April 2021, https:// globalinitiative.net/wp-content/uploads/2021/04/GITOC-East-and-Southern-Africa-Risk-Bulletin-17.pdf; interview with law enforcement advisor, Pemba, 13 October 2021.
- 145 Alastair Nelson, A triangle of vulnerability: Changing patterns of illicit trafficking off the Swahili coast, GI-TOC, June 2020, https://globalinitiative.net/wp-content/ uploads/2020/06/Triangle-of-Risk.-web.pdf; Prem Mahadevan and Alastair Nelson, Crime, conflict and corruption: Nampula as a smuggling hub, GI-TOC, April 2022, https://globalinitiative.net/analysis/crime-conflictcorruption-nampula/; interview with ANAC wildlife crime analyst, Maputo, 12 May 2022; interview with law enforcement advisor, Pemba, 13 October 2021.
- 146 Prem Mahadevan and Alastair Nelson, Crime, conflict and corruption: Nampula as a smuggling hub, GI-TOC, April 2022, https://globalinitiative.net/analysis/crime-conflictcorruption-nampula/, p 22.
- 147 Interviews with ANAC Director of Law Enforcement, Maputo, 13 January 2021 and 10 May 2022.
- 148 Interviews with US-DEA attaché for Mozambique, Maputo, 11 January 2021 and 5 October 2021. Note that India has an estimated 31 million drug users, so it has a sizeable domestic drug market.
- 149 Press Trust of India (PTI), Woman from Mozambique held at Delhi airport with over 10 kg heroin worth Rs 45 crore hidden in pipes, News18, 31 July 2019, https://www. news18.com/news/india/mozambican-woman-held-atdelhi-airport-with-over-10-kg-heroin-worth-rs-45-croreconcealed-in-pipes-rolls-2253501.html; PTI, 3 foreigners arrested, heroin worth Rs 60 cr seized, *Business Standard*, 23 February 2020, https://www.business-standard. com/article/pti-stories/3-foreigners-arrested-heroinworth-rs-60-cr-seized-120022300407\_1.html; Tanseem Haider, Mozambique man who swallowed heroin pills worth Rs 2.8 crore arrested at IGI airport, *India Today*, 25 July 2021, https://www.indiatoday.in/cities/delhi/story/

mozambique-man-swallows-heroin-pills-worth-2-8-croreigi-airport-1832270-2021-07-25.

- 150 Caryn Dolley, Drug bust in India links South Africa to global heroin trade with ties to the Taliban, Daily Maverick, 30 September 2021, https://www.dailymaverick.co.za/ article/2021-09-30-drug-bust-in-india-links-south-africato-global-heroin-trade-with-ties-to-the-taliban/.
- 151 Interviews with US-DEA Head of Intelligence for Africa, 31 January 2022 (Cape Town) and 29 May 2022 (Greyton).
- 152 Interviews by a local researcher with officials who wish to remain anonymous, March and April 2022.
- 153 Known from an investigation conducted by ANAC in 2016; interview with ANAC Director of Law Enforcement, Maputo, 13 January 2021.
- 154 Interviews by a local researcher with officials who wish to remain anonymous, March and April 2022.
- 155 Ibid.
- 156 Sim Leoi Leoi, RM30mil worth of rhino horns seized near KLIA, *The Star*, 15 September 2021, https://www.thestar. com.my/news/nation/2021/09/15/rm30mil-worth-ofrhino-horns-seized-at-klia.
- 157 Interview with ANAC official, Maputo, 12 May 2022.
- 158 Interviews by a local researcher who is known and trusted at Maputo airport, with officials who wish to remain anonymous, March and April 2022.
- 159 Alastair Nelson and Jacqueline Cochrane, Trafficking Malagasy tortoises: Vulnerabilities and illicit markets in the western Indian Ocean, GI-TOC, December 2020, https://globalinitiative.net/analysis/trafficking-malagasytortoises/.
- 160 Lucia Bird et al, Changing tides: The evolving illicit drug trade in the western Indian Ocean, GI-TOC, May 2021, https://globalinitiative.net/analysis/drug-trade-indianocean/; interviews with US-DEA attaché for Mozambique and Madagascar, Maputo, 11 January 2021 and 5 October 2021; interviews with US-DEA Head of Intelligence for Africa, 31 January 2022 (Cape Town) and 29 May 2022 (Greyton).
- 161 Interviews with US-DEA attaché for Mozambique and Madagascar, Maputo, 11 January 2021 and 5 October 2021; interviews with US-DEA Head of Intelligence for Africa, 31 January 2022 (Cape Town) and 29 May 2022 (Greyton).
- 162 Alastair Nelson and Jacqueline Cochrane, Trafficking Malagasy tortoises: Vulnerabilities and illicit markets in the western Indian Ocean, GI-TOC, December 2020, https://globalinitiative.net/analysis/trafficking-malagasytortoises/.
- 163 Al Jazeera, Return of the Lizard King, 21 April 2015, https://www.aljazeera.com/program/101east/2015/4/21/return-of-the-lizard-king; interview with Steve Carmody, WJC, 12 July 2021, via Zoom.
- 164 Interview with Richard Lewis, Durrell Wildlife Conservation Trust, Antananarivo, 25 June 2020, via Zoom.
- 165 Lucia Bird et al, Changing tides: The evolving illicit drug trade in the western Indian Ocean, GI-TOC, May 2021,

https://globalinitiative.net/analysis/drug-trade-indianocean/.

- 166 Interviews with US-DEA attaché for Mozambique and Madagascar, Maputo, 11 January 2021 and 5 October 2021; interviews with US-DEA Head of Intelligence for Africa, 31 January 2022 (Cape Town) and 29 May 2022 (Greyton); Lucia Bird et al, Changing tides: The evolving illicit drug trade in the western Indian Ocean, GI-TOC, May 2021, https://globalinitiative.net/analysis/drug-tradeindian-ocean/.
- 167 David Lewis, Ryan McNeill and Zandi Shabalala, Gold worth billions smuggled out of Africa, Reuters, 24 February 2019, https://www.reuters.com/investigates/ special-report/gold-africa-smuggling/.
- 168 Caryn Dolley, Madagascar eyes 73.5kg of 'smuggled' gold seized in hand luggage at OR Tambo, Daily Maverick, 12 January 2021, https://www.dailymaverick.co.za/ article/2021-01-12-madagascar-eyes-73-5kg-ofsmuggled-gold-seized-in-hand-luggage-at-or-tambo/; Journal Time, Comoros: 49 kilos of gold bars seized and 2 Malagasy seized, 30 December 2021, https://journaltime. org/finance/commodities/silver/comoros-49-kilos-of-goldbars-seized-and-2-malagasy-seized/.
- 169 Alastair Nelson, A triangle of vulnerability: Changing patterns of illicit trafficking off the Swahili coast, GI-TOC, June 2020, https://globalinitiative.net/wpcontent/uploads/2020/06/Triangle-of-Risk.-web.pdf; Alastair Nelson and Jacqueline Cochrane, Trafficking Malagasy tortoises: Vulnerabilities and illicit markets in the western Indian Ocean, GI-TOC, December 2020, https://globalinitiative.net/analysis/trafficking-malagasytortoises/.
- 170 Interview with Alliance Voahary Gasy investigator, 6 April 2022, via Zoom; interview with Durrell Wildlife Conservation Trust investigator, 13 April 2022, via Zoom.
- 171 USAID, Runway to extinction: Wildlife trafficking in the air transport sector, 2019 https://routespartnership. org/industry-resources/publications/routes\_ runwaytoextinction\_fullreport.pdf.
- 172 Jason Eligh, A shallow flood: The diffusion of heroin in Eastern and Southern Africa, GI-TOC, 28 May 2020,https://globalinitiative.net/analysis/heroin-eastsouthern-africa/; Azarrah Karrim, OR Tambo a major hub for drug trafficking, says prison chaplain from Hong Kong, News24, 31 January 2020, https://www.news24. com/news24/southafrica/news/or-tambo-a-major-hubfor-drug-trafficking-says-prison-chaplain-from-hongkong-20200131.
- 173 Interview with USFWS attaché to Southern Africa, Pretoria, 15 February 2022.
- 174 Interview with former Hawks Investigator, Pretoria, July 2022; interview with USFWS attaché to Southern Africa, Pretoria, 5 July 2022.
- 175 Alastair Nelson, A triangle of vulnerability: Changing patterns of illicit trafficking off the Swahili coast, GI-TOC, June 2020, https://globalinitiative.net/wp-content/ uploads/2020/06/Triangle-of-Risk.-web.pdf.

- 176 Simone Haysom, Peter Gastrow and Mark Shaw, The heroin coast, ENACT, June 2018, https://globalinitiative. net/analysis/the-heroin-coast-a-political-economy-alongthe-eastern-african-seaboard/.
- 177 Civil Society Observatory of Illicit Economies in Eastern and Southern Africa, Elephant poaching has dramatically decreased in Mozambique's Niassa National Reserve, once an epicentre of the illegal trade, Risk Bulletin – Issue 5, GI-TOC, February 2021, https://globalinitiative.net/analysis/ esaobs-risk-bulletin-5/.
- 178 Civil Society Observatory of Illicit Economies in Eastern and Southern Africa, Recent high-profile arrests by US and Chinese law-enforcement agencies have dismantled major wildlife trafficking networks that operated across the continent, Risk Bulletin – Issue 3, GI-TOC, January 2020, https://globalinitiative.net/esaobs-risk-bulletin-3/.
- 179 EIA, First class connections: Log smuggling, illegal logging and corruption in Mozambique, February 2013, https:// eia-international.org/wp-content/uploads/EIA-First-Class-Connections.pdf; EIA, Shipping industry: Where there is a will there is a way, 26 May 2021, https://us.eia.org/ press-releases/202 27-containers-of-stolen-illegal-timberreturn-to-mozambique/.
- 180 Civil Society Observatory of Illicit Economies in Eastern and Southern Africa, The evolution of the illicit economy in northern Mozambique, Risk Bulletin – Issue 17, GI-TOC, March–April 2021, https://globalinitiative.net/analysis/ esaobs-risk-bulletin-17/.
- 181 Marcena Hunter et al, Scratching the surface: Tracing coloured gemstone flows from Mozambique and Malawi to Asia, GI-TOC, 2021, https://globalinitiative.net/analysis/ gemstone-flows-mozambique-malawi-asia/.
- 182 Civil Society Observatory of Illicit Economies in Eastern and Southern Africa, Risk Bulletin – Issue 7, GI-TOC, April–May 2020, https://globalinitiative.net/analysis/ esaobs-risk-bulletin-17/; Julia Stanyard et al, Insurgency, illicit markets and corruption: The Cabo Delgado conflict and its regional implications, GI-TOC, February 2022, https://globalinitiative.net/analysis/mozambique-cabodelgado-conflict/.
- 183 Alastair Nelson, A triangle of vulnerability: Changing patterns of illicit trafficking off the Swahili coast, GI-TOC, June 2020, https://globalinitiative.net/wp-content/ uploads/2020/06/Triangle-of-Risk.-web.pdf; interviews with US-DEA attaché for Mozambique, Maputo, 11 January 2021 and 5 October 2021; interviews with Derek Littleton, Luwire concession in Niassa Reserve, Maputo, 11 January 2021 and 28 February 2022; interviews with Carlos Lopes Pereira, Director of Law Enforcement and Protection, ANAC, Maputo, 13 January 2021 and 10 May 2022; interviews with wildlife crime analyst, ANAC, Maputo, 14 January 2021, 28 February 2022 and 12 May 2022; interview with Serviço Nacional de Investigação Criminal (SERNIC) investigator, Pemba, 23 January 2021; interview with ivory trafficking investigator, Pemba, 25 January 2021; interview with Agostinho Jorge, Conservation Director, Mariri, 25 January 2021 and 29

July 2022, via Signal; interview with law enforcement advisor, Pemba, 13 October 2021.

- 184 News 24, Chinese flee Mozambique over ivory smuggling,
  7 June 2011, https://www.news24.com/News24/Chinese-flee-Mozambique-over-ivory-smuggling-20110607;
  AP, Vietnam seizes over 2 tons of elephant tusks from
  Mozambique, 7 October 2016, https://apnews.com/
  article/c703c6ed1cb24a1cb881df091048c9aa; DW,
  Cambodia seizes nearly a ton of ivory hidden in hollow
  logs, 6 December 2017, https://www.dw.com/en/
  cambodia-seizes-nearly-a-ton-of-ivory-hidden-in-hollowlogs/a-41671483;
- 185 Hizidine Achá, Chinese couple arrested with 3.6 kg of rhino horn at Pemba airport – Mozambique, Club of Mozambique, sourced from O País, 23 August 2018, https://clubofmozambique.com/news/chinese-couplearrested-with-3-6-kg-of-rhino-horn-at-pemba-airportmozambique/.
- 186 Interviews with US-DEA attaché for Mozambique, Maputo, 11 January 2021 and 5 October 2021; interviews with Derek Littleton, Luwire concession in Niassa Reserve, Maputo, 11 January 2021 and 28 February 2022; interviews with Carlos Lopes Pereira, Director of Law Enforcement and Protection, ANAC, Maputo, 13 January 2021 and 10 May 2022; interviews with wildlife crime analyst, ANAC, Maputo, 14 January 2021, 28 February 2022 and 12 May 2022; interview with Nilton Cuna, WCS Programme Director for Niassa Reserve, Maputo, 22 January 2021; interview with SERNIC Investigator, Pemba, 23 January 2021; interview with Mahavir, MRM Security Manager, Montepuez, 23 January 2021; interview with Magnus van der Merwe, Gemfields Security Manager, 24 January 2021, via Zoom; interview with ivory trafficking investigator, Pemba, 25 January 2021; interviews with Agostinho Jorge, Conservation Director, Mariri concession in Niassa Reserve, 25 January 2021 and 29 July 2022, via Signal; interview with US-DEA attaché for Tanzania, Dar es Salaam, 28 January 2021; interview with USFWS attaché for Eastern Africa, Dar es Salaam, 2 February 2021; interview with wildlife crime investigator from LWT, 11 February 2021, via Zoom; interview with Adam Brown, Anuera, 16 February 2021, via Signal; interviews with USFWS attaché for Southern Africa, Pretoria, 9 April 2021, 15 February 2022 and 5 July 2022; interview with Jonny Vaughan, LWT, 13 July 2021, via Zoom; interview with law enforcement advisor, Pemba, 13 October 2021; interview with DNPW investigator, Maputo, 10 May 2022; interview with Keith Begg, Operations Manager, Mariri concession in Niassa Reserve, Maputo, 1 March 2022; interview with Malawian government investigator centrally involved in the Lin case, Kasane, 15 August 2022.
- 187 Jenni Irish-Qhobosheane, How to silence the guns? Southern Africa's illegal firearms markets, GI-TOC, September 2021, https://globalinitiative.net/wp-content/ uploads/2021/09/GITOC-ESA-Obs-How-to-silence-theguns-Southern-Africas-illegal-firearms-markets.pdf.
- 188 Niassa Special Reserve is 42 300 km<sup>2</sup> (16 332 mi<sup>2</sup>) and one of Africa's largest and most remote protected areas.

Between 2009 and 2017, it was one of the protected areas at the forefront of the ivory poaching crisis, losing more than 10 000 elephants. It still has among the largest populations of lion and wild dog in Africa.

- 189 Interview with SERNIC Investigator, Pemba, 23 January 2021; interview with Yussuf Adam, Historian at University of Eduardo Mondlane, Maputo, 8 October 2021; Martin Ewi et al, Violent extremism in Mozambique: Drivers and links to transnational organized crime, Institute for Security Studies, Southern Africa Report 51, August 2022, https://issafrica.org/research/southern-africa-report/ violent-extremism-in-mozambique-drivers-and-links-totransnational-organized-crime.
- 190 Civil Society Observatory of Illicit Economies in Eastern and Southern Africa, Elephant poaching has dramatically decreased in Mozambique's Niassa National Reserve, once an epicentre of the illegal trade, Risk Bulletin – Issue 5, GI-TOC, February 2021, https://globalinitiative.net/analysis/ esaobs-risk-bulletin-5/.
- 191 Interviews with Derek Littleton, Luwire concession in Niassa Reserve, Maputo, 11 January 2021 and 28 February 2022; interview with Nilton Cuna, WCS Programme Director for Niassa Reserve, Maputo, 22 January 2021; interview with Keith Begg, Operations Manager, Mariri concession in Niassa Reserve, Maputo, 1 March 2022.
- 192 Interviews with Carlos Lopes Pereira, Director of Law Enforcement and Protection, ANAC, Maputo, 13 January 2021 and 10 May 2022.
- 193 Ibid.
- 194 Interview with ivory trafficking investigator, Pemba, 25 January 2021.
- 195 Interview with Keith Begg, Operations Manager, Mariri concession in Niassa Reserve, Maputo, 1 March 2022.
- 196 Interview with Nilton Cuna, WCS Programme Director for Niassa Reserve, Maputo, 22 January 2021; interview with Keith Begg, Operations Manager, Mariri concession in Niassa Reserve, Maputo, 1 March 2022.
- 197 Interview with João Feijó, Observatório do Meio Rural (OMR) researcher, Maputo, 5 October 2021; João Feijó, From the 'faceless enemy' to the hypothesis of dialogue: Identities, pretensions and channels of communication with the Machababos, OMR Rural Highlights no. 130, 10 August 2021, https://omrmz.org/omrweb/wp-content/ uploads/DR-130-Cabo-Delgado-Pt-e-Eng.pdf.
- 198 Interview conducted by Mozambican investigative reporter with two former al-Shabab fighters, Marrupa, 5 February 2022;iInterview with wildlife crime investigator who had contact with two families of al-Shabaab recruits, 16 February 2022.

- 199 Tim Wittig, IV. Poaching, Wildlife Trafficking and Organised Crime, Whitehall Papers, 86, 1 (2016), 77–101, 2016, https://doi.org/10.1080/02681307.2016.12521 27; interviews with Tim Wittig, United for Wildlife and FCS, 12 July 2021 (via Zoom) and 1 February 2022 (Cape Town); interview with Steve Carmody, WJC, 12 July 2021 (via Zoom) and 29 October 2021 (Cape Town); interviews with US-DEA Head of Intelligence for Africa, 31 January 2022 (Cape Town) and 29 May 2022 (Greyton); interview with Wim Brown, FCS, Franschhoek, 3 February 2022; interview with Rich Morley, FCS, Kasane, 16 August 2022.
- 200 Kimon de Greef and Simone Haysom, Disrupting abalone harms: Illicit flows of *H. midae* from South Africa to East Asia, GI-TOC, February 2022, https://globalinitiative.net/ analysis/abalone-south-africa-east-asia/; interviews with Kimon de Greef, Cape Town, 2 February and 7 July 2022; Interview with Simone Haysom, 19 January 2022, via Zoom.
- 201 Annette Hübschle, Contested illegality: Processing the trade prohibition of rhino horn, *The architecture of illegal markets*, edited by Jens Beckert and Matias Dewey. Oxford University Press, August 2017, 177–197.
- 202 Civil Society Observatory of Illicit Economies in Eastern and Southern Africa, Recent high-profile arrests by US and Chinese law-enforcement agencies have dismantled major wildlife trafficking networks that operated across the continent, Risk Bulletin – Issue 3, GI-TOC, January 2020, https://globalinitiative.net/esaobs-risk-bulletin-3/; Civil Society Observatory of Illicit Economies in Eastern and Southern Africa, Elephant poaching has dramatically decreased in Mozambique's Niassa National Reserve, once an epicentre of the illegal trade, Risk Bulletin – Issue 5, GI-TOC, February 2021, https://globalinitiative.net/analysis/ esaobs-risk-bulletin-5/.
- 203 Civil Society Observatory of Illicit Economies in Eastern and Southern Africa, Why did two major ivory trafficking cases in Tanzania collapse, with one conviction quashed and the other resulting in only a small fine?, Risk Bulletin – Issue 16, February–March 2021, https://globalinitiative. net/analysis/esaobs-risk-bulletin-16/; Chris Morris, African courts need to take the lead in trying traffickers, International Policy Digest, 8 September 2022, https:// intpolicydigest.org/african-courts-need-to-take-the-leadin-trying-traffickers/.
- 204 See https://www.effective-states.org/pockets-ofeffectiveness/.





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