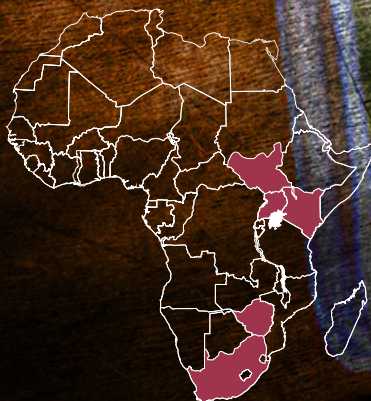


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ILLICIT GOLD MARKETS IN EAST AND SOUTHERN AFRICA



MARCENA HUNTER | MUKASIRI SIBANDA
KEN OPALA | JULIUS KAKA | LUCY P. MODI

MAY 2021

The background features several thin, light-colored lines that intersect at various points, creating a geometric pattern. Two of these intersection points are highlighted with small, solid-colored circles. The overall design is minimalist and modern.

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ACRONYMS AND ABBREVIATIONS

AGR	African Gold Refinery
ASGM	artisanal and small-scale gold mining
ASM	artisanal and small-scale mining
CES	Central Equatoria State (South Sudan)
DRC	Democratic Republic of Congo
EES	Eastern Equatoria State (South Sudan)
EU	European Union
FPR	Fidelity Printers and Refiners (Zimbabwe)
GI-TOC	Global Initiative Against Transnational Organized Crime
GMTC	Gold Mobilization Technical Committee (Zimbabwe)
MPP	Mineral Protection Police (Uganda)
NAS	National Salvation Front (South Sudan)
OECD	Organization for Economic Co-operation and Development
RBZ	Reserve Bank of Zimbabwe
SADPMR	South African Diamonds and Precious Metals Regulator
SPLM/A-IO	Sudan People's Liberation Movement/Army in Opposition
SSPDF	South Sudan People's Defence Forces
UAE	United Arab Emirates
UPDF	Ugandan People's Defence Force
ZANU-PF	Zimbabwe African National Union Patriotic Front
ZRP	Zimbabwe Republic Police



Gold miners work in Kakamega, one of Kenya's main gold-producing areas, August 2014. In East and Southern Africa, gold mining is mostly done by artisanal and small-scale miners who sell gold to informal and illicit buyers. © Simon Maina/AFP via Getty Images



EXECUTIVE SUMMARY

A South Sudanese worker holds a speck of gold in Nanakanak, South Sudan, May 2013. The country has significant gold reserves, which are mined by thousands of subsistence artisanal miners, as well as larger operations linked to politicians and armed groups. © Hannah Mcneish/AFP via Getty Images



Gold mining and gold trading in East and Southern Africa can be traced back nearly a thousand years.¹ Over the centuries, gold markets have evolved in these regions, responding to the discovery of new deposits, the entry of new actors, the influence of international markets, and changing regulatory regimes – both domestic and foreign. Today, the artisanal and small-scale gold mining (ASGM) sector is governed by increasingly comprehensive legal and regulatory frameworks, and is reliant on transnational supply chains that connect rural mining operations to international gold hubs.

However, the increase in illicit activities in gold-rich markets has undermined the potential for this precious commodity to be a catalyst for development in these regional African markets. A long-standing, important livelihood for many African communities, the gold trade draws criminal actors owing to its high-return, low-risk nature (especially when compared to the trade in other commodities, both licit and illicit). Inherent characteristics of gold (such as anonymity, ease of movement and global fungibility) attract illicit actors to the gold sector, who then exploit vulnerabilities in the system. Criminal and corrupt actors will use corruption and violence, as well as financial levers to profit from and control the trade.² As a result, informal mining operators struggle to comply with regulatory demands and are increasingly reliant on criminal actors who aggressively seek to maximize profits from illicit gold markets.

For example, a significant issue that fuels illicit gold markets is access to land and mineral rights. Regulatory frameworks can make it difficult for small operators to legally mine gold deposits, creating the conditions for illicit gold markets to form. Without clear, up-to-date and functional cadastres³ to define property rights over mineral deposits, violence and corruption become the tools for controlling extraction. Those in positions of power, especially state actors such as officials and politicians, take advantage of obscurity to seize and compete for mineral wealth.

The stress on gold markets during the COVID-19 pandemic highlighted the strength and resilience of illicit gold markets. While legal gold mining operations and buyers were shut down in many countries by national lockdowns that placed severe restrictions on movement and trade, illegal mining and trade were only temporarily stalled or suffered from minimal disruption. Many illicit gold buyers responded to this disruption by either stockpiling gold at bargain prices (resulting in windfall profits when they were able to sell the gold) or developing new ways of moving gold. Furthermore, miners dependent on ASGM for survival continued to mine in many locations, increasing their vulnerability to criminal actors and bribe-seeking law enforcement.

Analysis of various factors that shape illicit gold markets in East and Southern Africa provides insight into the stability or instability of markets and linkages between various marketplaces. They also can be important metrics in formulating policy and interventions in this sector. Effective responses to illicit activity in gold markets must seek to navigate the tension between combating criminality while maximizing the gold sector's development potential. This requires a nuanced analysis of market dynamics, supply chains and networks. This study unpacks the factors that shape and drive the East and Southern African gold markets.

Research covered multiple countries, providing insights into national and regional market dynamics and trade flows. The cross-border regional dynamics of illicit gold supply chains means examination of this issue requires applying a wide lens. South Sudan, Uganda, Kenya and Zimbabwe were selected for field research, with some limited research conducted in South Africa. A mixed-methods approach was used to collect quantitative and qualitative data. Research included identifying significant mining areas, and examining market structures and distribution systems. Gold pricing data was collected throughout 2020 at various points along the supply chain.

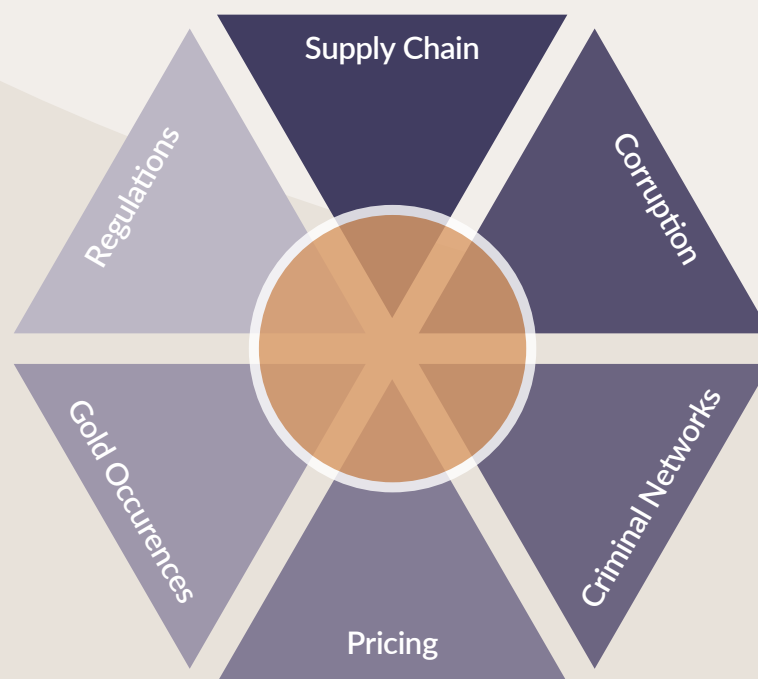


FIGURE 1 Factors shaping illicit gold markets.

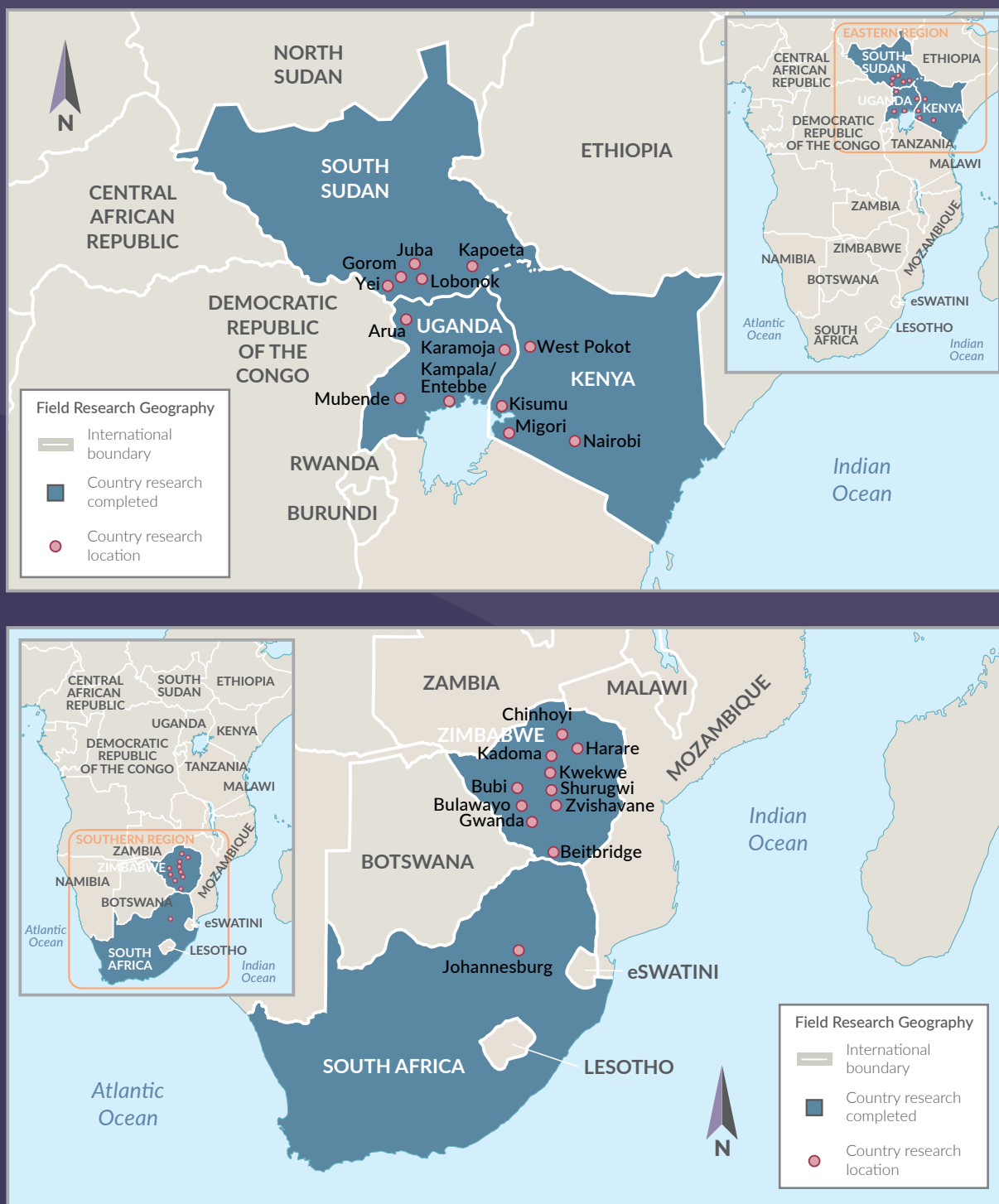


FIGURE 2 Countries where field research was conducted on gold markets and pricing.



Onlookers wait as retrieval efforts proceed for trapped artisanal gold miners near Kadoma, Zimbabwe, February 2019. Twenty-nine died when rain flooded mine shafts that miners had illegally accessed.

© Mike Hutchings/Reuters

Methodology

The study focuses on South Sudan, Uganda, Kenya and Zimbabwe, with some additional research also conducted in South Africa. These countries were selected because they are gold producers, possess known illicit gold markets and have significant inter-linked supply chains and market structures. Time and resource constraints precluded the inclusion of Tanzania, Mozambique and Madagascar, but these countries warrant further study.

Country-level investigators were charged with collecting data (quantitative and qualitative) on supply chains, local market structures and gold pricing along supply chains. In addition, semi-structured interviews with a wide range of stakeholders, including miners, buyers, journalists and civil society organizations, were conducted. The report is largely informed by interviews with people operating in or linked to the illicit gold sector, which have been triangulated with other sources and trade data where available.

Primary lines of research were:

- Price of gold: Pricing data along the supply chain was collected. Data included the role of the individual (i.e. miner, buyer or dealer), the location of data collection and details of where gold is bought and sold, the price at which gold is bought and sold, estimated purity of gold, and amounts bought and sold in transactions. This information enabled a nuanced analysis of illicit gold markets.



- Supply chains: The direction of gold flows and the various actors involved at different points in the supply chain were examined. This included identifying the means by which gold is moved from mine sites to transit hubs and from the continent to offshore markets.
- Market structures: Investigators were asked to build a profile of prominent and influential actors in gold markets, including political actors, foreign nationals and armed groups. This line of investigation aimed to identify core structural components of illicit gold markets in the region, with particular attention to those features that enable illicit trade to emerge and flourish, as well as factors that disrupt these markets. It examined which actors benefit the most if corruption or violence is used to control the gold trade, and what benefits accrue to local communities.

There were challenges encountered in conducting the fieldwork in the study countries. These included insecurity and the onset of the COVID-19 pandemic, which limited travel and affected access to some locations. Security was a particular problem in South Sudan, where accessing research locations and informants was curbed because of concerns about the personal security of researchers and participants.


The safety of informants is a priority. An overriding consideration of the work is the need to ensure that no individual or group is harmed in any way through conducting or participating in the research. As such, the principle of confidentiality governed the entire approach to the fieldwork and reporting.

A photograph of a miner, known as a Zama Zama, working in a narrow, dimly lit underground tunnel. The miner is wearing a green jacket with yellow and white stripes on the sleeves, a black headlamp, and a black headband. They are positioned in the center of the frame, looking towards the right. The tunnel walls are made of rough, uneven rock and are reinforced with several thick wooden poles. The floor is also rocky and uneven. The lighting is focused on the miner, with the rest of the tunnel being dark. The overall atmosphere is one of a small, confined, and potentially dangerous underground space.

OVERVIEW OF GOLD MINING AND TRADE

A Zama Zama, the colloquial name for illegal gold miners in South Africa, enters an abandoned mine in Roodepoort, Gauteng, in January 2016. There are hundreds of uncapped mine shafts surrounding Johannesburg that Zama Zamas access.

© Graeme Williams for The Washington Post via Getty Images



There is no universal agreement on the definition of artisanal and small-scale mining (ASM). The Organization for Economic Co-operation and Development (OECD) Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas describes ASM as, '... formal or informal mining operations with predominantly simplified forms of exploration, extraction, processing, and transportation. ASM is normally low capital intensive and uses highly labour-intensive technology. The size of ASGM operations can range from a small family group to hundreds of individuals working at a single site and equipment can range from metal or plastic pans to mechanised processing machines, such as rock crushers.'⁴

Within East and Southern Africa there is a wide range of activity that falls under the ASGM umbrella. In South Sudan, gold mining and processing techniques employed by artisanal miners are more rudimentary than seen elsewhere, with miners lacking even the most basic equipment. For example, no mechanization or chemicals (including mercury) is used to process artisanally mined gold. In contrast, mining operations in parts of Kenya and Zimbabwe are very developed, with hundreds of people present at some sites, using highly mechanized processes. Small-scale mining in South Africa is different from what is seen elsewhere on the continent. Most miners infiltrate and work illegally in abandoned and active commercial large-scale mine shafts.

ASGM can be a dangerous activity, particularly where there is a lack of appropriate equipment and safety measures. For example, around Kapoeta in South Sudan, trench collapses can kill up to four people a month.⁵ Likewise, 29 miners were killed in Zimbabwe in 2019 when mining tunnels flooded.⁶ The hard labour can also be detrimental to the general health of the miners.

Corruption and criminality in the sector have increased the speed and severity of the environmental damage caused by ASGM.

Also of concern is the widespread use of mercury. Dangerous to human health and the environment,⁷ the illicit mercury trade is closely tied to the illicit gold trade. It was reported in Migori, Kenya, that a leading politician in the area is behind the smuggling of mercury into the country from Tanzania.⁸ In Zimbabwe, this market is driven by a WhatsApp group for miners, where mercury is openly advertised and sold by mining sponsors, including gold buyers.

Corruption and criminality in the sector have increased the speed and severity of the environmental damage caused by ASGM. For example, foreign actors, who operate illegally or in collaboration with corrupt government officials, often introduce new techniques or technology that amplify negative environmental impacts. This is the case in Zimbabwe where the government is allowing mining in protected areas, such as the Matobo and Umfurudzi national parks,⁹ and has lifted a ban on riverbed mining, a practice with detrimental environmental consequences.¹⁰ Mining operators can conduct riverbed mining in partnership with the state's Zimbabwe Mining Development Corporation. In theory, this partnership promotes strong environmental management practices and regulatory checks. However, in practice, it is alleged that the arrangement allows senior politicians and military chiefs to parcel out lucrative riverbed permits to foreign investors for a fee without proper environmental protections being put in place.¹¹

Furthermore, there are notable human rights abuses carried out by criminal networks in South Africa. At the lowest rung of the hierarchy are miners colloquially known as Zama Zamas. An estimated 70 per cent of these are foreign nationals, mostly from neighbouring countries such as Zimbabwe, Mozambique and Lesotho. Generally from poorer socio-economic backgrounds, Zama Zamas are typically vulnerable individuals exploited by criminal gangs.¹² Zama Zamas can be unaware that they have been recruited to mine illegally until they arrive at the site.¹³ They can also be forced to work underground for weeks, and sometimes months, before resurfacing. These miners are also exposed to murder, forced migration, money laundering, corruption, racketeering, drugs and prostitution on a scale not seen elsewhere in Africa.¹⁴ A recent trend in the trafficking of children has been linked to increasing numbers of underage minors being rescued from forced labour in mines in the past two to three years.¹⁵

Despite the often unsafe and sometimes exploitative conditions, many Africans are drawn to the business by favourable economic returns, even for those on the lowest rung of the ASGM ladder, and the fact it provides them with a livelihood in an environment that offers few other options.¹⁶ The importance of ASGM as a means of survival is driven in part by declining agricultural productivity and high unemployment in rural areas accelerated by climate change. ASGM is an important economic shock absorber in countries facing growing poverty, high levels of unemployment and declining agricultural production. In the four countries under study, as well as in South Africa, ASGM not only provides a critical means of survival, it also stimulates local economies in the areas around the mining activity.

Country overviews

South Sudan

South Sudan, despite being known primarily as an oil producer, has substantial gold deposits. Most gold mining takes place in Central Equatoria State (CES), where Juba is located, and in Eastern Equatoria State (EES). In CES major gold producing areas include Gorom, Lobonok, and Yei. In EES, it is concentrated mainly in Kapoeta. ASGM also takes place in Western Equatoria State, along the border with Democratic Republic of Congo (DRC); Jonglei State, in and near Boma National Park; Western Bahr el Ghazal State and Upper Nile State. Poor infrastructure and security issues make gold mining operations difficult to access.

It is thought that tens of thousands of individuals are involved in artisanal gold mining. A 2016 report estimating that more than 60 000 people were active in artisanal mining across the country.¹⁷

In addition to artisanal mining, there are more structured, industrial mining operations.¹⁸ These mines are concentrated in the Kapoeta and Gorom areas. As of 2019, the Ministry of Mining granted 61 mining exploration licences valid until 2022, and 12 small-scale licences valid until 2028, most of them in the Gorom area near Juba.

It is difficult to estimate the amount of gold produced. Neither the Ministry of Mining nor the Ministry of Trade have data on the country's gold production or trade.¹⁹ The secretive and high-risk nature of investigating the sector makes it almost impossible to estimate the scale of production or value of gold flows. However, analysis of mining supply chains indicates that both the numbers of people engaged in ASGM and the value of gold produced are significant. GI-TOC speculates that the monthly value of production may be millions of dollars.



Gold mining operation in Gorom, South Sudan, February 2020. © Author supplied

Uganda

Uganda's domestic ASGM activity is mainly in the centre and north-east of the country. In the Karamoja region, the towns of Moroto, Amudat and Nakapiripirit are local hubs for mining activity. Some sites in Karamoja reportedly produce up to 200 grams to 500 grams per day of high-quality gold, with a purity of 97.8 per cent to 99 per cent.²⁰ Mubende, in the south-west of the country, is also a hive of ASGM activity.

Gold mining in Uganda is predominantly informal. An estimated 190 000 Ugandans employed by the ASM sector in Uganda produce about 90 per cent of all minerals, including gold.²¹ Prior to a large-scale eviction in 2017, it was estimated that about 60 000 people were mining in Mubende.²²

As with other countries, it is difficult to estimate the scale of gold production in Uganda. In 2019, Uganda exported US\$1.25 billion worth of gold, compared with US\$514.8 million in 2018.²³ However, Uganda's actual production is thought to be much smaller, with exports believed to include gold smuggled into Uganda from the DRC and South Sudan.

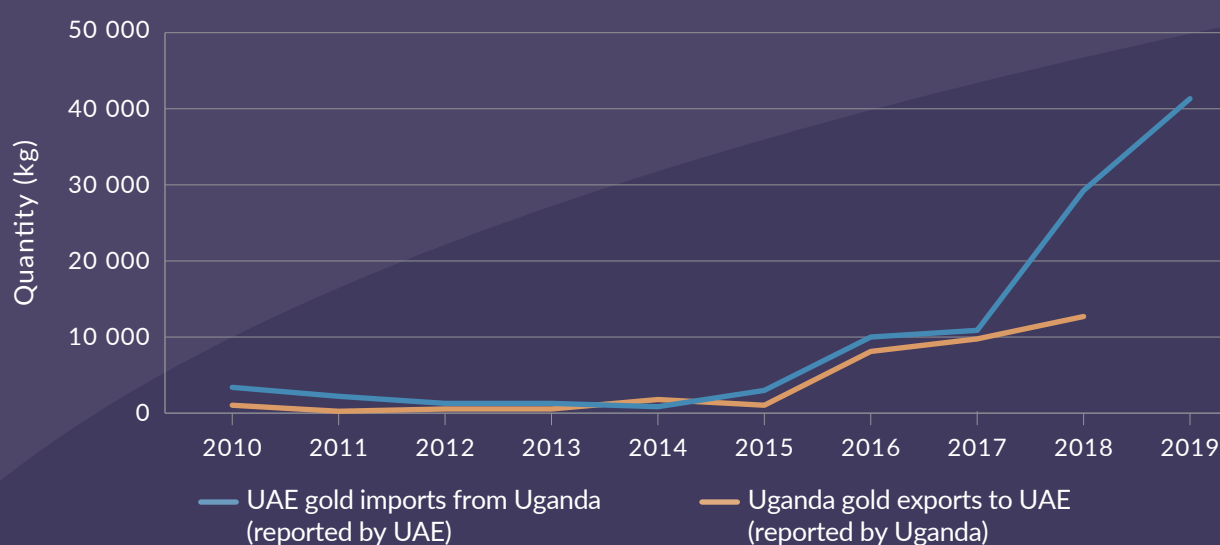


FIGURE 3 Ugandan gold export and import discrepancies to the UAE, 2010–2019.

Kenya

The bulk of Kenya's ASGM activity takes place in the south-west corner of the country in the Kisumu and Migori counties. Gold deposits and mining activity can also be found on the country's western and northern borders in frontier counties.

Tens of thousands of people are thought to be engaged in ASGM in Kenya, although the exact figures remain a matter of conjecture. Estimates of people directly engaged in artisanal mining range from 100 000 people²⁴ to 250 000.²⁵ In Migori in south-western Kenya, and in parts of West Pokot and Turkana in western Kenya, this is the main income-generating activity.

Mining regions on the borders with South Sudan, Ethiopia and Uganda are in some of the most dangerous parts of the country and are considered to be a haven for organized crime.²⁶ In West Pokot County and Turkana, former cross-border cattle rustlers and bandits have shifted to gold mining following government clampdowns on transborder criminal activities and a decrease in livestock populations.²⁷

The quantity of gold produced in the country remains uncertain. Following a dramatic rise in official production in 2017, gold deliveries have since declined. Officially only 394.9 kilograms of gold were produced in 2019.²⁸ According to a source in the Ministry of Petroleum and Mining, ASGM could be producing ten times the official figures, but most of this remains in the informal value chain.²⁹

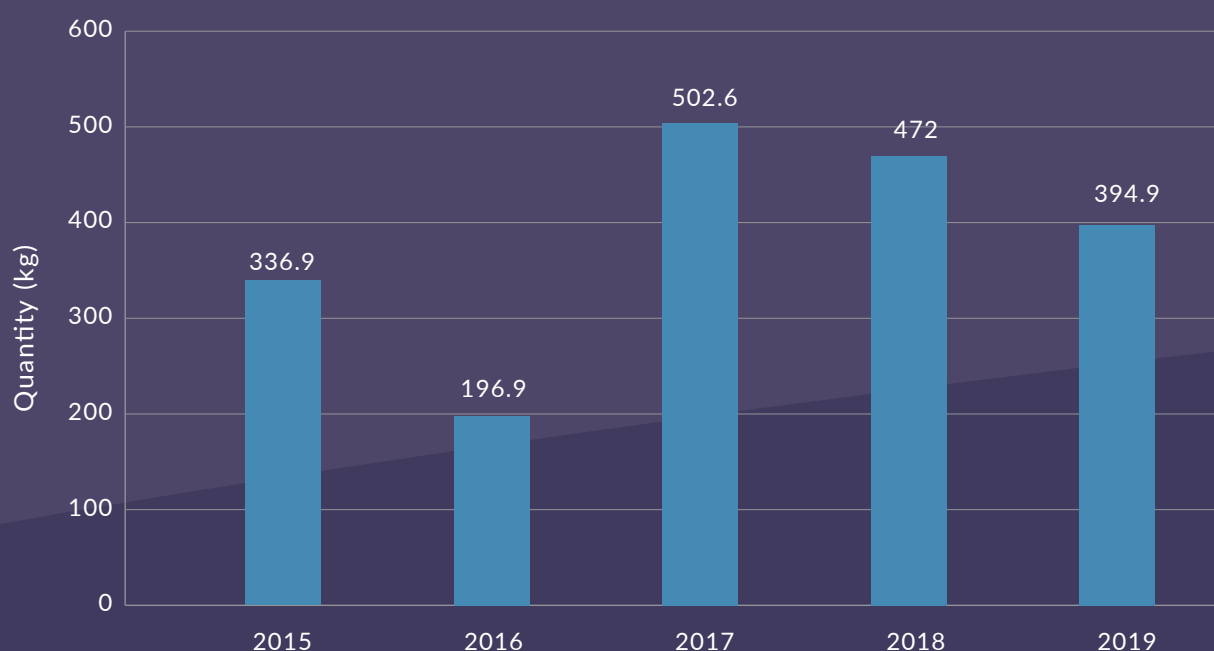


FIGURE 4 Official Kenyan gold production (kilograms, 2015–2019).

SOURCE: Kenya National Bureau of Statistics, Economic Survey 2020, 28 April 2020

Zimbabwe

ASGM takes place in every Zimbabwean province, with most gold production thought to take place in the Midlands districts of Kwekwe and Shurugwi and the Mashonaland West district of Kadoma.³⁰ More than a million people in Zimbabwe are directly dependent on ASGM, with more than 3 million indirect beneficiaries.³¹

While Zimbabwe is a major gold producer, official production estimates are likely to be well below actual production because of the size of the informal industry in the mining sector and the dominance of the illicit market. Based on official purchasing data, the ASGM sector produced 17.5MT of gold in 2019. However, an estimated 50 per cent of ASGM gold production is thought to be lost to smuggling.³² The Zimbabwean Minister of Home Affairs has said that Zimbabwe loses US\$100 million every month to gold smuggling.³³

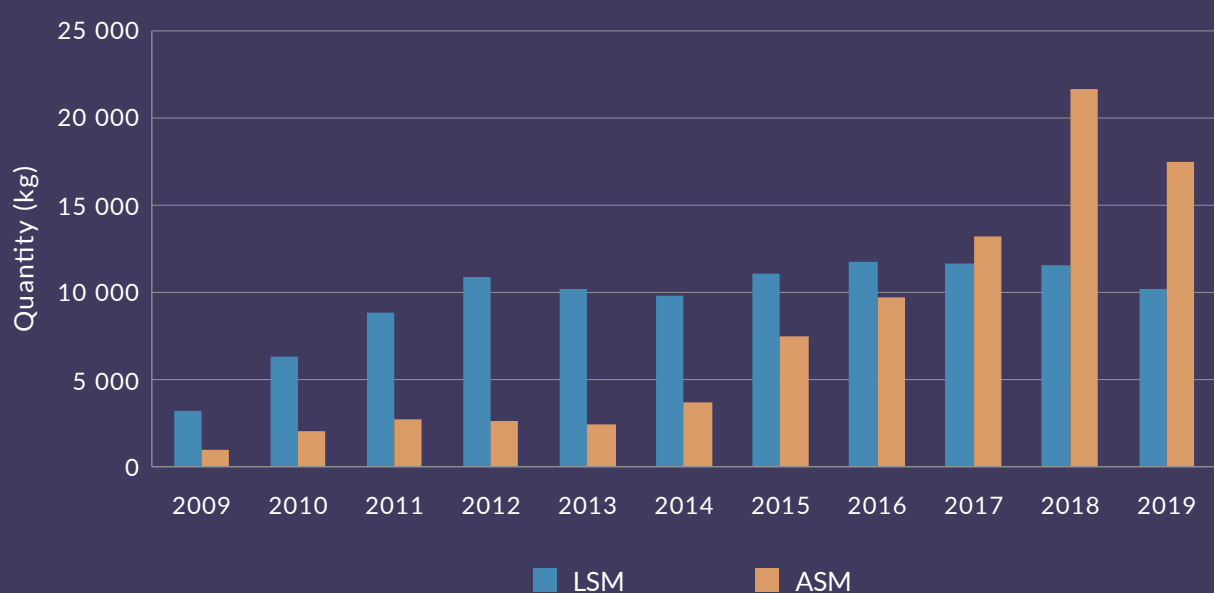


FIGURE 5 Gold deliveries to Fidelity Printers and Refiners (Zimbabwe).

SOURCE: Ministry of Mines and Mining Development, Kampala, November 2020

South Africa

Illegal mining largely takes place in Johannesburg's East Rand. In this area there are hundreds of uncapped mine entrances that are used by illegal miners. It has been estimated that about 30 000 illegal miners, or Zama Zamas are active.

Although it was recently surpassed by Ghana, South Africa has long been Africa's largest gold producer.³⁴ In 2019, it was estimated that illegal mining cost the South African economy R21 billion (about US\$1.2 billion) annually.³⁵

In general, gold supply chains consist of the following groups of actors:

Miners: While the description is often applied to all individuals working at a mine site, there is a wide variety of roles, hierarchies and other factors that differentiate members of this group. Diggers, who extract gold-bearing ore, will often work for a mine manager or pit owner. Given the informal nature of ASGM, often the owner has financed the operation but does not hold formal mining rights or a licence. Miners can also include washers. Often women are washers, who wash gold bearing ore with water as a first step to extracting gold.

Buyers: Buyers will buy gold from miners or other small buyers. Local buyers who buy at or close to mine sites tend to be natives of the area, especially in areas that are difficult to access or require local knowledge and connections to do business. They will then sell gold to bigger buyers or dealers in national or regional trade hubs. There is no set number of buyers in supply chains, although it is often limited to one or two intermediaries. Their role and relationships with others in the supply chain can vary significantly. For example, a miner may also be a buyer, or a buyer may be an independent actor or an agent for a dealer. Depending on their arrangement, buyers may hold both roles at once, buying some gold as an agent and some as an independent buyer.

Dealers: Dealers are major players and the largest buyers in the African gold supply chain. They are

mostly stationed in national or regional export hubs and orchestrate the export of gold (often illegally) from the continent.³⁶

Mapping the role and relationships between actors engaged in the ASGM gold trade is not a straightforward exercise. Individuals can have multiple roles, while supply chains and networks can take different routes and forms. The difficulty of differentiating between informality and criminality also complicates analysis of the situation. Upstream, at or close to the mine site, activity is often best characterised as informal. However, as gold moves downstream, the criminal culpability of actors tends to increase, with major dealers knowingly engaging in illicit activity. As a result, ASGM markets are not only a pyramid, consolidating as they move down the supply chain, but also a gradient, reflecting the increasing sophistication and criminality of actors through the supply chain.³⁷

Criminal control is often hidden behind a diffuse web of supply chains, financial flows and intermediaries. Although the networks are 'loose', this does not mean they are not well entrenched or well controlled. Networks tend to be transactional, driven and controlled by a limited number of individuals at key points in the chain. Influential criminal and corrupt actors often disguise their involvement behind front companies and representatives or geographically dispersed networks of intermediaries.³⁸

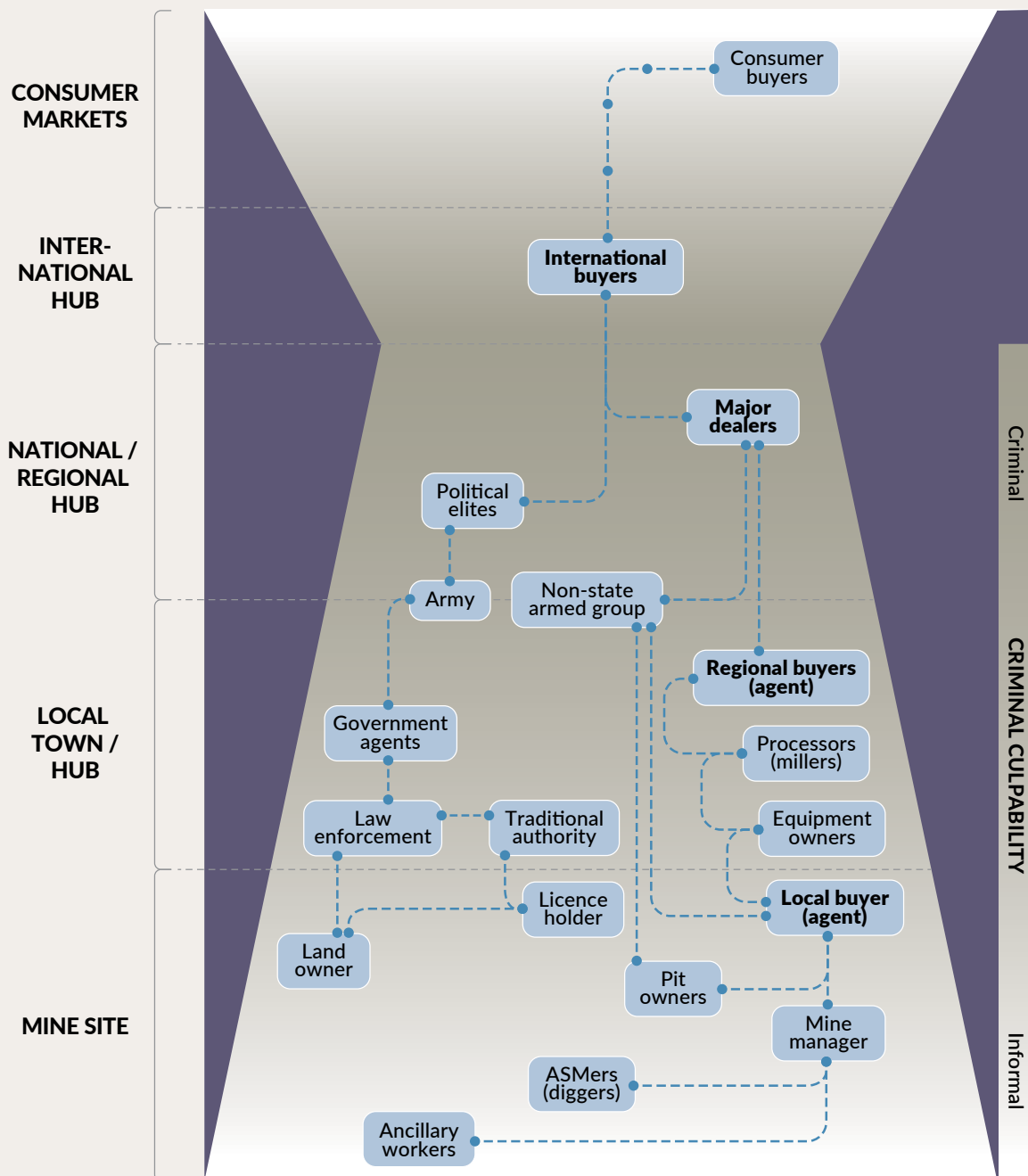


FIGURE 6 Gold supply chains and networks.

NOTE: While the diagram aims to reflect the relative criminal culpability of actors, it can significantly vary and is context-dependent.

SOURCE: Marcena Hunter, Pulling at golden threads, ENACT, April 2019.

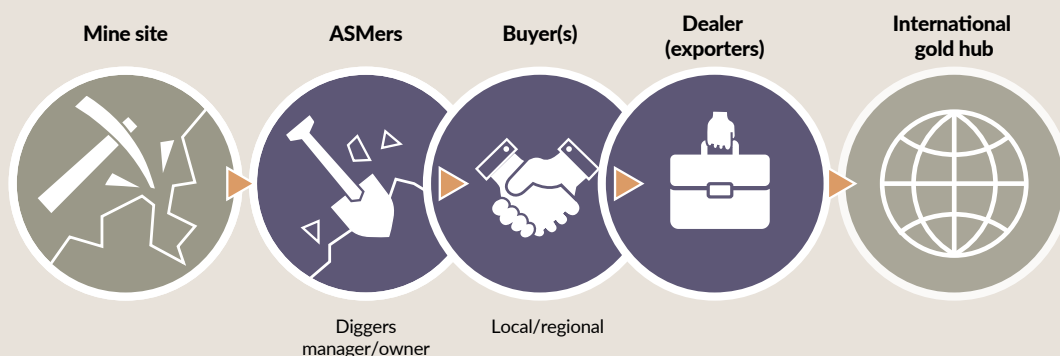



FIGURE 7 Supply chains in artisanal and small-scale mining.



PRICING

Gold ingot, also known as gold bullion or a gold bar, is gold that has been refined.

© Brooks Kraft LLC/Sygma via Getty Images



Data on gold prices provides valuable insights into market dynamics. By collecting pricing data over a period of time in diverse locations, it is possible to gain a better understanding of how illicit gold markets function, which can then inform responses.

Pricing data was split into 'mine site prices' and 'supply chain prices' to enable a more nuanced analysis of how prices change along the supply chain. The price of gold increases as it moves along the supply chain (from the mines to local and regional trade hubs, and on to international trade hubs) as value is added. This can take the form of increasing the purity of gold through additional processing, consolidating gold into larger consignments, or simply bringing gold to markets where it is more easily accessible to consumers.

For example, large gaps in Ugandan gold prices reflect the wide segment of gold supply chains covered, from remote mine sites in neighbouring countries to the regional export hub of Kampala and Entebbe. In Arua, a trade and transit hub located in north-west Uganda, mine site prices reflect what buyers have paid at mine sites or local towns in the DRC and South Sudan before the gold is smuggled into Uganda. In Uganda the price of gold significantly increases. Ugandan buyers in Arua report making profits of US\$10 to US\$20 per gram of gold sourced from the DRC, with profits increasing if the gold is sold in the capital, Kampala.³⁹

Prices are also dictated by destination markets and the power or influence of dealers and buyers over supply chains. The relative bargaining power of actors increases as gold moves along the supply chain, with miners having relatively little bargaining power on pricing compared to buyers and dealers. This can be due to a lack of knowledge on gold pricing or limited access to markets.

For example, in Kenya, Migori and Eastleigh play key roles in the gold trade, with prices offered in these locations dictating prices throughout the Kenyan gold supply chain. In Migori, buyers and dealers have reinforced this dynamic through price fixing. A former gold buyer in Migori reported that local dealers would meet and agree on prices, while trying to avoid miners' associations and cooperatives that represented miners' interests.⁴⁰ Miners have tried to counter this and increase their bargaining power by pooling their gold and selling higher volumes.

Analysis of pricing data shows that expected economic market factors are influencing prices, as well as criminality and the COVID-19 pandemic. Despite being based on a standard international price, the pricing data reveals large variances in prices. Also, while it is expected that prices at the mine site would consistently be lower than prices further downstream in the supply chain, the pricing data is much more mixed. The mix in pricing reflects the significant impact that other factors, particularly non-economic factors such as corruption and criminality, can have on pricing and illicit markets.

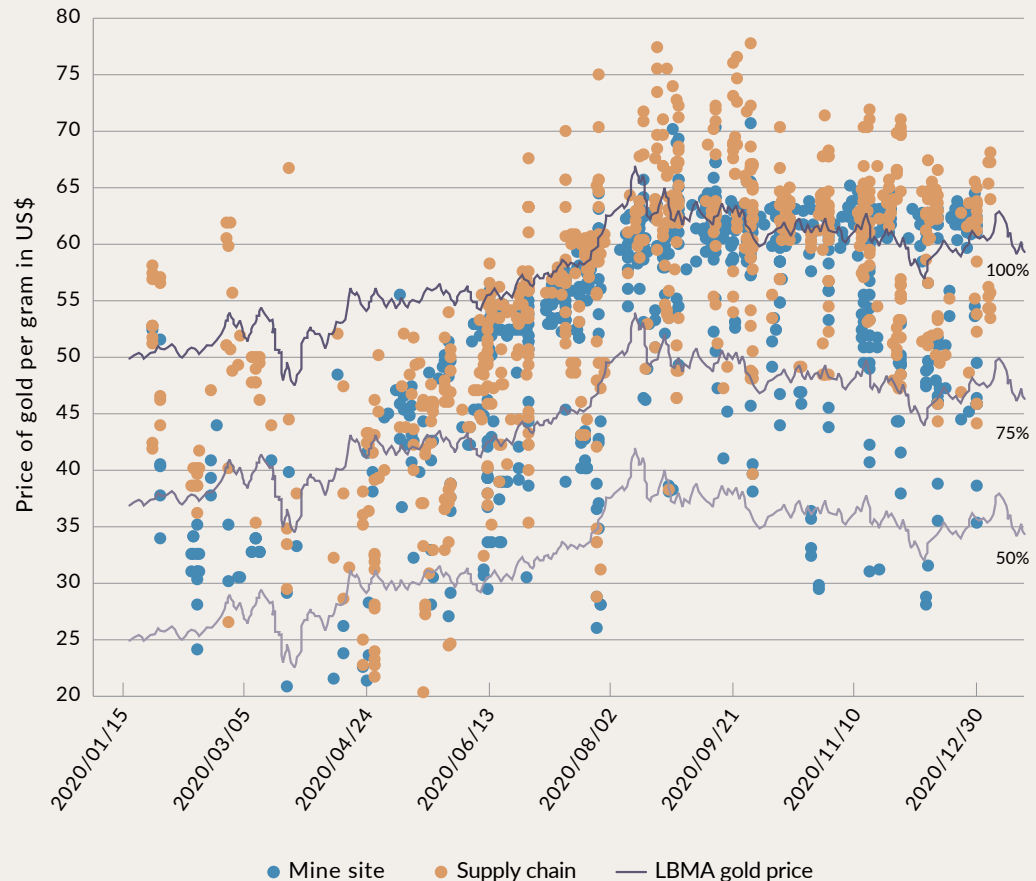


FIGURE 8 Aggregate country gold pricing.

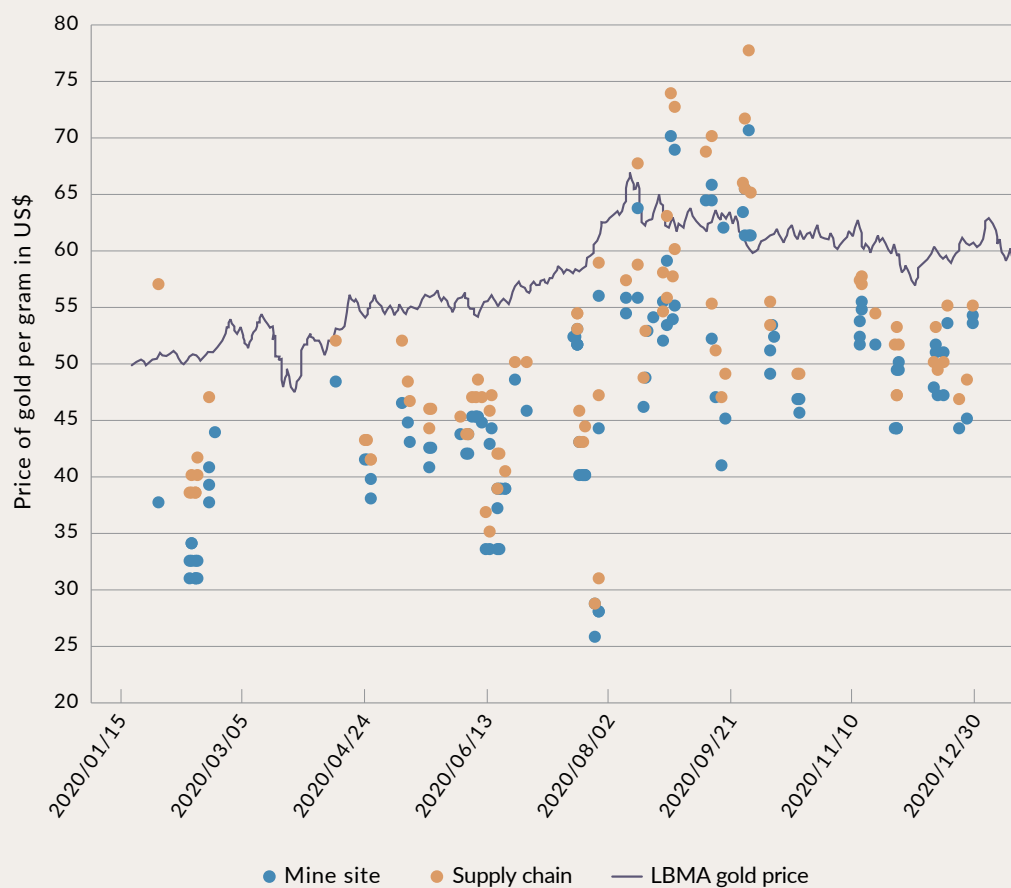


FIGURE 9 Gold prices, South Sudan.

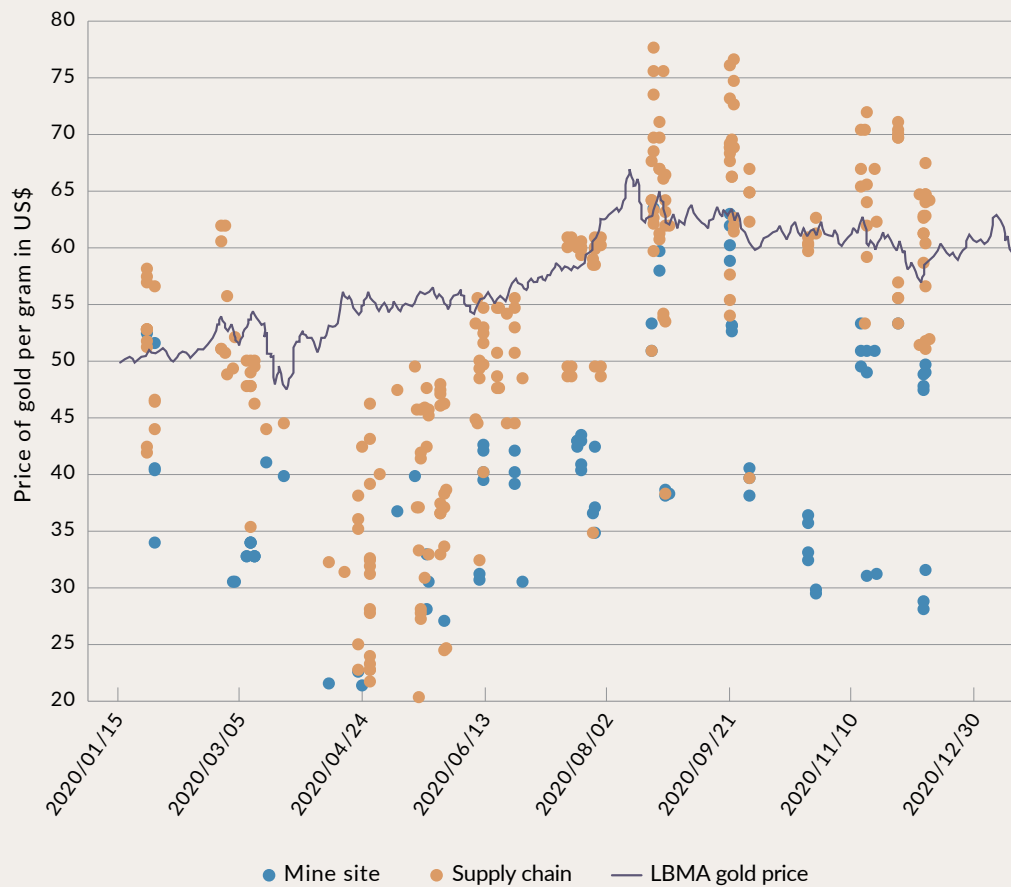


FIGURE 10 Gold prices, Uganda.

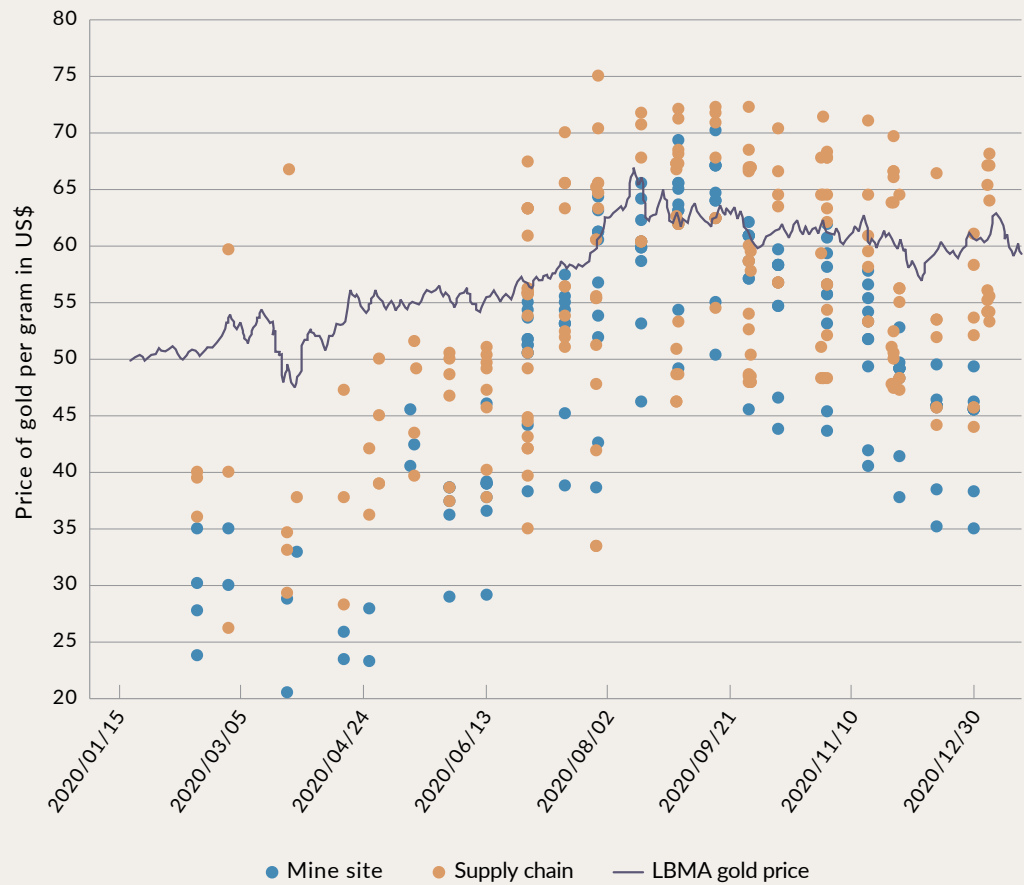


FIGURE 11 Gold prices, Kenya.

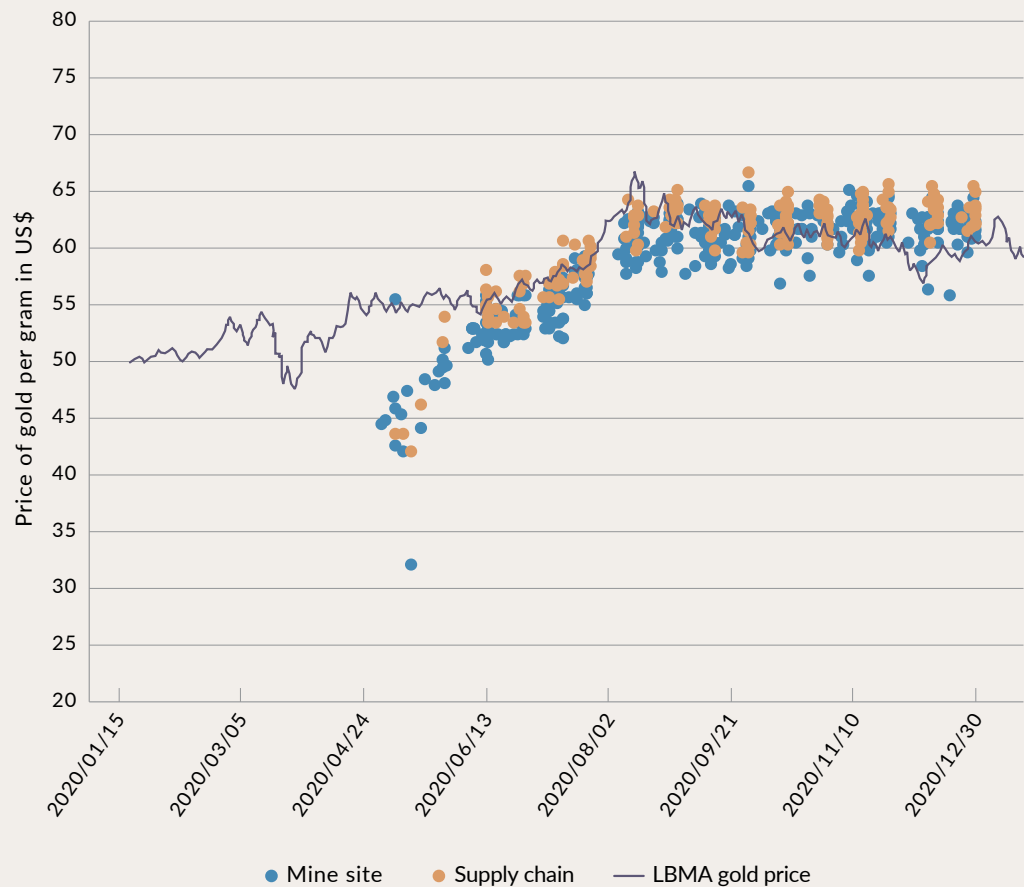


FIGURE 12 Gold prices, Zimbabwe.

Pricing gold

Globally, the London Bullion Market Association (LBMA) gold price is used as a benchmark for traders, banks, and refineries engaged with the industry, influencing prices all the way to mine sites in Africa.⁴¹ The LBMA price is set in US dollars per troy ounce, based on a gold purity of 99.99 per cent (it is impossible to achieve 100 per cent purity).⁴² In August 2020, the LBMA gold price hit an all-time high of US\$66.46 per gram.

The fairness of gold prices can be assessed by looking at how it compares to the LBMA price, adjusted for purity. Previous price data has reflected competitive pricing across Africa, with prices at mine sites ranging from 83 per cent to 95 per cent of the LBMA gold price. In some cases, miners may receive only 50 per cent to 60 per cent of the LBMA gold price, but these rates tend to be associated with conflict actors who violently control territory and supply chains. Once the gold is exported from Africa, dealers can sell it at or close to LBMA rates, with about 99 per cent of the value in international gold hubs such as Dubai based on the purity of the metal.⁴³

Upstream, at or near mine sites, a wide range of gold purities can be found, ranging from less than 50 per cent to the percentiles in the high nineties. A variety of methods of varying accuracy are used to assess the purity of gold by traders and miners. These range from looking at the gold and judging its colour to specific gravity testing, the most common method of testing gold purity. Challenges in assessing purity can make it difficult to ascertain whether prices are fair. In some cases, low prices may reflect low levels of purity but it can also simply be exploitative. Buyers can attempt to increase profit margins by rigging weight and purity measures in their favour. For example, middlemen will pay a purity percentage that is two or three points less than the actual purity of the gold.⁴⁴

The awareness of miners and local buyers about issues that affect prices, such as knowing how to assess the purity of gold and familiarity with international prices at the time of the sale, significantly impact on pricing. For example, reflecting the maturity of the Zimbabwe gold sector and actors in it, gold prices at mine sites in Zimbabwe are high for the region, with little variation between the prices offered at mine sites and those offered by downstream buyers. As a result, profit margins tend to be small, just US\$1 to US\$3 per gram at transaction points in the supply chain.

In contrast, South Sudan has a relatively young gold sector. Ignorance of international prices and purity assessments by miners, means prices tend to be lower. With no testing facilities for purity at the mine site, it can be difficult for miners to determine the purity of the gold they are selling. It is thought that gold from CES and EES is very pure. A 2016 study found that gold from these areas is mostly coarse grained, with some tests showing a purity of over 22 carats (91.6 per cent).⁴⁵ Similarly, the UN Panel of Experts on South Sudan reported that alluvial deposits appear to have a purity of 90 per cent to 92 per cent,⁴⁶ and dealers in Arua report that the purity of South Sudanese gold is between 90 per cent and 97 per cent.⁴⁷

Exchange rates can also influence prices, particularly in countries with volatile currencies. This can mean that there is a mismatch between the official exchange rate and more favourable rates offered on the black market. The result is that gold miners and traders often prefer to use the black-market rate to calculate gold prices. This is particularly the case in South Sudan and Zimbabwe. For this reason the black market exchange rates were used in South Sudan and Zimbabwe to calculate pricing, as it was a better reflection of the actual value of gold realised by miners and gold traders.

Market factors and price warping

It could be expected that prices in the supply chain are consistently above prices at the mine site, while staying below the LBMA gold price. However, pricing data reveals a much more mixed picture.

Legitimate supply and demand market drivers influence gold prices in local markets. When gold supply is low or demand is high, prices will increase and the converse is also true. For example, in many places less gold is produced in dry periods because of a shortage of water to process ore, which pushes up local gold prices. Discussed further below, the disruption to global supply chains due to COVID-19 and associated lockdowns significantly decreased local demand and dropped local gold prices in 2020.

However, gold prices are not just a product of legitimate market forces but are warped because of corruption, criminality and violence.

In some cases, gold prices are significantly lower, because of exploitation of miners by buyers and dealers. Lower gold prices are more usual in areas controlled by violent or corrupt actors. For example, the presence of armed groups is reported to

significantly depress gold prices in eastern DRC.

Ugandan buyers report paying low prices in this area of the DRC before it is smuggled into Uganda. It has been reported that in some areas of Uganda, corrupt law enforcement officers forced miners to sell gold at low prices to 'approved' buyers, while in Zimbabwe, violent gangs bearing machetes were reported to be forcing miners to sell their product at low prices. In South Africa, criminal networks seem to tightly control gold prices at the mine sites, with Zama Zamas often forced to sell at prices set by the networks of primary buyers.⁴⁸ Despite producing gold that with a purity of up to 90 per cent, Zama Zamas can be paid as little as a quarter to half of the LBMA gold price⁴⁹ up to about 75 per cent.⁵⁰

Gold prices can also be unnaturally high because of smuggling, the use of the commodity to launder money and the abuse of government VAT and buying schemes.

Factors, both legitimate and illegitimate, that impact gold pricing in East and Southern Africa gold markets include:

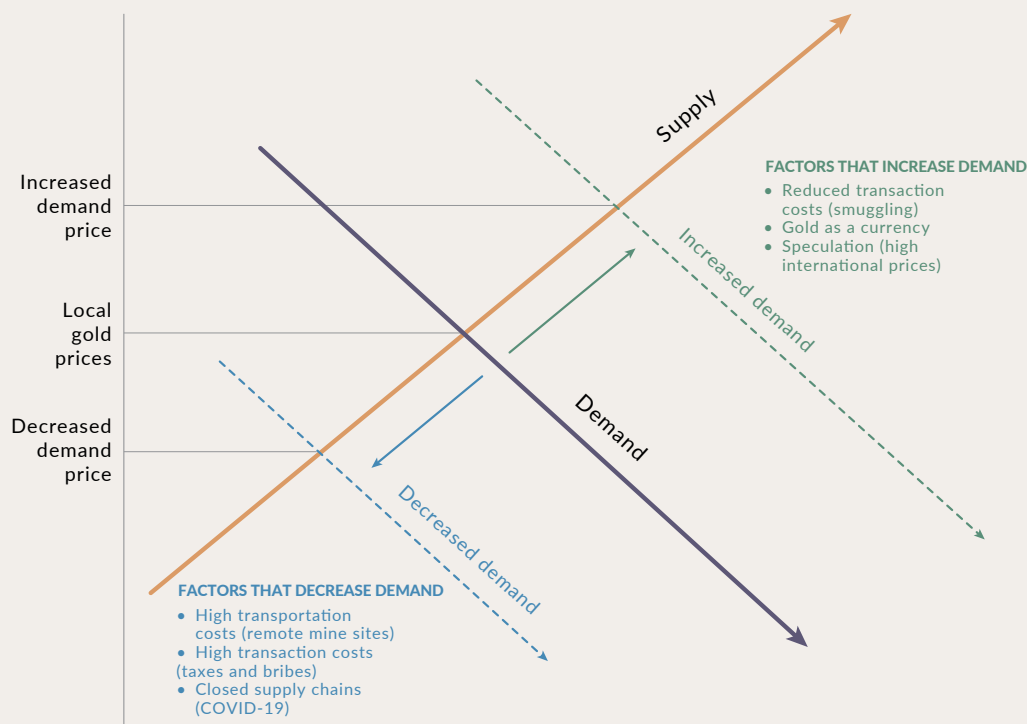


FIGURE 13 Impact of demand factors on local gold prices.

Remoteness of mine sites: transport costs and exploitation of vulnerable groups

The less accessible the mine or trading point, the lower the gold price at source. This is because of the increased costs of reaching such mining areas, which reduces demand for gold from the area, and an increased number of buyers along the supply chain, each of which requires a profit margin. Also, miners in more remote locations are less likely to have knowledge of factors such as the LBMA gold price or how to test the purity of gold ore. Not only does this result in higher transportation costs, but can also result in the increased exploitation of miners by criminal networks.

The low prices reported at some mine sites in South Sudan and Kenya, far below the LBMA gold price, suggest miners are being exploited in these areas by criminal networks. Similarly, Ugandan buyers report paying low prices at mine sites in neighbouring DRC and South Sudan. The low prices could be explained by high transportation costs to reach the areas or gold being of a lower purity than what was reported. However, the significant profit margins reported by buyers, especially in Uganda, indicate the low prices are more likely the result of predatory gold buyers taking advantage of vulnerable mining populations in remote and conflict-affected locations.

Transaction costs: taxes and bribes

Gold smugglers can offer prices higher than the formal market because they do not pay taxes on the trade or export of gold or other regulatory fees. In a sector with small profit margins, even a small percentage savings can have a significant influence on supply chains. Smuggling is most likely the reason behind high prices, with formal buyers unable to compete on price because of their obligation to pay taxes and other costs relating to due diligence and responsible sourcing activities.

In Zimbabwe, for example, gold delivered to Fidelity Printers and Refiners (FPR) attracts a 2 per cent royalty fee and the government has introduced a 2 per cent Intermediated Money Transfer Tax,⁵¹ which is paid on every transaction exceeding 100 Zimbabwean dollars (ZWL). Additionally, payments from the FPR can be slow, with some ASM miners

and buyers waiting more than two weeks for payment.⁵² As one miner said, 'If I deliver a kilogram of gold today and I go for two weeks without getting payment, why would I deliver more gold to FPR when the black market is ready to pay cash?'⁵³

Conversely, when buyers and dealers pay bribes to government officials, in particular law enforcement officers, they may offer lower prices to people selling them gold in order to recover the financial losses. This reflects the vulnerability of miners in gold supply chains, as they make the smallest profit on gold and are the most likely to bear the brunt of transaction costs.

Exchange rates

The currency used can also significantly affect prices. For example, in Zimbabwe, unfavourable currency exchange rates make it hard for formal buyers to compete with the illicit market. US dollars are the preferred currency because of the volatility of the ZWL. Because US dollars are highly sought after in Zimbabwe, gold will cost less if purchased in US dollars than in ZWL. As such, the illicit market, which tends to pay full price for gold in US dollars, has been far more attractive to gold sellers than the FPR which has historically offered no or only a percentage of gold sales in US dollars.⁵⁴ Further, the black-market exchange rate for the US dollar is much more favourable than the official rate, which is offered by FPR. For instance, on 4 May 2020, the official exchange rate was pegged at US\$1 to ZWL 25⁵⁵ with the black-market rate at about US\$1 to ZWL 45.

The thirst for US dollars also fuels partnerships between Zimbabwean nationals and foreign nationals. Zimbabweans provide a front for foreign operations, hiding their involvement. These collaborations are valuable to Zimbabwean businesses wanting to procure goods in South Africa by exchanging US dollars for rands.

Gold as a financial vehicle

Because gold can be used as a financial vehicle, it can have more value as a financial currency than as a standalone commodity. This can warp gold prices.

Gold that is either illegally produced or smuggled into the country is often disguised as recycled gold.

To avoid currency exchange losses or trade costs, gold traders may smuggle gold across borders to buy goods that they import and sell in the gold source country. For example, in South Sudan, to avoid losing money on currency losses, buyers will carry goods to mine sites and barter them for gold rather than using cash. As one trader in Kapoeta explained, 'When I take the gold to Nairobi for sale, I use the money to buy goods such as flour, oil, and other basic items in bulk for sale in Kapoeta. Doing my gold trade and selling the goods improves my profits'.⁵⁶ Similarly, in Uganda one buyer said he sells gold in Kenya in exchange for electronics that he would then sell back home. Zimbabwean buyers have taken this a step further, sometimes using gold profits to buy luxury cars in South Africa, which they then drive back to Zimbabwe and sell to get their money back.⁵⁷

As a financial vehicle, gold can also be used to move illicit wealth between jurisdictions. This could make it more valuable to the holder than the international spot price and some buyers may be willing to pay above the market price for the metal.

In East and Southern Africa, prices near to or greater than the international spot price have been recorded regularly. While this could be because its purity is higher than was thought or because of buyers and dealers inflating prices, the fact dealers across most countries under review priced the gold near or above the LBMA market price is cause for concern. Not only could this indicate that gold is being used to launder money, it also makes it impossible for legal, formal gold traders to compete with the illicit market on price. This is particularly the case in Uganda and Kenya, where prices were frequently reported to be above the LBMA price. In both countries, other illicit trade is prevalent and networks have links to illicit regional markets, which could drive demand for money laundering options.

Abuse of government VAT and buying schemes

Another activity that affects gold prices is VAT fraud. In South Africa, the sale of second-hand gold products, such as jewellery, are tax exempt. Gold that is either illegally produced or smuggled into the country is often disguised as recycled gold. Merchants then fabricate transactions that enable them to falsely claim that they have paid the 15 per cent VAT and submit fraudulent requests for tax rebates.⁵⁸ VAT scams skew local gold prices because traders know profits will be padded with the tax rebates. It also makes estimating production difficult because buyers may report the same gold multiple times in their VAT rebate claims. Sources believe the volume of illicit gold is overestimated as a consequence of distortions created by the VAT scam and laundering techniques.

As most of Zimbabwe's gold is thought to be smuggled to South Africa, this could also be the reason for the high gold prices seen in Zimbabwe. While gold prices in Zimbabwe were regularly reported to be above the LBMA gold price, margins on the sales are smaller than those reported in eastern Africa. Further, they are within 15 per cent of the LBMA price. Thus, traders laundering gold in South Africa are able to pay the LBMA gold price and still make a profit through VAT fraud.

IMPACT OF COVID-19

Price data collected during 2020 illustrates the tenacity of illicit gold markets. In 2020, the spread of COVID-19 across the world and the resultant restrictions on travel and record high gold prices had significant market impacts that are reflected in pricing data. While the COVID-19 pandemic delivered a significant shock to local markets in the early part of 2020, illicit supply chains were re-established by August 2020, allowing the market to recover.

While international gold prices soared, border restrictions made exporting the metal difficult and significantly depressed local prices.⁵⁹ African countries closed their borders, as did the United Arab Emirates (UAE). Most gold produced by ASGM in Africa flows to the UAE, one of the world's largest gold hubs. On 18 March 2020, the UAE announced that foreign nationals were no longer permitted entry to the country and citizens were prohibited from leaving, and a week later, all passenger and transit flights to the country were suspended as part of the

country's COVID-19 mitigation strategies. The border closures were a shock to regional gold markets.

The border closures resulted in an oversupply of gold in local markets and the short-term price in the ASGM communities plummeted from March until May. There were significant price reductions at the mine site which were lower than usual compared to other points along the supply chain. During this time, the major dealers stopped buying gold because they did not have the cash to do so and were not sure how they would export it.⁶⁰ In other cases buyers and dealers were reported to be stockpiling gold at the discounted prices, in the expectation they would realise windfall profits when supply chains did open up. This shows how vulnerable miners in the illicit gold sector are, with little bargaining power compared to buyers and dealers. They are the first to feel the impact of external shocks to the system such as COVID-19.

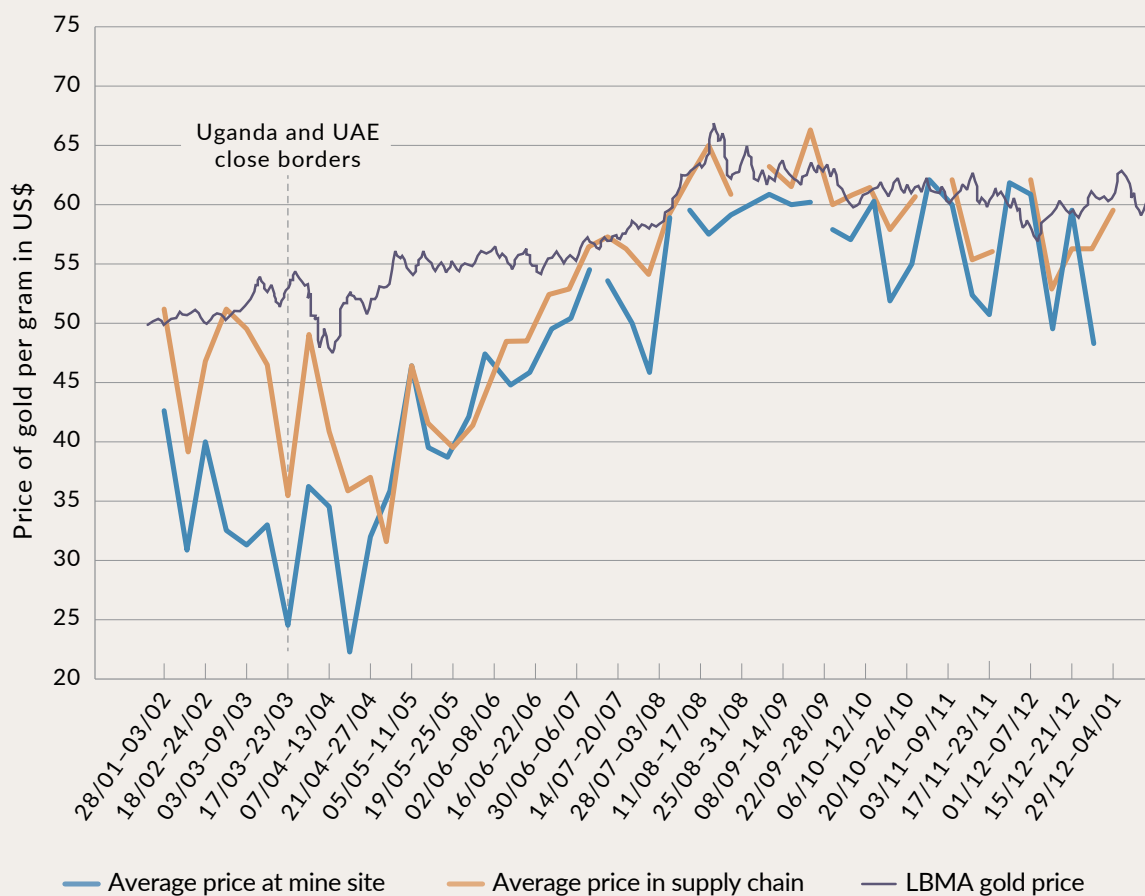


FIGURE 14 Average weekly gold price, all countries, 2020.

However, the illicit market quickly rebounded. From May, supply chains started moving again as lockdowns began easing, allowing the gold trade to resume. Some buyers had taken advantage of the low prices, secretly stockpiling gold.⁶¹ In June, the UAE resumed limited international and commercial flights and in July foreigners were permitted to visit,⁶² which boost supply chain recovery. Despite continued lockdowns in many countries and ongoing travel and other restrictions, gold prices in the countries studied reflected international gold prices, or were even higher by August 2020.

Speculation also played a role in driving up local prices, with buyers setting individual prices, sometimes at very inflated rates.⁶³ The price data shows this did turn out to be a wise business decision in some cases. Locations where gold was stockpiled include Kapoeta in South Sudan, as well as West Pokot and Turkana counties in Kenya.⁶⁴

A significant exception is the low prices at mine sites in the eastern DRC, where prices have reportedly dropped by more than 40 per cent since April because of lockdowns and increased violence among militant groups.⁶⁵ The significant gap between prices at mine sites and further down the supply chain in the Uganda indicates that buyers are profiting handsomely from the low prices at mine sites in the DRC. By the end of 2020, prices at the mines had not recovered.

Country overviews

South Sudan

In South Sudan, the closure of the Kenyan and Ugandan borders stalled gold flows from late March. Some traders attempted to use trucks carrying essential goods to smuggle gold, but this proved to be difficult. Yet, mining and trade within South Sudan reportedly continued unabated. Traders and dealers continued to buy and stockpile gold, especially given the historically high and increasing international gold prices. Miners and local buyers were hoarding gold due to the expectation that prices would continue to rise.⁶⁶ As the government relaxed restrictions, smuggling resumed and by July, gold was reported to be moving across the border again. Traders were able move, bribing their way across the manned crossings, including the Lokichogio border to Kenya. As flights resumed into Juba, traders were once again able to move their goods by air.⁶⁷

Uganda

In Uganda there were 'spot price sales' of gold near mine sites as a result of excess supply. In the mining areas of Karamoja and Mubende, gold was being sold at a fraction of its value (about US\$15-US\$20 per gram) irrespective of purity. Prices in the country dropped to between 20 per cent and 25 per cent of their pre-lockdown levels at one point.⁶⁸ A local buyer explained, 'We would have to wait for two to three days before we were paid. And they would only pay in cash and not electronic transfers, something which never used to happen.'⁶⁹ Financing for mining activity also declined substantially, which, in turn, resulted in a loss of income and jobs for communities dependent on artisanal mining, with food security becoming a significant concern.⁷⁰

In Arua, buyers continued to buy Congolese gold, but sold it locally rather than making the trip to Kampala. From Karamoja, buyers attempted to use trucks to move gold to Kampala but this proved difficult and some turned to motorbikes to do so.⁷¹ Although the trip there and back takes three days to complete, it successfully reopened supply chains. As of May, there were about 30 buyers regularly making the three-day return journey to Kampala by motorbike up to twice per week to sell their gold in the illicit market.⁷²

Kenya

In Kenya prices significantly fell from March to May due to restrictions on travel and curfews in Nairobi. On 27 March, Kenya airways suspended all international flights to and from the country.⁷³ Border closures were accompanied by restrictions on domestic travel and business restrictions, while several gold trading hubs, such as Eastleigh, were placed under localized lockdowns.⁷⁴ This curbed opportunities to export gold, which depreciated local prices in Kenya to as little as US\$16 per gram.⁷⁵

Buyers in eastern Uganda who had been moving some gold into Kenya were taking all gold to Kampala while dealers in western Kenya sought buyers in Uganda and

Tanzania because of the short distance and weaker travel and trade restrictions.⁷⁶ In northern Kenya, there have been reports that Somali gold traders are stockpiling gold and moving it directly to Somalia. Already a key corridor for a wide range of illicit trade, the Kenya-Ethiopia border has increased in importance during the pandemic, and it is possible that gold could also be moving this way. These shifts have forced law enforcement authorities to identify the new routes.⁷⁷

Zimbabwe

In Zimbabwe, the first 21-day national lockdown, imposed at the end of March 2020, brought the illicit market to a standstill, leading prices to plunge. While the international spot price at the time was about US\$56 per gram, gold was selling at between US\$36 and US\$39 on the black market by the end of March.⁷⁸ The more remote the gold producing area, the more drastic the price decline. However, Chinese nationals buoyed prices to some extent as they sought to maintain relationships with gold miners. For example, when local gold prices were between US\$40 and US\$42 per gram, Chinese buyers were reported to be offering US\$47 to US\$49.⁷⁹

In Zimbabwe, prices in main production areas recovered from June and continued to rise, reflecting the all-time high international spot price for gold.⁸⁰ By August, gold was being traded at more than \$60 per gram on the black market in Zimbabwe. Those with the means to stockpile, smuggle or export gold were able to reap substantial rewards.⁸¹


South Africa

In South Africa, illegal mining increased during lockdowns as law enforcement officers prioritized the enforcement of lockdown measures. This is not the first time an event has contributed to increases in illegal mining in South Africa. In 2019 for instance, Zama Zamas and criminal gangs used a five-month strike by the Association of Mineworkers and Construction Union at Sibanye mines to illegally re-enter mine shafts and entrench themselves after having been removed.⁸²



SUPPLY CHAINS

Trucks at the Elegu border point between Uganda and South Sudan. Trucking is a popular way of smuggling large gold shipments. During the COVID-19 pandemic, Uganda and other countries closed their borders to all traffic except cargo planes and truck drivers, making these modes of transport even more attractive to smugglers. © Sally Hayden/SOPA Images/LightRocket via Getty Images



Gold supply chains act as a funnel, consolidating flows as they move from the mine to a local town and then on to either a larger transit town or directly to a regional export hub. In East and Southern Africa, these gold supply chains are predominantly informal or illegal. For example, in South Sudan the government has only granted one mineral dealing licence since 2019,⁸³ few export certificates have been issued and no gold exports are recorded.⁸⁴ Kenya also has a shortage of officially licensed traders. For example, Migori county only has five. As a result of this, many miners are forced to sell gold through informal or illegal channels.⁸⁵

Miners or local buyers may try to bypass middlemen to secure a higher price for gold. However, entrenched trade networks make this difficult and the extra profit is not always worth the effort. For example, in Zimbabwe, local buyers from the Midlands Province have overcome this challenge by circumventing Kadoma, a consolidation point for the province, and working directly with the big buyers in Harare. The shift is attributed to changes in government which have strengthened the influence of key political actors from the Midlands (Kwekwe, a Midlands town, is the hometown of President Mnangagwa).⁸⁶ However, this may not yield much by way of added profits because of the tight profit margins and increased transportation costs.⁸⁷

Gold is easily smuggled across borders, both through informal and official border posts, and mostly by road. For example, Arua gold hub in north-western Uganda can be reached through hundreds of unofficial border points, locally known as panya routes, spread along Uganda's borders with the DRC and South Sudan.⁸⁸ Women and drivers of boda bodas (bicycle and motorbike taxis) often act as couriers for small amounts of gold that can be easily concealed.⁸⁹ Some smugglers use fake identify documents to disguise their identity.⁹⁰ Likewise, from Kapoeta in South Sudan, according

*Some major buyers
have invested in both
gold and trucking.*

to a Somali trader, it is easy to cross from South Sudan into Kenya with a Kenyan national identification card and they only need to pay a bribe if they are caught.⁹¹

Similarly, in Southern Africa, gold is easily smuggled from Zimbabwe into South Africa. Porous land borders make it easy for criminal groups to cross into South Africa where laundering opportunities and transport services are more readily available.⁹² While there are informal border crossings, the official Beitbridge border post remains a preferred route for gold smugglers. Smaller quantities of gold are hidden in clothing and headdresses, while larger amounts are stowed away in car glove compartments, spare wheels and any other parts of a vehicle that can be modified for smuggling purposes.

In both East and Southern Africa, trucking is a popular way to smuggle large gold shipments. On the Zimbabwe-South Africa border both bus drivers and truckers are reported to smuggle gold. On the DRC-Uganda border, gold is hidden in trucks that can bypass COVID-19 restrictions to deliver 'essential goods'. Bars weighing between five and 20 kilograms, are stuffed underneath truck cabins, inside battery compartments and emptied gasoline tankers.⁹³ As a result, some major buyers have invested in both gold and trucking. For example, certain major gold dealers in Harare have invested in the gas business, enabling the use of gas haulage trucks with secrete compartments to smuggle gold into South Africa.⁹⁴

On the borders, there appears to be a lack of capacity and will to stop gold smuggling. For example, in Zimbabwe, only luggage is subject to scans by customs officials so travellers without luggage are unlikely to be searched. In Uganda's Arua district, key entry points lack basic scanners and screening machines. The authorities are interested mostly in arms, timber and consumables. Larger smuggling operations will also involve collusion between criminal actors and border officials. On the Ugandan border, there is reported to be collusion between smugglers and Ugandan authorities at official entry points.⁹⁵ To move gold in bulk, cartels use an elaborate network that has advance teams to 'clear' the route, a euphemism for bribing authorities.⁹⁶ Organized crime gangs as well as customs, police and military officials who man border points, are enlisted to help.⁹⁷

In eastern Africa, Kampala and Entebbe in Uganda are the regional magnets, attracting significant volumes of gold from the DRC and South Sudan, as well as domestically produced gold and smaller flows from Kenya. Uganda's gold exports have grown exponentially since the 1990s and are now the highest in the region, amounting to more than US\$1 billion annually. Most of this gold is exported to Dubai in the UAE with some going to Mumbai and Antwerp.⁹⁸ Official export data is likely to understate actual gold exports because of smuggling and the under-declaration of gold exports, something highlighted by the discrepancy between Uganda's declared gold export figures and the UAE's reported import figures.⁹⁹

There are seven registered gold refineries in Uganda. The large refining capacity strengthens Uganda's position at the heart of the central and eastern Africa gold trade, including the illicit gold market. Critics have raised concerns that the number of gold refineries far exceeds Uganda's actual production, which raises questions about the provenance of gold being refined in the country.¹⁰⁰

Kampala's refineries are thought to be key nodes in regional illicit gold supply chains, connecting mines to international transit and destination hubs. African Gold

Refinery (AGR) is by far the largest gold processor and exporter. Other smaller refineries (including Britam, Simba, and Bullion), gold dealers and companies enter into agreements with AGR to export their gold for a commission.¹⁰¹ AGR reported that it exported more than 17 tonnes of gold worth around US\$800 million in 2019.¹⁰²

In Southern Africa, Johannesburg is the regional gold magnet, although there are reports that significant and increasing amounts of gold are being exported directly from Harare to Dubai and other international destinations. In Johannesburg, locally produced gold and imports from neighbouring countries, especially Zimbabwe, is traded and laundered. Some is laundered into formal supply chains through local refineries.

In South Africa police estimate that there are at least 100 small refineries in the Gauteng area alone. Industry analysts and police complain that the SA Diamond and Precious Metal Regulator shies away from its regulatory mandate and operates opaquely, turning a blind eye to clear reputational and criminal risks.¹⁰³

From regional trade and transit hubs, most gold moves by air, legally and illegally, to global hubs such as Dubai.¹⁰⁴ Moving gold by air often requires the influence of political elites or bribing airport officials. For smaller quantities of less than 10 kilograms, smugglers may directly pay security officials at check points. Alternatively, gold can be made into jewellery which is then worn by passengers on flights out of the country, mainly to India and the UAE. In Uganda, it is believed that smuggling gold through the airport is facilitated by highly placed persons in the government and army.¹⁰⁵ Similarly, in Zimbabwe smuggling gold out of Harare's airport is suspected of being done by powerful gold dealers and political elites. It was reported that individuals moving gold as jewellery will make at least one to two trips each month.¹⁰⁶

The destination of gold mined and bought illegally by Chinese nationals remains unclear. It is suspected that the gold is smuggled to China through the main international airport in the country of origin. A Kenyan interviewee reported that he had assisted in moving gold to Nairobi where the Chinese nationals they were working with had the necessary connections to move the gold out of the country. Another interviewee reported that gold produced by Chinese companies they had worked with was sold in Nairobi and Tanzania, as well as to local buyers.¹⁰⁷ In South Sudan, Chinese nationals are reported to be the biggest buyers in Juba. It is alleged that since they are working directly with government actors, they can easily fly gold directly out of the country. The money is reported to be deposited in Chinese or Kenyan banks or invested in real estate.¹⁰⁸ While there is little information available about the movement of gold by Chinese nationals involved in Zimbabwe's illicit gold sector, it is also suspected the metal is moved by air from Harare.

The quality of law enforcement has a significant impact on supply chains. For example, before 2018, Kenya and Tanzania were reported to be flooded with gold from Uganda, the DRC and South Sudan.¹⁰⁹ However, Tanzania has introduced reforms that have been effective in suppressing the illicit gold trade in the country, prompting some of the biggest gold shops in the region to shift their offices to Uganda. Local dealers from Tanzania and Kenya now come to Uganda, where it is easier to evade taxes enabling traders to increase their profit margins.¹¹⁰ As one buyer reflected, taxes in Kenya and Tanzania are not so easily dodged.¹¹¹

Moving gold by air often requires the influence of political elites or bribing airport officials.

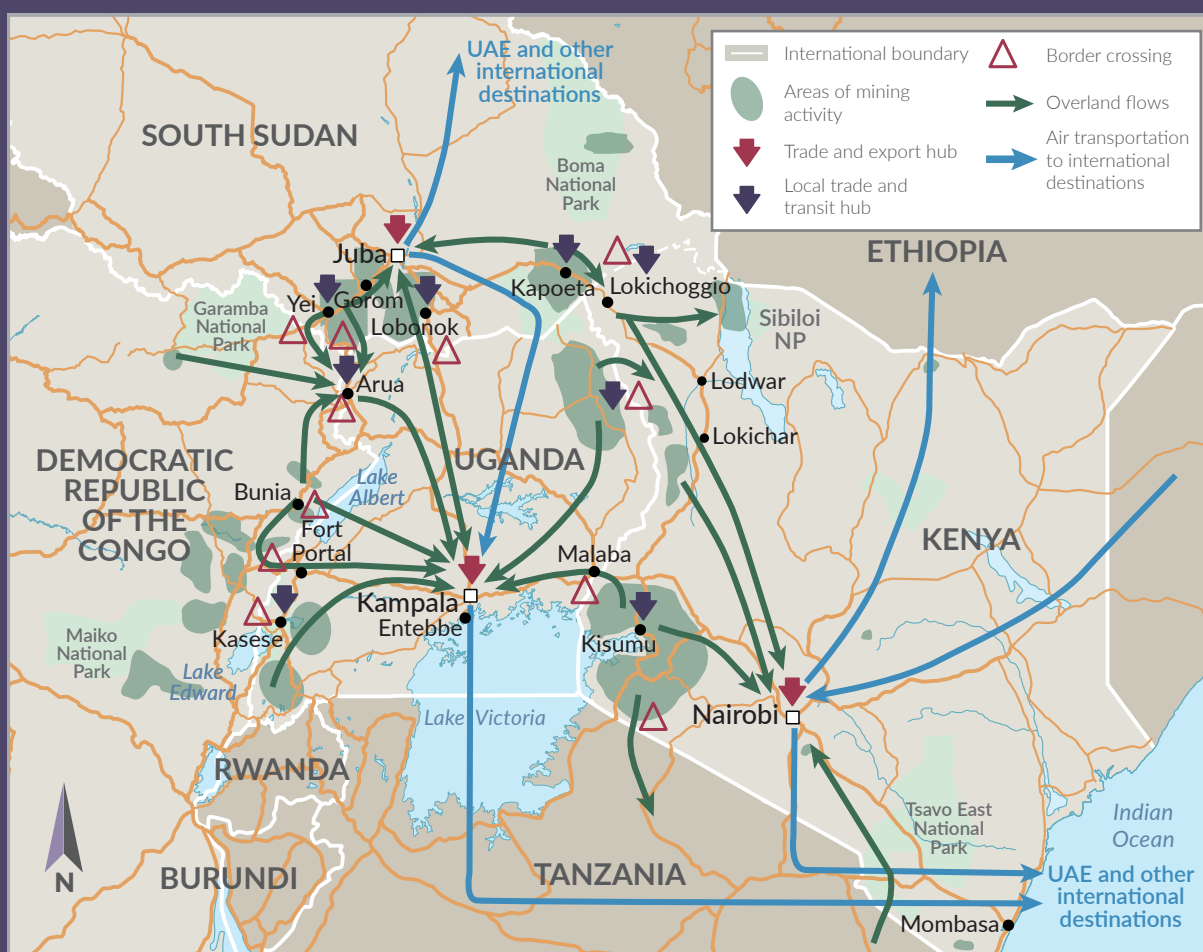


FIGURE 15 Gold flows in Eastern Africa.

NOTE: Areas of mining activity are non-exhaustive.

South Sudan

In South Sudan, local buyers (often people from the area) buy gold from miners and sell it to larger buyers in regional towns, such as Kapoeta or Yei. From there, dealers take the gold to Juba (either by air or by car, depending on the security situation) or over the border to Uganda or Kenya.

They are, however, small players in South Sudan's illicit gold trade compared to the amounts of gold produced and traded by criminal networks linked to political elites and foreign nationals. For example, a gold mining company in Gorom reported producing a minimum of 100 grams of gold per day.¹¹² Most gold produced by mining operations controlled by the government and political elites is thought to go to

Juba where it is sold on the black market. There are also reports of significant amounts of gold being sold in Arua in Uganda.

Most of the gold produced in South Sudan is smuggled out of the country.¹¹³ The main supply chains run from South Sudan across into Uganda and Kenya and it also moves to the DRC and Sudan. Many consignments are also flown out of Juba. The direction which gold moves is largely determined by the proximity of the closest border. The main border posts used for this purpose are Nimule-Elegu and Kaya (Uganda) and Nakodok (Kenya). For gold moving by air, it moves from Juba primarily to Kampala, Dubai and China.

Gold supply chains and actors in South Sudan

Gorom

Because Gorom is an area relatively close to Juba, most gold produced there is sold to major buyers in the capital. A substantial amount of gold is also smuggled out of the country to Kampala through the Nimule border crossing. Buyers are reported to include senior government officials, senior army personnel and businessmen, all based in Juba.¹¹⁴

Yei

Buyers report that gold from the area around the town of Yei, including Lujule and Morobo, is consolidated in Yei before being moved south through the Kaya border post to Uganda and often to Arua and Koboko.¹¹⁵ Members of the non-state armed groups the Sudan People's Liberation Movement/Army in Opposition (SPLM/A-IO) and National Salvation Front (NAS) confirmed to the 2019 UN Panel of Experts that they had sold gold from South Sudan in Uganda.¹¹⁶ Gold dealers in Arua in Uganda confirmed that gold comes to the town from the Lujule, Morobo and Yei areas of South Sudan and from there it moves to Kampala.¹¹⁷ In Uganda, South Sudanese gold is laundered and misrepresented as having been mined in Uganda.¹¹⁸

Gold is also smuggled out through the Lasu border post (west of Yei) to the DRC. A local dealer reported that this gold is usually sold to businessmen in Ariwara and Ingbokolo in the DRC.¹¹⁹ Aba, a Congolese town just across the border from Lasu, is home to tens of thousands of South Sudanese refugees and is known to be a refuge for rebels from that country. Senior members of the Congolese army stationed in the area are believed to work with rebels and refugees to facilitate the gold trade in and around Aba.

Gold is also taken to Juba and sold on the black market there.

Lobonok

Local buyers are from the community and they sell to businessmen from Juba and Nimule who frequent the main town. These buyers will coordinate gold purchases with local buyers by telephone, negotiating prices and a pick-up schedule. From Lobonok gold moves south along the Juba-Nimule highway, through the Nimule-Elegu border post and on to Kampala.¹²⁰

Kapoeta

Artisanally mined gold is mostly sold to Somali traders, but also Kenyan and South Sudanese businessmen. From Kapoeta, gold is smuggled into Kenya through the Nadapal-Lokichogio border post.¹²¹ Some traders will sell gold at the Lokichogio border with Kenya, while others will transport the gold all the way to Nairobi.¹²² Eastleigh, a predominantly Somali neighbourhood in Nairobi known to be a gold hub, was specifically referenced by interviewees.

Juba

In the capital, various groups of actors are active in the illicit gold market. Regardless of the identity of the buyer, the illicit gold business is said to be risky and there is a need for protection of some sort (often political) for actors to avoid harassment. Chinese nationals, political and business elites, and Ugandans and Kenyans are all reported to be active in the Juba gold trade. Political elites are alleged to have their own shops and can easily fly gold out of the country,¹²³ while big Ugandan buyers are reported to easily fly gold from Juba to Kampala.



Female artisanal miners near Kapoeta, South Sudan, February 2020.

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Uganda

Gold mined in Uganda is sold to local buyers at the mine site or closest town. Buyers then take it to Kampala where it is sold to a wholesaler (dealer) and gold refineries. In addition to the Kampala-Entebbe route, a small amount of gold is moved through the Karamoja region and traded along the Kenyan border.

As noted higher up, domestic production is thought to be dwarfed by the amount of gold smuggled into Uganda from its neighbours, primarily the DRC and South Sudan. As one gold dealer explained, 'Most of the gold we get here [in Uganda] is in transit', and almost 95 per cent of it is illicit.¹²⁴ This also reflects reports from the DRC that large criminal gangs are increasingly controlling the gold trade.

Uganda provides an attractive market environment due to the ease with which gold can be moved and traded, and because of the presence of many well-resourced buyers purchasing gold at competitive prices. Low export royalties also contribute to a larger profit margin. Once it arrives in Uganda, dealers claim the smuggled gold is of Ugandan origin, supported by fraudulent documentation, which the authorities find difficult to disprove.

Gold dealers in Kampala reported that almost all the gold shops and companies in Kampala have agents with direct links to the large gold producers in the eastern DRC, as well as connections with the police and military who provide protection and security when smuggling.¹²⁵ From the DRC and South Sudan, the border towns of Arua (gold from South Sudan and DRC) and Kasese (gold from DRC) are significant conduit points for illicit flows in the country. Illicit flows from South Sudan also move through the Nimule-Elegu border post in the Amuru District.

Gold dealers also use Lake Edward (Kayanja Landing site) and Lake Albert, both of which have strategic remote areas that are used by locals to evade law enforcement officials and hostile competitors who are linked to the military.¹²⁶ Lake Albert's position provides dealers the option to move gold either through the West Nile or Kasese into Uganda. During the wet season, movement is slow along the southern Kasese route and dealers prefer to move

gold through Arua and West Nile, connecting to Kampala by road. The sections below provide more detail on key transit locations.

Arua: Gold from the DRC and South Sudan

Officially, there is no gold trade in Arua, as affirmed by the local branch of Uganda's Chamber of Commerce and the lack of premises for licensed gold trading.¹²⁷ Yet large amounts of gold are known to flow through the town daily. This is an open secret, with government officials pointing to vehicle and hardware shops as particularly common fronts for the illicit gold business.¹²⁸ At least 10 shops are widely known to be fronts for buyers trading in illicit gold¹²⁹ and a few gold shops in the town operate as branches of Kampala-based buyers. There are also reported to be two small, low-level gold refineries in Arua where the metal is processed for export.¹³⁰

Most of the gold that moves through Arua comes from the eastern DRC and South Sudan. A local taxi driver reported taking his clients to South Sudan to acquire gold and timber and DRC for gold and other contraband.¹³¹

The Ituri and Haute Uele provinces in the eastern DRC are the main origins of the country's gold. From these locations, gold dealers easily move gold through Ariwara and Aru, border towns in the DRC which flank Arua to the north and south, respectively. The Mahagi-Nebbi route between the DRC and Uganda is also key. In these towns, the gold trade is a key livelihood, with the product openly hawked in both licensed and unlicensed shops.¹³² Influential businessmen and senior members of the Congolese military are said to facilitate and contribute to a free and open environment for illicit trade. However, the growth of the licit trade in these towns is constrained by insecurity, making Arua an attractive location for conducting illicit business.

From South Sudan, Arua is connected to the town of Yei, about two hours' drive north along the Kaya highway. Gold coming from Yei, although smaller by volume, is reported to be purer than that from the DRC, increasing its value.¹³³

From Arua, agents and middlemen transport most of the gold to dealers in Kampala, while a small amount is smuggled to Nairobi.¹³⁴ Traders based in Arua are mainly Ugandans, Congolese, South Sudanese and Indian.¹³⁵ Major brokers are mainly foreigners who come from India and Kenya, as well as the Middle East and West Africa.¹³⁶

Estimates of how much gold flows through the town vary, but even the lowest figures are quite substantial. A local gold broker estimates that between 50–100 kilograms gold per day transits through the town. One of the biggest buyers, an Indian national based in Kampala who owns an outlet in Arua, is thought to regularly buy about 10 kilograms of gold.¹³⁷ However, other buyers reported only buying a few hundred grams a month, although these figures could be lower because of the pandemic.

Kasese: Gold from the DRC

Well-established criminal networks operate from the eastern DRC through Kasese and on to Kampala.¹³⁸ A network of businessmen in Kasese is reported to tightly control gold smuggling from the DRC to Uganda, employing people on both sides of the border. State authorities in both the DRC and Uganda are also alleged to be involved, as well as agents of foreign companies, in particular Chinese nationals. Relationships and networks are also strengthened by the shared Nande identity and history of people living on both sides of the border.¹³⁹

Criminal networks easily move gold through official border points. For example, the Mpondwe border area is reportedly tightly controlled by an elite network of businesspeople and local farmers who also control fleets of hawala and money changing businesses in the town. Dealers from the DRC also use timber trucks to move gold across the border as these vehicles are hardly ever thoroughly checked. In some cases, gold will be flown out. It is reported that rich Congolese traders travel in private vehicles or by air to Entebbe.¹⁴⁰

Within Uganda, smaller players take advantage of frequent buses travelling between Kasese and Kampala to move gold, although the amounts moved in this way are thought to be small in comparison to

the quantities moved in the private vehicles owned by business and political elites.

Kampala and Entebbe

There are a variety of actors active in the Kampala and Entebbe gold market, including local dealers, foreign corporate dealers and established refineries. Within the city, dealers have opened shops in the Kololo and Kamwoykyia neighbourhoods, and more recently in Bukoto, Ntinda and Kisementi.¹⁴¹ Most major dealers are reported to be foreign nationals, in particular Indians. Many dealers operate independently and have been in the gold business for 10 or more years.

The origin of gold is disguised using fake certifications and forged documents. It is reported that Certificates of Origin for smuggled gold are mostly forged on Nasser Road in downtown Kampala.¹⁴² It is often sold to refineries before being exported. There are seven registered gold refineries in Uganda. With their large refining capacity, Kampala's refineries are thought to be key nodes in regional illicit gold supply chains, connecting mines to international transit and destination hubs.

Gold smuggling out of Entebbe Airport is reportedly facilitated by highly ranking people in the government and army.¹⁴³ Smugglers may move gold in bulk, carry it by hand or make it into jewellery that is worn by passengers on flights to the UAE and India.

In Uganda, the COVID-19 lockdown appeared to have had little impact on the gold trade through the airport at Entebbe. Despite its lockdown, Uganda earned more than US\$120 million from gold exports in March and April, according to the country's central bank.¹⁴⁴ During COVID-19, cargo planes, which have delivered COVID-19 aid and other essential supplies to Uganda, have become a popular way to smuggle gold to Dubai and other overseas markets. An independent source reported that it was business as usual, with commercial flights still operating despite the lockdown. For example, one individual reported seeing a large amount of gold being prepared for export to the UAE on a commercial flight in April. It is believed the origin of the gold was not Ugandan and it was transiting the country or being laundered.¹⁴⁵

Kenya

Eastleigh is Nairobi's main gold hub, where the market is largely illicit.

Buyers buy gold at or close to the mine site before taking it to Nairobi to sell, although some is smuggled directly to Uganda and Tanzania. For example, miners in West Pokot and northern Kenya will sell to a local buyer who will then sell to a buyer in Kapenguria who will then move it to a dealer in Nairobi. Gold produced by Chinese operations also goes to Nairobi.¹⁴⁶

In recent years, Kenyan gold is more likely to be smuggled out of the country than in the past. While gold flows in both directions across the Uganda-Kenya border, there is evidence of increasing amounts now leaving Kenya for Uganda. Recent evidence shows that flows from Tanzania into Kenya have subsided, and now gold flows in both directions with increased flows from Kenya into Tanzania becoming apparent during the pandemic. For example, some dealers in the Migori and Kisumu areas are now selling gold in Tanzania rather than Nairobi. Also, in May 2020, the Tanzanian government seized more than 27 kilograms of Kenyan gold (valued at over US\$1.5 million) from a would-be smuggler at Sirari border point, close to the Migori mining area.¹⁴⁷

A limited amount of gold is thought to be smuggled out of northern Kenya. It is reported that gold is being moved to Somalia by Somali traders based in Turkana and West Pokot counties. It is reportedly consolidated in Somalia before being moved to Nairobi for export.¹⁴⁸

In addition to domestic gold flows to Nairobi, there are some regional flows to the capital, particularly from Kapoeta in South Sudan. A small amount is also reported to come from the DRC via Uganda.

Eastleigh is Nairobi's main gold hub. The market is largely illicit, with gold dealerships disguised as general merchandise outlets or private offices. The illicit trade is facilitated by rampant corruption in the area, with law enforcement reported to be involved in protection and extortion rackets. All gold dealers interviewed reported having to pay police officers and local administrators for protection.¹⁴⁹ The area is also known to be a hub for other types of illicit activity, including human trafficking,¹⁵⁰ and the storage and trafficking of small arms.¹⁵¹

River Road, a commercial street on the fringes of Nairobi, is a secondary gold trading hub. A centre of East Africa's informal economy, a wide array of merchandise (from genuine, to counterfeit, to sub-standard products) can be found at River Road. This includes both real and fake gold. The River Road gold business, mostly illicit, is dominated by Kenyans. Gold prices are lower here, despite being so close to Eastleigh, because bribes are lower.

Gold trading also takes place in the Nairobi Central Business District and Karen neighbourhoods. The trade in these areas is more formal, with many buyers holding gold trading licences. Buyers are often Indian or European nationals.

From Nairobi, gold is moved to the UAE, China and India. One gold dealer also reported that some is also shipped to Asia and Europe through South Africa.¹⁵²

Zimbabwe

Gold mined in Zimbabwe is moved to the trading hubs of Harare and Bulawayo before it is smuggled or exported out of the country. While Bulawayo's reach is limited to gold mined in areas close to the town, Harare attracts gold from across the country.¹⁵³ Bulawayo buyers are generally less well-resourced and lack the US dollar buying power of their Harare competitors. Miners or buyers may also take gold directly to South Africa, especially from Matabeleland province in the south. Nearly 40 per cent of gold mined in Matabeleland is believed to be smuggled directly to South Africa.

Smuggling is rife. Gold buyers revealed in interviews that they were selling between 10 and 30 per cent of their gold to the FPR only to maintain their gold licences, with the rest being sold on the illicit market. Major foreign buyers, often from South Africa, partner with Zimbabwean dealers to buy large quantities of gold on the illicit market.



FIGURE 16 Gold-smuggling routes out of Zimbabwe.



The bustling Beitbridge border crossing remains the most popular route for moving gold from Zimbabwe to South Africa. © Mustafa Kamaci/Anadolu Agency via Getty Images

The involvement of foreign buyers has increased official gold deliveries but is also believed to be fuelling illicit trade. If 17.5 tonnes, the official small-scale gold production figure in 2019, only accounted for this small share of actual ASGM production, it means that billions of dollars' worth of gold is being lost to the illicit market annually.

When there is a strong foundation of trust, buyers will advance funds for gold purchases. For example, foreign buyers will advance funds to major buyers in Harare or Bulawayo to buy gold,¹⁵⁴ and those buyers will advance cash to local buyers from small towns. Conversely, if a trusted small buyer is unable to immediately pay, miners may give that person gold to sell further downstream. Leaders of large Pentecostal churches, often referred to as prophets, can also be important sponsors for locals in the ASGM sector and a number of them have been involved in the gold trade, preaching the gospel of prosperity.¹⁵⁵

Most gold is thought to be smuggled to South Africa by road with buyers active on both sides of the border. Johannesburg is the primary destination for gold, with the border town of Musina sometimes used as a trade point.¹⁵⁶

While there are informal border crossings, the official Beitbridge border post remains a preferred route for gold smugglers, given its weak controls. In 2015, the Reserve Bank of Zimbabwe (RBZ) reported that the border was contributing to '... the most [gold] leakages that the country has ever experienced'.¹⁵⁷ The ease in which it can be moved over the border makes it difficult to catch smugglers. It is reported that a smuggler will only be caught if the police have received a tip-off but they can easily pay a bribe to allow them to continue across the border.¹⁵⁸

In other instances, gold is moved to South Africa through Botswana to avoid the heavily congested Beitbridge crossing. South Africa's strict lockdowns in response to COVID-19 have forced smugglers from Zimbabwe to increase their use of the Botswana route to come into South Africa.

A significant and growing amount of gold is also believed to be flown out of Harare airport to international transit and destination hubs, particularly the UAE, China and India and, to a lesser extent, Russia. This route is suspected to be used by more powerful gold dealers and political elites. For example, in December 2019, President Emmerson Mnangagwa reported that a syndicate of businessmen had smuggled gold worth US\$60 million to Dubai.¹⁵⁹ In October 2020, Henrietta Rushwaya, the head of the Zimbabwe Miners Federation and a relative of President Mnangagwa was arrested at Harare airport with 6 kilograms of gold in her handbag.¹⁶⁰ Indian buyers are allegedly the most likely to smuggle gold in this manner.¹⁶¹

There are also small gold flows between Zimbabwe and Mozambique in border regions, but the direction of the flows is unclear.¹⁶²

South Africa

Mining activity and supply chains significantly vary in South Africa from what is seen in the other countries being studied. In addition to artisanal and small-scale mining, gold mining takes place illegally in dormant and active large-scale mining shafts.

Due to a favourable VAT scheme, much of the gold tends to be laundered into formal supply chains in South Africa rather than being smuggled out of the country to international trade hubs.

Gold is laundered by second-hand scrap metal dealers and jewellers with licences to buy and sell gold.¹⁶³ Second-hand jewellery and registered precious metals dealers are described as playing a greater role in the financing of the illegal activity than the scrap metal dealers.¹⁶⁴ Small refineries are also a vulnerable point in gold supply chains, with allegations that the South Africa Diamond and Precious

Metals Regulator (SADPMR) has shied away from its mandate to regulate the businesses.

A lack of transparency and regulation of supply chains has facilitated not only gold laundering, but also VAT fraud. In South Africa, the second-hand sale of gold, such as gold jewellery, is tax exempt. Illegally produced gold, either being mined locally or smuggled in, is melted down into grade doré bars (doré is a semi pure alloy of gold and silver) consistent with the purity of jewellery. Using this method, newly mined product is disguised as recycled gold. Not only does this make tracking the origins of the metal difficult, gold merchants can fabricate transactions in order to falsely claim that they have paid the VAT of 15 per cent and submit fraudulent requests for tax rebates.¹⁶⁵ In one instance, the arrest of two suspected criminal syndicate members led not only to the discovery of gold, but also about 3 000 fraudulent identity documents, and 16 000 fraudulent invoices worth more than R528 million (about US\$35 million) purchases of second-hand jewellery.¹⁶⁶ Some interviewees claimed that the VAT fraud scheme is more profitable than the illicit trade in gold itself.

Once laundered, gold is exported or smuggled out of the country, primarily to the UAE, and to a much lesser extent India and China. Though South Africa declared no doré exports between 2007 and 2017, UAE import data shows that more than 34 tonnes arrived from South Africa between 2012 and 2016.¹⁶⁷ This gold was likely exported legally through being processed by small refineries in Gauteng.¹⁶⁸

Front companies are essential in the export of the gold. These are often export companies with connections to refineries in global hubs such as Dubai.¹⁶⁹ It is difficult to identify and prosecute these actors, in part because many of the companies involved are based beyond South Africa's jurisdiction.¹⁷⁰


There are also reports of gold being smuggled through neighbouring states. Mozambique, for instance, exports substantially more gold than it is thought to produce or import and has been identified by law enforcement and mine security as being a probable exit point for gold from South Africa.¹⁷¹



MARKET ACTORS: CORRUPTION AND CRIMINALITY

Members of the Sudan People's Liberation Movement/Army in Opposition take part in a military exercise near Yei, a gold-producing area of South Sudan. Armed groups are reported to seize gold mines in the area, driving out informal miners.

© Sumy Sadurni/AFP via Getty Images



In all the countries studied, corruption was a common theme, ranging from small bribes to low-level officials to grand corruption by political elites. In South Sudan, Uganda and Zimbabwe, allegations of the involvement of military officers and politicians at the highest levels of government abound. Foreign actors tied to corrupt agreements with high-ranking, influential politicians are also prominent actors in the regions' illicit gold markets. This reflects previous findings that links between ASGM and corruption in Africa are deep and inextricable.¹⁷²

In some regions, ASGM has also been linked to high levels of violence. In South Sudan, gold mine sites have become points of conflict for warring groups, leading to violence and the displacement of local communities, while in Zimbabwe machete gangs have increasingly victimized miners, using violence to forcibly remove non-violent miners from mine sites.¹⁷³

Political actors

One way political actors exploit the sector is by securing land access and mining rights, often through corruption or by force. In Uganda, for example, mining licences are said to be predominantly owned by political elites who have ordered the Mineral Protection Police (MPP) to crack down on any other mining operations.¹⁷⁴

The lack of or mismanagement of computerized cadastre (mining title administration) systems has contributed to the capture of land and mining rights by corrupt actors. In Kenya and Zimbabwe, the absence of an effective cadastre system was specifically referenced as a driver of criminal capture of the industry.

Country overviews: actors in the gold trade

South Sudan

Gold has become an important source of illicit revenue in South Sudan. While artisanal mining is taking place, gold production profits are mostly captured by bigger players, providing substantial financing to people active in the illicit market, including political elites, foreigners and non-state armed groups. There are widespread allegations of large mining operations being linked to political elites and evidence that members of the NAS and the SPLM/A-IO are profiting from gold mining.

Uganda

Ugandan political elites, including members of the Ugandan People's Defence Force (UPDF), are allegedly involved in the illicit gold trade.¹⁷⁵ At higher levels, this gold trade is thought to be facilitated by high-level collusion with government officials, described by some as a 'mafia-like business'.¹⁷⁶ Because Kampala and Entebbe are key nodes in regional illicit gold supply chains,¹⁷⁷ it is a very high-value business. This also makes it a risky business to enter without the right political connections and deep pockets.¹⁷⁸

Kenya

In Kenya there is evidence of senior politicians and foreign nationals being involved in the illegal mining, processing and trade of gold. For example, a crackdown on illegal mining operations in the Migori area following a fatal pit collapse revealed that mines and processing plants are owned by local senior government officials, as well as a former Kenyan ambassador, several Chinese investors and prominent businessmen in the area. Land access and mining rights are key ways in which political actors exploit the sector.

Zimbabwe

Corruption in ASGM and the gold market is endemic in Zimbabwe, and it is widely alleged that political elites are involved in the gold sector across the country. This has led to a rise of violent machete gangs in the country, who terrorize miners. While there have been initiatives like the Bubi Gold Centre near Bulawayo, launched in 2018, government programmes have been plagued by allegations of corruption, including a lack of transparency and accountability.¹⁷⁹

South Africa

South Africa's illicit gold market is fuelled by a fear of criminal networks and actors. Influential criminal actors behave with impunity and show no need to maintain a low-profile. The weak law enforcement response is attributed to a lack of capacity and political interference from senior members of government who are complicit and profiting from the illegal gold trade.¹⁸⁰ Gangs and mine bosses gain access to mine shafts by using threats of violence and bribing security staff and supervisors.¹⁸¹

In Zimbabwe mining disputes occur when multiple mining titles being granted for the same location, which has led to conflict and chaos.¹⁸² While mining activity should be suspended while disputes are resolved,¹⁸³ many actors instead use violence, political connections and bribery to continue operating in disputed areas.¹⁸⁴ This is especially the case when a gold rush occurs, with senior politicians reportedly abusing their power to quickly secure ownership of claims. If they are unable to secure permits, they may employ machete gangs (traditionally used for political violence during elections) to displace ASM miners, secure access to mine sites and, in some cases, steal gold ore.¹⁸⁵

Similar trends can be seen in Kenya. Senior politicians will leverage their political and financial advantages to secure land. For example, in Lolgorian, an area on the border with Tanzania, a gold rush led to a wave of senior politicians and government officials descending on the area to purchase large chunks of land.¹⁸⁶ In 2015, the government launched the Kenya Mining Cadastre Administration System, but ministry officials have gone back to using the manual system, which makes it easier for people to bypass licensing procedures, thus avoiding tax payments and defrauding the country.¹⁸⁷

In other instances, political actors will not obtain a licence, but take over mining operations using deception, political pressure and violence. They may also not engage in mining themselves, rather using extortion to get money and minerals from mining operations (legal and illegal) in areas they control.

In South Sudan there is documentation of unlicensed industrial equipment being used to mine gold.¹⁸⁸ Although the Ministry of Mining is the only authority that can issue licences that allow for the use of industrial machinery, the local Kapoeta administration has been doing so, with state officials reportedly negotiating directly with local companies.¹⁸⁹ It is alleged that local administrators, in particular leaders of the newly appointed EES government, act as gatekeepers, which allows them to profit from the illegal mechanized mining in the area.

Other locations in South Sudan where state officials are reported to be active in the gold sector include Luri (Gorom, CES) and Boma State in the Upper Nile.¹⁹⁰ It is also speculated that the decision to designate the Pibor, an area in eastern South Sudan, an administrative area rather than a state, may be linked to the presence of gold reserves and the desire of the national government to directly control these deposits.¹⁹¹

In Zimbabwe, if a miner finds a profitable gold site, they must share the profits with senior politicians to secure protection against machete gangs.¹⁹² In some cases, this can reflect a significant part of the value of the gold, which can add up to hundreds of thousands of dollars.¹⁹³

Political elites are also reported to force miners and local buyers to sell gold to buyers or companies that they control. For example, in Uganda, police are said to require miners to register and sell gold back to them at a determined price.¹⁹⁴ Likewise, in Kapoeta in South Sudan, anyone found selling gold to a party that is not one of the designated companies that are allegedly controlled by political elites will be arrested. One gold buyer reported that he was badly beaten and had to pay a fine when he was caught trading gold to the 'wrong' party.¹⁹⁵ As a result, gold miners and buyers operate in secret.

In South Sudan, state officials are reported to be active in the gold sector.

Refineries are also targeted by political actors and criminal networks. In Uganda, police harass refineries for bribes. The dubious practices of some refineries leave them vulnerable to exploitation by law enforcement. Undercover compliance checks are conducted regularly, often by the MPP or Ministry of Labour, and where fines are threatened, they are reportedly waived in exchange for bribes. In South Africa, refineries and processing facilities are increasingly the targets of armed robbery. Security sources report incidents in which heavily armed paramilitaries have captured processing facilities, taken hostages and attempted to steal gold. Sometimes, this results in firefights between gunmen and security. As one source put it, 'they [the armed robbers] are doing in 20 minutes what it would take 200 Zama Zamas weeks to do'.¹⁹⁶

It is also alleged that mining companies linked to political elites under-declare gold production and export to avoid taxes. A common tactic globally, mining companies will use an exploration permit as a cover to extract gold. In Uganda, it is alleged that one politically connected company has been mining for years but has never officially transitioned to mining. There are no public records of it paying royalties or taxes.¹⁹⁷

Law enforcement

The quality of law enforcement heavily dictates whether the gold sector can be captured by criminals or not. The police may do their jobs to the letter of the law but, equally, they may become a tool to be used by corrupt politicians to get control of mining operations and markets.

For example, in Uganda law enforcement bodies, specifically the MPP, are reported to have become a tool for powerful individuals in government to exercise control over the gold sector and reap illicit profits. In the Mubende and Kasanda districts, the MPP and other law enforcement officials, allow mining to continue in exchange for bribes. According to one gold dealer, some district police commanders receive directions from top officials to provide security and cover for the illicit mining operations and the movement of gold.¹⁹⁸ The Minister of Energy has accused the police unit in Mubende of promoting and protecting illegal

gold mining, referring to the protection racketeers as 'mafias'.¹⁹⁹ In Kisiita, in western Uganda, the MPP reportedly provides informal protection to mining operations while ensuring that gold is sold to specific agents or buyers aligned with powerful people in government, despite mining officially being shut down. Here, according to one dealer, miners must pay the police a bribe of at least UGX4 million (US\$1 080) to access their pits and another bribe after they have sold their gold.²⁰⁰

In Zimbabwe the Gold Mobilization Technical Committee (GMTC) was established to improve coordination among government institutions and increase gold deliveries to the FPR.²⁰¹ Comprising members from the RBZ, the Ministry of Mines and Mining Development, the Zimbabwe Republic Police (ZRP) as well as the military, the GMTC's primary function is to monitor the gold sector and curb smuggling. However, the ZRP and army officials have been accused of frequenting mines and processing centres known to be non-compliant with licensing regulations in order to extort bribes.²⁰² It is alleged that known gold buyers also pay regular bribes to the ZRP.²⁰³

In South Africa, police can be directly complicit in illegal mining, abusing their power to profit from it.²⁰⁴ Police are alleged to help illegal miners to access mine shafts and to seize gold from illegal miners and low-level buyers, which they then sell to criminal groups.²⁰⁵ These exchanges are said to be frequent and visible and occur in daylight, showing the brazen nature of such criminality.²⁰⁶

Military

The military is believed to be involved in the gold trade of South Sudan, Uganda and Zimbabwe. For example, given the proximity of the South Sudan People's Defence Forces (SSPDF) Gorom Training Centre to local mine sites, ASGM in the area is linked to SSPDF forces on multiple levels, including the provision of security by SSPDF soldiers.²⁰⁷ There are also allegations that senior army officials engage in the gold trade as buyers and provide transportation.²⁰⁸

In Uganda, senior UPDF officers are said to control illicit gold flows from the DRC into their country.

There are reports of traders being targeted, and even killed, by police or military officers for their gold.²⁰⁹ Elements of the UPDF also reportedly use regular security missions into the DRC and South Sudan to hunt down rebels to buy and move gold into Uganda.²¹⁰ They allegedly also connect gold traders with buyers in Kampala and help to smuggle gold out of the country through Entebbe.²¹¹ Dealers in Kampala say that almost all gold operations in Kampala have connections with the police and the military, who provide protection and security for smugglers.²¹² In June 2020, it was reported that 35 kilograms of gold went missing from a senior military officer's residence in the city. The robbery raised red flags as the source of the gold was undisclosed and the officer had no dealers' licence.²¹³

It is also suspected there are business links between South Sudanese and Ugandan military officials.²¹⁴ For example, generals from South Sudan are known to own real estate in Arua and Kampala and have connections with Ugandan military officials. It is suspected they cooperate with their Ugandan counterparts and probably move freely through border check points because of their official status.²¹⁵

Zimbabwe's military is also becoming more involved in the country's illicit gold markets. While it is not clear when the army joined the GMTC, as no official notice was given, it is now considered to be the de facto leader of the committee through its investment vehicle, Rusunguko, Nkululeko Holdings.²¹⁶ Because of the potential rent seeking opportunities this offers, as well as sizeable allowances, the GMTC is reported to be an attractive posting for military officials.

Foreign nationals

Foreign nationals are also involved in the sector, operating as influential buyers and investors. Across all the countries studied, the involvement of foreign players and their ability to profit from the sector relies on dubious agreements with political elites, who also profit from the arrangement.

Laws that require foreign nationals to partner with locals in mineral enterprises have been introduced to

avoid the capture of mineral resources by foreigners. However, in practice it facilitates high-level corruption, with large amounts of money paid to political elites by foreigners, often in profit-sharing arrangements. For example, in Zimbabwe bans on riverbed mining and mining in protected areas have been lifted, allowing senior politicians and military chiefs to parcel out lucrative riverbed mining permits to foreign investors in exchange for hefty payments. Specifically, Chinese and Belarusian companies have been granted permission to conduct riverbed mining.²¹⁷ The lack of alluvial gold mining experience in Belarus has raised further concerns about the deal.²¹⁸

While many nationalities are involved in gold mining and processing in these countries, the presence of Chinese nationals in the industry is notable. In eastern Africa, multiple interviewees reported that South Sudanese government actors have gone into partnership with Chinese nationals in CES and EES,²¹⁹ and they are reported to be the biggest buyers in Juba.²²⁰ In Uganda, foreign companies (usually owned by Chinese nationals) provide a front as investors, with senior government officials benefiting.²²¹ In Kenya, there are also suspicions about the nature of mining operations linked to Chinese nationals. In Southern Africa, the presence and influence of Chinese nationals in the Zimbabwe gold sector has significantly grown since 2010.

In the Migori area in Kenya, for example, there are reports of a recent influx of Chinese nationals, who are partnering with local elites. The construction industry is thought to be a common cover for mining activity, an allegation also made in other African countries where Chinese firms are formally involved in construction and infrastructure projects but are mining on the side. Informants say that have met Chinese investors who were officially in the country as construction workers on infrastructure projects, but who were also mining.²²² Also in Migori, interviewees explained how a leaching plant was an illegal partnership between a senior county government official and Chinese investor.²²³ Often locals or other businesses will be a front for illegal operations. For example, multiple people, including a former government representative, reported helping Chinese

operators to establish and manage gold mining sites.²²⁴ The presence of Chinese nationals has become a political hot potato, with some politicians speaking out against the involvement of Chinese nationals in the mining sector as a way to gain political mileage with local communities.²²⁵

Chinese nationals are also prominent and influential actors in Zimbabwe's gold sector where they have formed partnerships with Zimbabwe African National Union Patriotic Front (ZANU-PF) elites, along with senior military and ZRP officers. Benefits allegedly include fast-tracking licences and protection from law enforcement. One industry representative reported, 'The Chinese have the audacity to tell government compliance officers that they are small boys'.²²⁶

Chinese nationals are also involved in supplying equipment and processing gold ore in Zimbabwe. In most gold mining towns, Chinese owned shops sell ASGM equipment, including mercury thought to be sourced from China.²²⁷ In the main production districts such as Bubi, Kwekwe, Shamva, Shurugwi and Kadoma, their position is dominant, cemented by the ownership of custom mills - gold processing facilities that employ more efficient technology than traditional stamp mills. Chinese nationals rarely buy gold not produced at their milling centres and reportedly offer competitive gold prices, especially when wanting to retain a trade relationship with a miner who has quality gold ores.

Gold dealers

Gold dealers sit at the apex of the East and Southern African gold markets, profiting handsomely from consolidating and exporting gold flows from the regions. Dealers require significant financial resources and strong political connections in some places. African political and business elites often occupy this space, although foreign nationals with deep pockets are also players. For example, a dealer in West Pokot in Kenya reflected that foreigners can dominate the industry because they have capital they can use to influence and compromise state officials.²²⁸

While a variety of nationalities are involved in the industry, Indian nationals seem to have an especially large presence and buying power. In the eastern African gold hubs of Kampala and Entebbe, they are referenced as buyers more than other nationalities. Their presence can also be felt in the trade hub of Arua. One interviewee reported that one of the biggest buyers, an Indian national based in Kampala with an outlet in Arua, regularly bought about 10 kilograms of gold per day.²²⁹ In Migori, one of the biggest gold-producing areas in Kenya, buyers are often locals buying gold on behalf of Indian nationals. This was reflected in a crackdown on illegal activity in Migori, where companies owned by Indian gold traders were identified.²³⁰ Indian nationals are also active in Zimbabwe, operating with local partners and hiring locals for various operations, but they are not as prominent in the industry as they are in eastern Africa.²³¹

Somalis are another notable group in eastern African supply chains. The Eastleigh suburb of Nairobi is known as a trading hub for gold from Kenya and Kapoeta in South Sudan, in addition to elsewhere in eastern Africa. One of the reasons for its importance as a gold hub are close-knit regional ethnic alliances. Popularly known as Little Mogadishu because of its large Somali population, Eastleigh is also home to refugees from other east and central African nations. Gold dealers are primarily Somali and businesses tend to be kinship-based, run by families or clans. Eastleigh gold dealers reported that Somalis can secure a loan that is backed by gold, a popular arrangement for those fleeing the country and seeking a new life in Nairobi.²³² Gold is also used to move wealth in and out of Somalia. This is enabled by plethora of airline booking offices, hawaladars, foreign exchange bureaux, local and international commercial banks – some of them Shariah-compliant—and cargo freight companies in the neighbourhood.



An artisanal miner sifts through disused rock in South Africa, October 2015. The gold dust collected is sold on to informal and illegal buyers in the illicit market. © John Wessels/AFP via Getty Images

Country overviews

South Sudan

In Yei, a variety of foreign nationals can be found buying gold, including Ugandans, Chinese, Congolese, Kenyans, Ethiopians, Eritreans and Somalis. In Kapoeta, gold dealers are primarily Somali, although Indians, Congolese, South Sudanese and Ethiopians can also be found. Chinese nationals, political and business elites, and Ugandans and Kenyans are all said to be active in the Juba gold trade.

Uganda

In Arua, middlemen and buyers are mainly Ugandans, Congolese, South Sudanese, and Indians.²³³ Major brokers are mostly foreigners who come from India and Kenya, as well as the Middle East and western Africa.²³⁴ In Kampala and Entebbe, in addition to Indian dealers, Chinese, Pakistani, Congolese, South Sudanese and Ugandan nationals with political ties also deal in gold.²³⁵

Kenya

In Kenya dealers include Indian, Somali, South Sudanese, and Congolese nationals. In the Migori area, buyers are often locals buying gold on behalf of Arab and Chinese nationals located

in bigger towns or cities. For example, in the crackdown on illegal activity in Migori, companies owned by Indian and Arab gold traders were identified.²³⁶ In West Pokot, foreign dealers come from as far as South Africa, Ethiopia, Somalia, Dubai and Uganda.²³⁷

Zimbabwe

Major foreign buyers, often from South Africa, as well as Indians and actors from Dubai, tend to partner with licensed Zimbabwean dealers to buy large quantities of gold on the illicit market. They sponsor gold buyers in Harare, providing pre-financing of up to US\$1 million for gold purchases. Zimbabwean nationals provide a front for the operations, hiding their involvement.

South Africa

Second-hand scrap metal dealers, jewellers and refineries owned by South African nationals are commonly used to launder and trade in gold. One interviewee reported that scrap dealers are white South Africans with beneficial law enforcement connections and influence, either because they are former police or because they have relatives who are members of the police.²³⁸

Violence and conflict financing

In some regions ASGM is linked to violence. In South Sudan gold mine sites have become points of conflict for warring groups, who sometimes violently seize and control gold mining areas. In Zimbabwe, machete gangs terrorize miners, using violence to forcibly remove non-violent miners from mine sites.

In South Africa, gangs and mining bosses are often the perpetrators of the most serious crimes at or near mine sites. They use violence to enforce discipline and ensure production quotas are met.²³⁹ Gangs and mining bosses also engage in violent gang and turf wars which each other, and with mine security and police.²⁴⁰ Based on media reports of inter-syndicate-related violence, it was estimated that there were about 300 mining-related deaths between 2012 and 2015, many of these the result of turf wars. In 2019, there were 26 murders in the Durban Deep Mine alone.²⁴¹ The use of firearms by criminal syndicates in some instances has led observers to conclude that some gang leaders have military backgrounds.²⁴²

Violence in the South Sudan and Zimbabwe gold sectors is examined in more depth below.

Armed conflict in South Sudan

The illicit gold trade in South Sudan is linked to conflict, particularly in CES where SSPDF forces, the NAS, and the SPLM/A-IO are present. In a January 2019 incident, more than 15 people were killed in Gorom when alleged NAS forces attacked a gold mining site, claiming that it was occupied by SSPDF forces.²⁴³ Also in 2019, representatives of both SPLM/A-IO and NAS confirmed to the UN Panel of Experts that they occasionally engaged in artisanal gold mining themselves and taxed civilians who mined gold in areas they controlled.²⁴⁴ While characterised as informal and sporadic at the time, more recent interviews indicate that their involvement has become more structured and entrenched, especially that of the NAS.²⁴⁵ While there is strong evidence that armed groups are profiting from the illicit gold trade, there is limited evidence that violence is directly linked to efforts to control gold mining areas.²⁴⁶

The main areas where gold mining and conflict overlap are Yei and Lobnok. In the Yei area, the SSPDF and NAS are reported to be major players in the industry, with forces loyal to the opposition SPLM/A-IO and senior government officials also mentioned in interviews in the area. While government forces control the town and nearby mines, more remote areas are controlled by either the NAS or the SPLM/A-IO forces.²⁴⁷ Rampant violence and conflict in and around the greater Yei region has made the gold trade even more risky for individuals not linked to the groups.

Since late July and August 2020, clashes between the NAS and government forces have severely affected mining activity in Lobonok, driving away miners, buyers and traders.²⁴⁸ Homes have been torched, some people have been killed with many others forced to abandon their homes in search of safety. Locals say they will not visit the mine sites for fear of violence.

In Lobonok, it is unclear if individual mine sites are controlled by the government or NAS as both are active in the area. The SPLM/A-IO has also previously engaged in gold mining in the area.²⁴⁹ It is suspected the SPLM/A-IO continues to be involved in mining, or is seeking to do so, following meetings with locals by SPLM/A-IO ministers.²⁵⁰ The SSPDF has also been accused of violence against civilians. It was reported that in July 2020, while conducting a counter-insurgency campaign in the Karpeto area near Lobonok, the SSPDF attacked civilians, including gold miners, at a mine site. The SSPDF have been accused of raping and killing civilians and looting.

By comparison, Kapoeta in the EES is relatively peaceful. However, rather than indicating a lack of criminality, this is more likely a reflection of the strong protection enjoyed by political elites who have a presence in the market there.

Machete gangs in Zimbabwe

At the end of 2019, violence perpetrated by machete gangs against ASGM communities became increasingly destructive and uncontrollable. Between

August and October 2019, these gangs killed at least 105 people in Kadoma and nearby mining communities.²⁵¹ This included attacks against ZRP officers trying to maintain peace. In one incident in Kadoma, a police officer was hacked to death by a gang.²⁵²

Machete gangs tend not to mine, but rather rob miners of their gold, gold ore, money and other valuables. They also violently displace miners from profitable sites, extort money from miners and buyers and engage in forced labour.²⁵³ There are also reports of female miners being targeted, which has led many to stop working out of fear for their lives.²⁵⁴

In January 2020, the ZRP launched operation Chikorokoza Ngachipere to crack down on illegal mining.²⁵⁵ According to the ZPR, 52 115 people had been arrested by September as a result of the operation.²⁵⁶

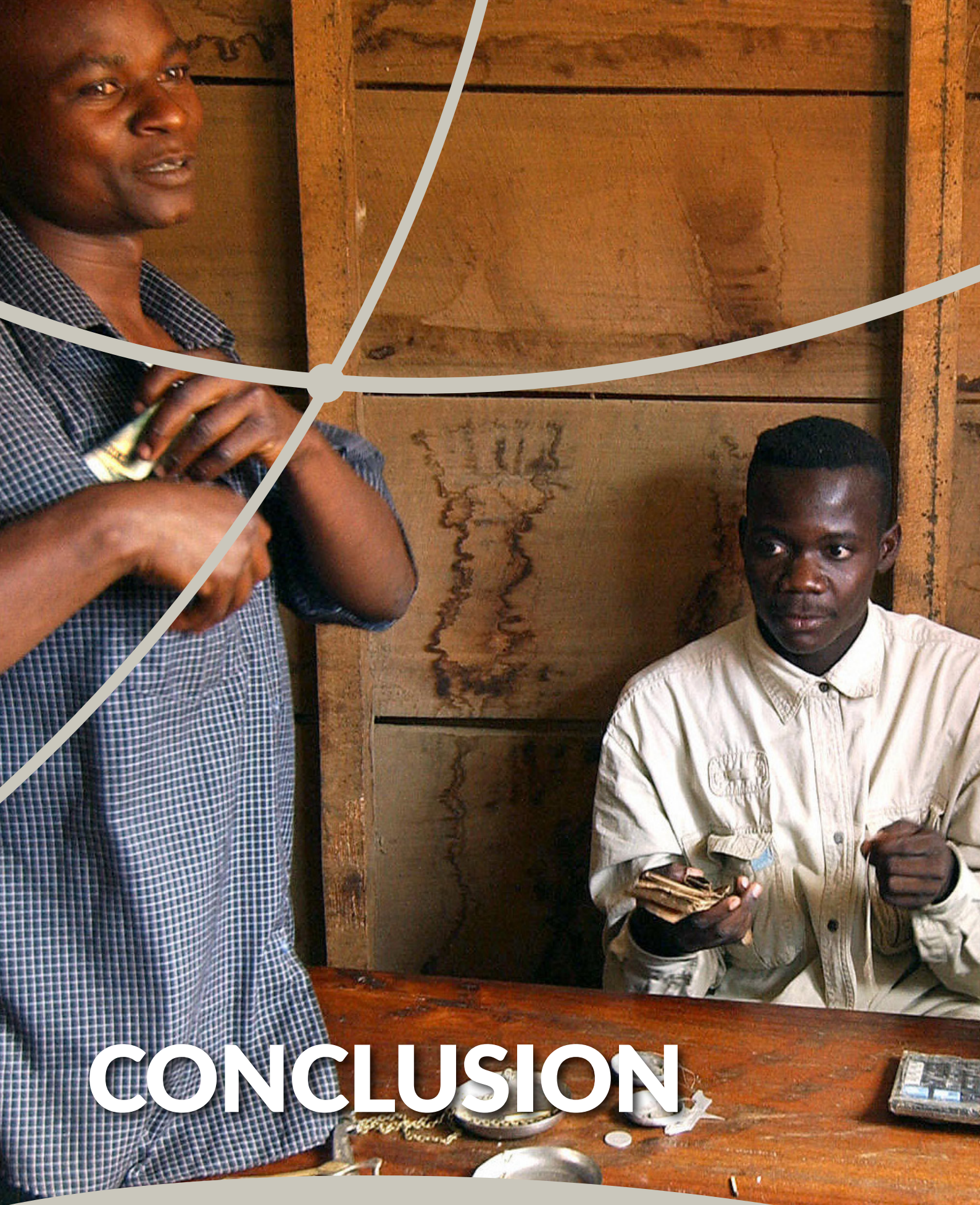
While tackling machete gangs is crucial, informal ASGM miners suffered significant collateral damage in these operations. Non-violent miners and associated

people were arrested and fined for offences that ranged from failure to wear personal protective equipment to not having identity cards. As a result, even legal miners stopped their operations for fear of arrest and gold deliveries to the FPR plunged to a 16-month low.²⁵⁷ In short, ASM miners were twice victimized, once by machete gangs and again by law enforcement.

Further, many members of the machete gangs were not captured or were quickly released on bail. Allegedly, gangs were warned by ZRP insiders of planned visits and protected by officials of ZANU-PF, who are said to be invisible sponsors. For example, in Zvishavane, one gang member who had hacked someone to death was arrested, but was quickly released before proceeding to boast publicly to the bereaved family that he was untouchable.²⁵⁸ In a survey of gold mining communities undertaken by the Zimbabwe NGO Centre for Natural Resource Governance, the names of politicians, including high-ranking officials, featured prominently in answers to questions about machete gangs.²⁵⁹




A small-scale gold mining and processing operation in Kwekwe, Zimbabwe, April 2018. © Marcena Hunter



CONCLUSION

Gold is traded at Bunia market in the eastern DRC. Most of eastern DRC's gold is thought to be smuggled to Uganda, where it is then exported to international gold trade hubs, in particular the UAE.

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Effective responses to curbing activity in illicit gold markets require not only targeting influential criminal and corrupt actors, but also putting the tools, resources and support in place to make it easier for informal mining operators to comply with legal and regulatory requirements and to engage with the formal private sector. This is no small undertaking and will require significant resources and long-term commitments. Progress can also easily be undone by corrupt and criminal actors who appropriate development initiatives and programmes for their own personal gain.

Legislative and regulatory framework

Current efforts to regulate ASGM and combat the illicit gold trade tend to create or increase barriers to entry for informal miners, without providing the support needed for those informal miners to comply with licensing and reporting requirements. Analysis of legal and regulatory frameworks is not only important to understand which laws apply to the sector, but also how they can form a barrier to miners operating legally and formalizing operations. Past research has found this is true not only for national legislative and regulatory frameworks, but also for prominent international due diligence and responsible supply chain initiatives. When legal and regulatory barriers to entry are too high (for example, costly licences or unrealistic environmental impact assessment requirements), it can force miners to operate illegally or rely on criminal actors to buy the gold they produce.

The increasingly comprehensive mining legislative frameworks that have been adopted across Africa are closing the space for informal gold mining and trade, which is creating opportunity for criminal actors. In parallel, government action supporting the sector, such as building miners' capacity and allocating land for artisanal mining,

Mining legislative frameworks across Africa are closing the space for informal gold mining, creating an opportunity for criminal actors.

has been weak. Eastern and Southern Africa are no exception. In all the countries studied, miners said the current regulatory requirements were too onerous for them to comply with and legally mine.

For example, in South Sudan obstacles to legal ASGM include the high cost of mining licences as well as onerous and complex bureaucratic processes that need to be complied with. Artisanal mining applications must include maps and an environmental impact study, and annual reports must be submitted.²⁶⁰ These requirements are far too costly and technically challenging for artisanal miners to realistically comply with, forcing them to mine illegally. In turn, they are pushed to rely on criminal actors to purchase their gold and for financing.

Similarly, in Zimbabwe current regulatory frameworks also create significant barriers to formalization for ASGM miners by creating compliance standards that are difficult to meet.²⁶¹ For example, delays in processing licences can lead to wait times of more than three years.²⁶² Also, the South African Rand Refinery's attempt at establishing responsible supply chains ran into problems with miners struggling to comply with a stringent due diligence process and constant visits from the Ministry of Mines and Mineral Development.²⁶³ Some efforts have been made to encourage ASGM miners to operate legally. For example, environmental management assessment fees were reduced from thousands of dollars to a couple hundred dollars and the complex environmental impact assessment has been substituted with a simpler Environment Management Plan. Yet, uptake by ASGM miners has been slow and catalyzing change has proven to be difficult.

Zimbabwe has taken other steps to curb illicit flows. The RBZ, for example, supports efforts to formalize gold trading in order to reduce smuggling and increase official gold deliveries.²⁶⁴ In 2016, the central bank directed the FPR to buy gold on a 'no questions asked' basis to encourage miners to sell all gold, regardless of the sources, within formal channels.²⁶⁵ However, because it is a criminal offence to possess gold without a valid mining or buyers' permit, miners fear being arrested if they sell to official buyers. So, little artisanally mined gold finds its way to the formal market. The Zimbabwean experience highlights how hard it is to break the strong hold that corrupt and criminal actors have over illicit gold markets.

An unreliable national currency has also thwarted South Sudan and Zimbabwe's efforts to establish national gold buying schemes. In 2017, the South Sudanese government attempted a pilot gold buying scheme in Kapoeta through its central bank. According to government officials, their use of the official exchange rate to calculate the gold price and their location in the town centre rather than at mine sites meant that they were unable to compete with the large number of mobile and informal gold traders. As a result, less than one kilogram was purchased under the scheme before being abandoned. Similarly, the Zimbabwean government has frequently changed the percentage of the gold purchase price they will pay in US dollars versus local currency to compete with the illicit gold market and thwart arbitrage in the gold and jewellery sectors. However, even when paying in US dollars, the FPR uses the official exchange rate, which is less favourable than the black market rate, which deters gold sales to the FPR.

Country overviews: regulatory frameworks

South Sudan

Gold mining is regulated by the Mining Act, 2012. Under the act, all unlicensed mining, including artisanal mining, is illegal. Informal artisanal mining by South Sudanese citizens of surface minerals²⁶⁶ is permitted but requires a licence that is issued by local state authorities. However, no such licences have been issued, largely because there is little capacity to do so at the state level.²⁶⁷

Uganda

The minerals sector is governed by the Mining Act of 2003, which is implemented by the Ministry of Energy and Mineral Development. The National Environmental Act 2003 governs and provides guidelines for mining activities as their activities affect the environment, including requiring miners to conduct environmental impact assessments. The Ugandan government approved a new Mining and Mineral Policy in 2018 and brought forward a bill to update the mining and minerals act in 2019. The new bill, which expands on the legal and tax classifications for legal artisanal mining licences, has become stuck in parliament, delayed by the advent of COVID-19, which has redirected political priorities. The new bill is unlikely to become law until the latter half of 2021. Though the government is encouraging artisanal miners to formalize their operations, current regulatory requirements remain onerous for most of them, preventing a shift to the formal sector.²⁶⁸

Kenya

A new mining law was enacted in 2016 which provided 'a framework for mainstreaming ASM miners'. The new legal regime decentralized the administration of

artisanal mining and made permits for these miners subject to less stringent regulatory requirements than other types of mining licences.²⁶⁹

Zimbabwe

Gold mining is regulated by the Mines and Minerals Act, which is administered by the Ministry of Mines and Mineral Development. The gold trade is managed by the RBZ through its FPR subsidiary. The police, through the Minerals, Flora and Fauna Unit, enforce mining regulations and combat gold smuggling out of the country.

South Africa

The Department of Mineral Resources, in partnership with the SADPMR and the South African Revenue Service, regulates the gold mining and trade sector. While current legislation does not effectively differentiate between industrial and artisanal mining,²⁷⁰ the weak enforcement of the gold mining and trade sector is viewed as more problematic.²⁷¹ In 2002, the Mineral and Petroleum Resources Development Act removed the oversight role of the South African Police Service, including its investigation and monitoring responsibilities, moving these to the SADPMR, whose officials have less investigative capacity.²⁷² This includes the licensing and monitoring of miners and scrap metal dealers. Creating further enforcement challenges, the SADPMR only shares information when requested to do so through official channels.²⁷³ Because the cost of combating illegal mining is increasingly falling on the private sector, there is a growing push by mining companies for a specialized mine police unit to be revived.²⁷⁴

Recommendations

Target key actors, financial flows and transit points

Criminal investigations should target the activities of key actors in the illicit gold trade, including senior government officials. This could include increased support for financial intelligence units and financial investigations. By providing information and support, foreign governments and international law enforcement bodies can support efforts to identify and prosecute key individuals, companies and financial institutions linked to or involved in the illicit gold trade. This can lead to improved reporting on suspicious transactions and knowledge of laundering methods and flows.

Law enforcement, including customs officials, can also target enforcement activity at major transit points. Because international airports are key bottleneck points in supply chains, effective policing there will have a significant impact on illicit gold flows. In addition, smugglers tend to favour major border crossings when moving large amounts of gold. Targeting key road border crossings may therefore also reduce the ease with which gold is smuggled out of source countries.

Responses could also include targeted sanctions against key actors engaged in buying and smuggling gold that is used to finance armed groups and violence. Targeted sanctions, as opposed to more blunt country-wide sanctions, are critical to minimizing harm to vulnerable communities and fuelling an environment that increases demand for smuggling and other criminal activities.

Further, due to Dubai's prominence as a global gold and financial trade hub, action by the UAE government will be needed to curb illicit flows. The Financial Action Task Force Mutual Evaluation Report published in April 2020 provides guidance on steps the UAE can take on addressing vulnerabilities to gold and money laundering.

Strengthen relationships with ASGM stakeholders

Crucial to developing effective responses to the vulnerabilities of ASGM to criminal exploitation is ensuring that responses are informed by perspectives from actors in the sector and achieve buy-in from all parties. Effective, sustainable responses and interventions will require a foundation of strengthened relationships with ASGM stakeholders. Interventions may require strategic engagement with established informal networks, even if this means working with less-than-ideal partners. In particular, the influential role of intermediary buyers and their relationships with mining communities could potentially be of use.

When working with the ASGM sector, government agents, donors and foreign experts need to be sensitive to the complexities of miners' organizational structures and power dynamics to avoid initiatives and programmes supporting the industry being monopolized by a small number of individuals to the detriment of the larger group.

Responses also need to be gender sensitive, including input from women and accounting for how they will be impacted by interventions.

Establish and maintain electronic cadastres

Developing independent and dependable electronic cadastre systems is crucial to bringing clarity to the ASGM sector. Without clear, up to date and functional cadastres to define property rights over mineral deposits, conflict and corruption become the tools for controlling extraction. Paper-based cadastre systems are vulnerable to criminal exploitation while electronic systems lay the foundations for greater accountability and transparency in extractives sectors by providing platforms that are more transparent and accessible.

Some of the countries studied have started the transition to electronic cadastres. Supporting this transition has been a focus of the international community, with institutions such as the World Bank financing the development of electronic cadastre initiatives across the world.²⁷⁵ Many of these initiatives have shown that by harnessing new technology, such as geographic information system mapping, it is possible to build new and more complete cadastral maps in areas where there has historically been a lack of defined and recorded property and mineral rights.²⁷⁶

It is important that electronic cadastres are developed in conjunction with the ASGM sector. Existing cadastres have largely focused on large-scale mining concessions, excluding artisanal miners in the process.²⁷⁷ For electronic cadastres to resolve conflicts arising over ASM sites, they must include opportunities for artisanal miners to register their claims, and be accompanied by appropriate legal systems that can, for example, deal with conflicting claims to mineral deposits.

Develop innovative responses to curb criminality

Combating criminality in the ASGM sector must be done in a way that seeks to limit harm to the vulnerable populations who depend on gold for their livelihoods. One way to do this is to support formalization. The ability of criminal consortia to undermine efforts to formalize the ASGM sector highlights the need for holistic, innovative responses that not only include security and law enforcement approaches, but also development actors and strategic partnerships.

To ensure formalization is sustainable, the decision to operate formally should be the result of a reasoned, cost-benefit analysis. This requires devising policies that seek to minimize barriers to entry. Reforms could include increasing the duration of ASGM licences and reducing bureaucratic red tape and waiting times. Reduced taxes or fees could be offered to buyers and dealers who engage with traceability and certification pilot projects and actively work to formalize their operations. Non-economic incentives could also be considered, such as improving safety measures and access to safe, efficient and affordable processing areas. Interventions that aid miners in securing land and mining rights or assist in geological exploration could also be helpful.

While domestic refineries are a gold laundering vulnerability in supply chains, they also present an opportunity to establish responsible sourcing practices directly with the country of origin. There is a move towards refining gold across the continent, and since 2021, there have been 26 new refineries operating in sub-Saharan Africa, with more under construction.²⁷⁸ Frank Muygyeni, head of the minerals unit at the African Union,

stated that refineries are crucial to ending gold smuggling and ensuring that Africans receive a greater share of the value of their gold.²⁷⁹

Any development strategies that aim to curb crime and corruption will need appropriate safeguards in place to ensure these very practices do not undermine any interventions or policy changes that aim to eradicate such behaviour. Rent-seeking behaviours by criminal consortia have proven to be a significant obstacle to the successful implementation of ASGM programmes and interventions of all kinds to date.

ASGM miners washing gold ore, Migori, Kenya, December 2019. Because gold is heavier than the other particles, it sinks and catches on the carpet. The ore concentrate left in the carpet goes through additional processing, often using mercury, to extract the gold. © Marcena Hunter

Seek to responsibly source gold directly from source countries

Private sector actors, in particular refinery and smelter-level programmes, should strive to responsibly source gold from source countries, as opposed to refusing to source product from high-risk areas or disengaging from ASGM entirely. Sourcing gold directly from source countries has the benefit of improving downstream knowledge of supply chains as well as establishing responsible sourcing practices, thereby also supporting the sustainable development of the sector. Increasing the number



of ASGM sourcing options will help to grow and regularize responsible ASGM gold supply. This will require developing flexible and tailored solutions on the ground. This can include securing individual supply chains and increased acceptance of sourcing gold from mines that are in the process of achieving certification or meeting due diligence requirements.

The EU Conflict Minerals Regulation, which requires companies to follow the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas when buying gold,²⁸⁰ entered into force in January 2021. Importantly, the initiative does not recommend de-risking supply chains by not sourcing from countries flagged as conflict or high-risk areas, but rather sourcing from them in a transparent and responsible manner. Also, it does not demand supply chains be completely free of conflict or risk. Rather, it expects companies to manage these risks honestly and transparently. Strong due diligence practices enable companies to develop a deeper understanding of their supply chain and to improve practices over time. This will enable companies to operate and source responsibly and confidently in high-risk contexts.²⁸¹



Adopt more stringent due diligence practices for recycled gold

It has been well documented, including in this report, that gold from conflict and high-risk areas is laundered through a select number of transit hubs and sold on as scrap or recycled gold. As such, there are still risks when sourcing recycled gold from these locations and it is not necessarily an improvement on sourcing practices. Inadequate due diligence by importers of recycled or scrap material could therefore allow high-risk supply chains to be left unchecked. However, companies that import recycled or scrap gold are subject to reduced due diligence requirements under the EU Conflict Minerals Regulation. As such, if not able to source gold directly from source countries, importers of recycled and scrap gold ought to seek additional information from suppliers on the steps they have taken to comply with the OECD guidance rather than uncritically accept the accuracy of all material designated as scrap or recycled metal.

Increase cooperation between government agencies and other relevant bodies

The transnational nature of illicit gold markets requires cooperation between law enforcement, customs services and other relevant bodies to combat criminality. In both source and destination countries, competent authorities need to be adequately staffed, funded and trained. Communication strategies between government bodies at the national level are also needed to close coordination gaps.

Enforcement should also focus on transit and trade hubs, particularly the strengthening of enforcement controls at airports. Land borders are difficult to police, while the geographically remote and dispersed nature of ASGM makes it a challenge to regulate mine sites. This means enforcement efforts must look further downstream to transit and trade hubs for solutions. This could include assistance to airlines to better enable them to detect smuggled gold, possibly in partnership with international trade organizations.

Include ASGM in security strategies and peace operations

Illicit gold markets ought to be considered in developing security strategies and in peace operations. More effective strategies may not only mitigate threats, but also identify opportunities for positive intervention. For example, mediation between various groups to determine access to ASGM rents may be needed. This requires strong situational awareness of networks, activities and power dynamics. Also, ASGM should be considered in disarmament, demobilization and reintegration programmes, especially since former combatants are often already engaged in ASGM. By recognizing the activity not only as an income stream for conflict actors but also as a potential economic stimulant, states and international development organizations will be better positioned to promote social cohesion in marginalized communities that may otherwise be tempted to support non-state armed groups.

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