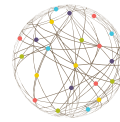




UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION



THE GLOBAL INITIATIVE  
AGAINST TRANSNATIONAL  
ORGANIZED CRIME

# FOLLOW THE MONEY: ZIMBABWE

A Rapid Assessment of Gold Supply Chains and Financial Flows  
Linked to Artisanal and Small-Scale Gold Mining in Zimbabwe



March 2018



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## **The GIFF Project**

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## **Zimbabwe Environmental Law Association (ZELA)**

ZELA is a public interest law organisation driven to ensure that communities derive maximum benefits from resources in their areas. To achieve this, ZELA is heavily involved in stakeholder engagement and plays an instrumental role in developing policy recommendations for the government. To learn more about ZELA's work, visit the website [www.zela.org](http://www.zela.org).

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# Acronyms and Abbreviations

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<b>ASGM</b>	Artisanal and small-scale gold mining
<b>ASM</b>	Artisanal and small-scale mining
<b>ASMers</b>	Artisanal and small-scale miners
<b>CID</b>	Criminal Investigation Department
<b>EIA</b>	Environmental Impact Assessment
<b>EMA</b>	Environmental Management Agency
<b>FPR</b>	Fidelity Printers and Refiners
<b>LBMA</b>	London Bullion Market Association
<b>LSM</b>	Large-scale mining
<b>MDC</b>	Movement for Democratic Change
<b>MIL</b>	Mining Investment Loan
<b>MMA</b>	Mining and Minerals Act
<b>MMCZ</b>	Minerals Marketing Corp. of Zimbabwe
<b>MMMD</b>	Ministry of Mines and Mining Development
<b>MT</b>	Metric Tonne
<b>OECD</b>	Organisation for Economic Cooperation and Development
<b>RBZ</b>	Reserve Bank of Zimbabwe
<b>RDC</b>	Rural District Council
<b>UNIDO</b>	United Nations Industrial Development Organization
<b>VAT</b>	Value Added Tax
<b>ZANU-PF</b>	Zimbabwe African National Union – Patriotic Front
<b>ZELA</b>	Zimbabwe Environmental Law Association
<b>ZGMA</b>	Zimbabwe Gold Miners’ Association
<b>ZIMRA</b>	Zimbabwe Revenue Authority
<b>ZIMSSBA</b>	Zimbabwe Small-Scale Buyers’ Association
<b>ZMDC</b>	Zimbabwe Mining Development Corporation
<b>ZMF</b>	Zimbabwe Miners Federation
<b>ZRP</b>	Zimbabwe Republic Police





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# Executive Summary

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Artisanal and small-scale gold mining (ASGM)<sup>1</sup> is thought to be the greatest current emitter of mercury in the world. Although inexpensive and relatively effective in extracting gold from ore, the use of mercury can cause serious harm to people and the environment.<sup>01</sup> Recognising the threat, the international community rallied around the *Minamata Convention on Mercury*, which entered into force in August 2017. The Convention mandates a reduction, and elimination, if possible, in mercury usage around the world, including in ASGM.<sup>02</sup>

A signatory of the Convention, Zimbabwe faces momentous challenges to reducing mercury use in its ASGM sector. The Zimbabwe ASGM sector is significant, both in scale and the important role it plays in the domestic economy, with gold the second highest value export out of Zimbabwe.<sup>03</sup> In parallel, mercury usage in the sector is rampant, with those using mercury having little knowledge of the dangers of the chemical or alternative processing methods. A large percentage of ASGM in Zimbabwe is hard-rock mining, which requires greater processing than alluvial mining, further aggravating high levels of mercury use in the country.

Furthermore, like most ASGM sectors around the globe, the vast majority of ASGM in Zimbabwe is informal and/or illicit. The pervasive informality of ASGM has proven to be a major obstacle to reducing mercury use in the sector. In addition to thwarting efforts to regulate the sector, informality impedes the delivery of non-mercury technology, training and distribution of information materials to miners and processors.

Compounding the challenge of formalisation, is that the informal nature of ASGM makes it incredibly attractive to illicit actors. Illicit actors are often gold buyers or sponsors, financing ASGM mining operations or local buyers. There are a number of reasons stakeholders, such as artisanal small-scale miners (ASMs) and local buyers, may choose to engage with illicit actors rather than the formal sector. In Zimbabwe, higher prices paid for gold, greater liquidity, and provision of financing are major draws of the illicit sector. Consequently, financial flows can significantly contribute to a self-reinforcing cycle of informality and illegality, which can be difficult to break.

To increase the chances for success in formalising Zimbabwe's ASGM sector, a holistic understanding of gold supply chains, financial flows and power dynamics is crucial. In particular, this type of analysis is vital to identifying potential obstacles to success, as well as opportunities and partners.

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1 The Minamata Convention defines ASGM as: "gold mining conducted by individual miners or small enterprises with limited capital investment and production" (UNEP 2013a). However, there is no universally accepted definition of artisanal and small-scale mining (ASM), nor uniformity in national legislation. The Organisation for Economic Co-operation and Development's (OECD) definition of ASM, which is widely used, offers some additional guidance: "formal or informal mining operations with predominantly simplified forms of exploration, extraction, processing, and transportation. ASM is normally low capital intensive and uses high labour-intensive technology. "ASM" can include men and women working on an individual basis as well as those working in family groups, in partnership, or as members of cooperatives or other types of legal associations and enterprises involving hundreds or even thousands of miners." (OECD 2016).

A rapid assessment of Zimbabwe's ASGM sector reveals a closely intertwined story of livelihoods and competition for power and wealth, shaped not only by internal drivers, but also foreign policies and actors, namely that of neighbouring South Africa. The report identifies a series of red flags, which are points, actors or phenomenon which may inhibit efforts to formalize Zimbabwe's ASGM sector. This nuanced first look is intended to help stakeholders better understand and respond to the role gold supply chains and financial flows play in formalisation efforts. Moreover, it is hoped the report will provide inspiration and guidance for similar assessments in other gold producing nations.

## Key Findings

A rapid assessment of Zimbabwe's ASGM sector reveals a closely intertwined story of livelihoods and competition for power and wealth, shaped not only by internal drivers, but also foreign policies and actors, namely that of neighbouring South Africa.

1. ASGM is an important source of sustainable livelihoods in Zimbabwe. As such, efforts which seek to eradicate the sector, rather than formalise the sector, are more likely to push the sector into dark (i.e. the black market) than to curb activity.
2. Legislation does not differentiate between artisanal and small-scale mining (ASM) and large-scale mining (LSM), which inherently favours LSM and is difficult for ASMs to comply with and operate legally.
3. Long distances to licensing areas, lengthy processing times and high costs are a deterrent to obtaining a licence at all points in the supply chain (mining, milling, and buying). Thus, there are multiple vulnerable points in the supply chain which can be exploited by illicit actors.
4. The cadastre system and land access are not well managed, resulting in conflict and enabling corruption in securing access to deposits.
5. Protection economies (the use of violence, corruption, and politics to secure illicit incomes) play an important role in determining who controls and profits from the ASGM sector. Government actors, in particular those in the security sector, are allegedly prominent players in this regard. However, the degree and form of their involvement is unclear.
6. There are reports of foreign actors (including Zimbabwean diaspora) engaging in the Zimbabwe ASGM sector in various ways (i.e. buyers, sponsors, miners, etc.). However, the scale and form of their involvement, as well as their role in driving and shaping activity, is unclear.
7. The processing point appears to be both a weak and influential point in the supply chain. However, the role and degree of control over ASGM activity processors play in gold supply chains and financial flows is unclear.
8. A number of drivers are pushing actors to sell gold on the black market, rather than to the Fidelity Printers and Refiners (FPR), the official government gold buyer. Primary drivers are: i) higher prices paid for gold, ii) greater liquidity, iii) easier to do business, and iv) the provision of financing.
9. A large amount of gold is reportedly being smuggled out of Zimbabwe, primarily to South Africa, with higher prices and currency risk management being major motivating factors.

# Introduction

The formalisation of ASGM and the elimination of mercury usage go hand-in-hand. Informality in the sector impedes the delivery of non-mercury technology, training and distribution of information materials to miners and processors, thus creating a knowledge vacuum about the dangers of mercury. It can also prevent authorities from adequately policing the use of mercury in mining communities and processing regions, and controlling its distribution. In turn, drawing ASGM into the formal sector is not only desirable to facilitate initial interventions aimed at reducing mercury use, but is also critical to ensuring interventions are sustainable and can be successfully up-scaled.

The formalisation of ASGM and the elimination of mercury usage go hand-in-hand.

Compounding the challenge of formalisation, is that the informal nature of ASGM makes it incredibly attractive to illicit actors. Applying the economic principles of cost-benefit analysis and risk-versus-reward, illustrates why gold is very appealing to illicit actors: ASGM and the related gold trade offer very high returns with very little risk. In particular, when compared to the risks of punishment for engaging in other illicit activity (such as illegal diamond mining and smuggling or wildlife trafficking as is the case for Zimbabwe), the risks associated with ASGM and the illicit gold trade are minimal.<sup>II</sup> Illicit actors are often gold buyers or sponsors, financing ASGM mining operations or local buyers. These actors are highly unlikely to have any interest in interventions which may restrict this income stream. Thus, wide-scale formalisation of ASM is arguably not something illicit actors would want to see occur, nor would they be likely to advocate it in the mines they help to finance.<sup>III</sup>

In practice, it can be very difficult to make the distinction and determine if an activity or financial flow is illicit or informal. This is particularly difficult in states or regions with an expansive informal economy, such as Zimbabwe. Many people rely on ASGM to generate their livelihoods and often-times ASGM or the local gold trade is best characterised as an informal activity.

There are a number of reasons stakeholders, such as ASMers and local buyers, may choose to engage with illicit actors rather than the formal sector. Before gold even leaves the ground, a lack of access to formal financing means informal or illicit financing options are often the only options available. Moreover, ASGM is frequently an economic stimulus for local communities. The resulting economic

II The Gold Trade Act has a provision of a maximum 5-year sentence for illegal possession of gold; however, the “no-questions-asked” recently adopted by the government has relaxed this legal requirement in practice and arrests are not being made.

III Hunter, Smith and Levin-Nally, Follow the Money: Financial Flows linked to Artisanal and Small-Scale Gold Mining, Geneva: Global Initiative against Transnational Organized Crime, 2017; For more information on IFFs, including impacts and the criminal allure of gold, please see the GIFF Project Handbook which can be found on the Global Initiative website: <https://goo.gl/mDEmwk>.

benefits to local populations outside of mining, contribute to a sense of legitimacy around ASGM practices and associated financial flows, further empowering illicit actors. At the same time, illicit actors may hold a great deal of social capital and provide social security in the form of financial or political assistance. ASGM stakeholders may be unwilling to participate in formalisation initiatives if it requires them to abandon or jeopardise their relationships with buyers or sponsors. Consequently, financial flows can significantly contribute to a self-reinforcing cycle of informality and illegality, which can be difficult to break.

These factors contribute to the momentous challenges Zimbabwe faces in seeking to reducing mercury use in its ASGM sector. Thus, to increase the chances for future interventions in the country and region to be successful, interventions are needed which draw ASGM into the formal sector to a greater degree. Success in formalising Zimbabwe's ASGM sector will require a holistic understanding of gold supply chains, financial flows and power dynamics. In particular, this type of analysis is vital to identifying potential obstacles to success, as well as opportunities and partners.

Success in formalising Zimbabwe's ASGM sector will require a holistic understanding of gold supply chains, financial flows and power dynamics.

This report provides a rapid assessment of the gold supply chains, financial flows, and power dynamics of the Zimbabwe ASGM sector and related gold trade, and a baseline for this type of analysis. Research consisted of a desk review and a limited number of key informant interviews conducted in Zimbabwe by the Zimbabwe Environmental Law Association (ZELA) in Harare and the Mutare district of Manicaland province in December 2017. Interviews were conducted with small number of key informants from various government bodies, including the Ministry of Mines and Mining Development (MMMD) and the Zimbabwe Republic Police (ZRP), as well as civil society organisations active in the sector, and private sector actors directly engaged in ASGM and the related gold trade.

Of particular note, the 2015 Pact report *A Golden Opportunity: Scoping Study of Artisanal and Small Scale Gold Mining in Zimbabwe* played an important role in informing this report. Pact used a mix of qualitative and quantitative data collection and analysis in the Kadoma and Shurugwi districts in the Mashonaland West and Midlands provinces respectively to inform the report.

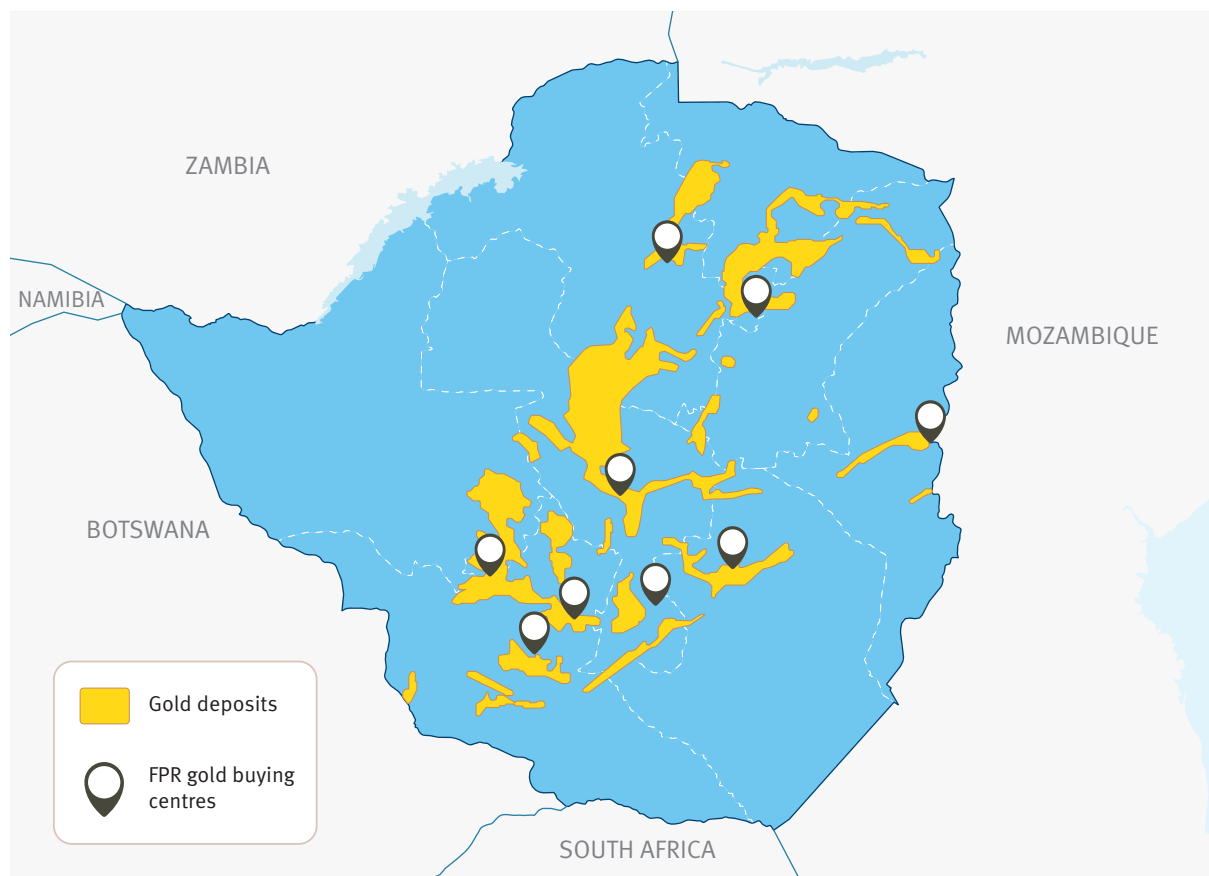
# ASGM in Zimbabwe

## Overview

A major gold producer, ASGM is reported to take place in every Zimbabwe province. The majority of gold produced from ASGM operations is thought to come from the Midlands districts of Kwekwe and Shurugwi and the Mashonaland West district of Kadoma.<sup>04</sup> In fact, Kwekwe has earned the title ‘chikorokoza capital’ of Zimbabwe. (‘Chikorokoza’ is a term used to describe informal, unregistered, or illegal miners.)

The location of gold mining in Zimbabwe is largely dictated by the presence of greenstone belts, which are thought to have some of the richest gold deposits in the world.<sup>05</sup> Purity of gold ore is reported to range from 65% to 95%.<sup>06</sup> This is reflected by research in Manicaland, where estimates of purity ranged from 72% to 96%.<sup>07</sup> Most ASGM is reported to be hard rock mining (81%), with alluvial mining occurring at much lower rates.<sup>08</sup> The most common method used to test the purity of gold is the density test (specific gravity).<sup>09</sup>

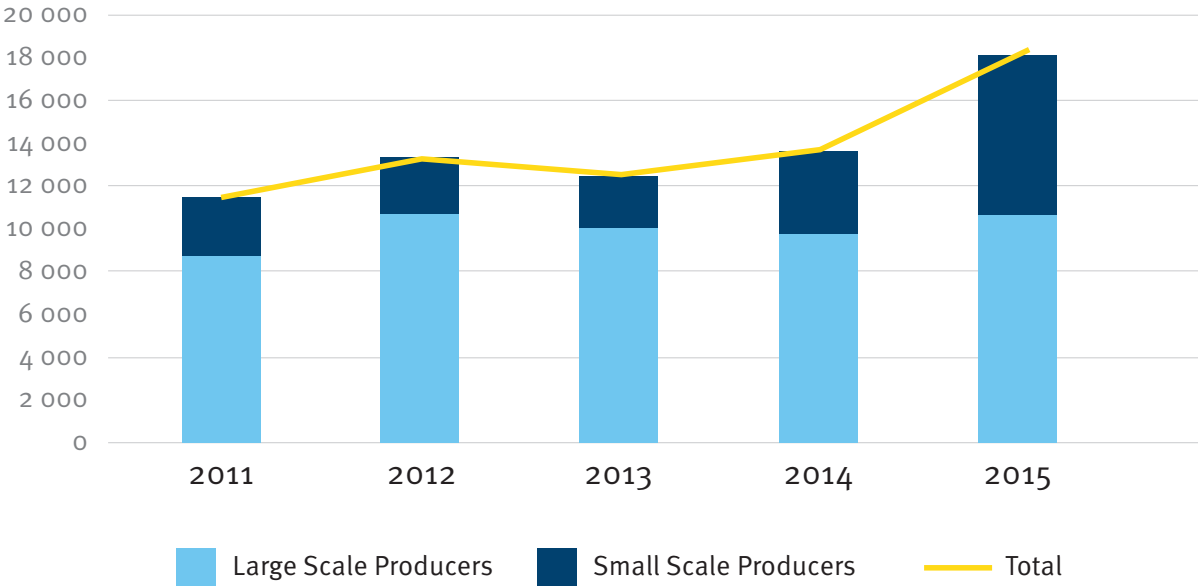
**Figure 1** Map of Gold Deposits and ASGM “Hotspots” in Zimbabwe



Zimbabwe legislation does not differentiate between artisanal mining and small-scale mining. As such, differentiation between the two types of mining is defined largely by public perception. Artisanal mining is said to consist of unregistered or unlicensed mining, while small-scale mining is more organised and tend to be registered.<sup>10</sup> In addition, as the name suggests, small-scale miners are more mechanised and tend to use simple, mechanised equipment.<sup>11</sup> In contrast, artisanal mining is limited to the use of rudimentary tools like pans, picks and shovels.<sup>12</sup> (These local differentiations between artisanal mining and small-scale mining align with international definitions.) It is reported a growing number of ASMs are shifting from artisanal mining to small-scale mining, as it is becoming more difficult to access gold deposits. While historically gold was close to the surface and easy to extract, miners are now reporting that they have to go deeper, increasing the risk of mine flooding and, in turn, the need for pumps and compressors.<sup>13</sup>

There are strong indications the ASGM sector is on the rise.<sup>14</sup> Overall, ASGM is responsible for a significant portion of the country’s gold production, and in 2017 production from ASGM surpassed LSM production for the first time.<sup>15</sup> ASGM gold production grew from 942kg in 2008 to 13MT in 2017,<sup>16</sup> and official production figures are now at about 24MT annually.<sup>17</sup> It is thought Zimbabwe can continue to build on this success, with government targets for 2018 roughly 29MT.<sup>18</sup> FPR, the government’s official gold buyer, is buying an average of 1.5MT of gold or more per month, making this a reasonable goal.<sup>19</sup>

**Figure 2** Gold deliveries to FPR (Source: RBZ Monetary Policy Statements 2015-2018)



While official production figures have been growing, it is widely thought most output from ASGM is unaccounted for, rendering official output figures a massive underestimation.<sup>20</sup> A common estimate is that 50% of ASGM gold production is lost to smuggling.<sup>21</sup> As an illustration, it is estimated the ASGM sector produces roughly 3MT of gold each month (which at current prices would be valued at roughly US\$129 million<sup>IV</sup>), but the FPR is buying only about 1.5MT, a 50% difference.<sup>22</sup> While estimates are very difficult to make, and should be considered guesstimates at best, if 50% of ASGM gold production is lost to smuggling, at current gold prices, this amounts to over US\$1 billion worth of gold lost each year.

IV At the time of writing, the LBMA spot price for gold was hovering around US\$43,000 per kg.

...if 50% of ASGM gold production is lost to smuggling, at current gold prices, this amounts to over US\$1 billion worth of gold lost each year.

It is very difficult to estimate actual production, and in turn smuggling rates. Even at the micro-level, it is difficult to estimate production volumes because of differences in ore grades and the methods used to extract the ore.<sup>23</sup> For example, a potential deposit may be mined for a year without being productive, while another location may deliver significant gold finds within a few days or weeks.<sup>24</sup> Factors which impact on the productivity of mining operations, and thus national production levels, include the quality of the ore, the degree of mechanisation of the mining operation, and the time of year. Specifically, rainy season has an adverse effect on ASGM production rates in Zimbabwe because it increases costs and risks for ASMers; ensuring the integrity of shafts becomes difficult and expensive and there are reports of shaft collapses.<sup>25</sup>

To estimate gold production, Pact (2015) took the approach of triangulating data in the areas investigated, an approach advocated for in the GIFF handbook *Follow the Money: Financial Flows Linked to Artisanal and Small-Scale Gold Mining*.<sup>26</sup> Data included the number and capacity of containers used in ASM to collect ore, the volume of gold-bearing ore produced, the frequency miners took ore for milling, the quantity of gold recovered from the ore, and quality of the gold recovered from the ore. Extrapolating from these figures, Pact (2015) asserts that because 130kg is going to FPR each month, by extension, an estimated 130kgs to 240kgs of gold reaches the informal sector each month. This finding aligns with the estimate roughly half of the gold produced by ASGM is smuggled out of the country illegally.<sup>27</sup>

The unreliability of deposits, due to a lack of geological information, was cited as a major obstacle to increasing productivity and ASMers ability to formalise. Gold production can wildly vacillate due to varying ore grades.<sup>28</sup> As such, ASGM can be a high-risk investment, with some ASMers seeing no return on investment. This challenge has not gone unrecognised by the government, civil society, and the private sector, with calls from all actors for greater assistance to ASMers in conducting exploration, such as the provision of adequate machinery and geological data.<sup>29</sup>

## Use of Mercury and Other Chemicals

While not the focus of this study, there were numerous reports of the use of mercury to purify gold, coming from a range of actors.<sup>30</sup> The dearth of knowledge of the dangers of mercury use, as well as Zimbabwe's commitment to reducing mercury use, was reflected in interviews with various stakeholders, ranging from miners, to millers, and from civil society advocates to government agents.<sup>31</sup> This supports findings of other investigations which suggest that Zimbabwe has some of the world's highest levels of mercury pollution and human exposure to toxic risks.<sup>32</sup>

Pact (2015) also observed wide use of mercury, often in open-air amalgamation. Nearly 18% of respondents had burned amalgam at home, and only 11% had ever used a retort when burning mercury.<sup>33</sup> Mercury was mostly used at milling centres, in homesteads, and on mine sites. The few alternatives to mercury use were generally found to be unappealing to miners and 64% of millers knew of no known



alternatives to mercury.<sup>34</sup> There are clear indications of detrimental impacts on the health of local populations. Only 46% of miners knew about the health problems related to mercury and, when asked whether, after working in mining, they had experienced any symptoms suggestive of mining-related effects, 23% of respondents had experienced headaches, dizziness and blurred vision, 12% had experience skin irritation and sores, and nearly 26% reported muscle pain and weakness.<sup>35</sup>

In addition to mercury, cyanide, borax, and, to a lesser extent, chemicals such as hydrochloric acid and fertiliser, are used to further purify gold.<sup>36</sup> Common assertions are that buyers are the ones facilitating purification, either doing the purification themselves or providing the necessary chemicals to ASMers (such as cyanide, borax or mercury).<sup>37</sup> Buyers may provide chemicals, including mercury, or conduct purification free of charge to ASMers as incentive to sell to them and secure supply chains.

## Previous Efforts to Regulate and Formalise the ASGM Sector

To best appreciate the current context of ASGM in Zimbabwe, it is beneficial to have a grasp of the history of mining in the country. Since the 1990's the Government's relationship with mining has largely been one of two tales: decentralisation and development; and crisis and crackdowns. In addition to the overview presented here, 'Shifting Formalization Policies and Recentralizing Power: The Case of Zimbabwe's Artisanal Gold Mining Sector' by Samuel J. Spiegel, who has published multiple papers examining the regulation of the Zimbabwe ASGM sector, is helpful in better understanding the evolution, as well as the implications, of ASGM regulation in Zimbabwe.<sup>38</sup>

### 1990's to Early 2000's: Decentralization and Development

In the 1990's Zimbabwe was considered a global leader in ASM regulation, creating incentives and rewards for ASMers to become formalised, taking steps to decentralise regulation, and supporting development interventions. For example, at various points in the early-1990s, the Zimbabwe Government kept gold prices for ASMers at favourable rates - at times higher than international market prices - to minimise smuggling and create incentives for miner registration. The Harare Guidelines, formally promoted in 1993, reflected the progressive approach, promoting the legalisation of ASM and recognising it as a poverty-alleviation activity.<sup>39</sup>

An important step towards decentralisation was the promulgation of Statutory Instrument 275 (1991, Regulations on Alluvial Gold Panning in Public Streams), which created a framework wherein Rural District Councils (RDCs) would issue licences to riverbed gold panners independently of the MMMD and made local governments responsible for coordinating training centres that also served as gold-marketing centres for panners. This was thought to be the best approach to controlling the impacts of panning. In turn, local government officers in RDCs had unprecedented and autonomous licensing powers in the gold panning sector. (The MMMD also issued its own gold panning licences, which in some cases led to confusion and overlap between central and local government licences.)<sup>40</sup>

However, regulation by the RDCs was not entirely successful, owing to insufficient resources and a lack of technical support.<sup>41</sup> Shortcomings were also attributed to national economic policies which

prevented RDCs from collecting mineral revenues, noting that RDCs receive less than 0.001% of mining revenues.<sup>42</sup>

Decentralisation also created space for international actors to support ASM programming. For example, international donors and authorities from the MMMD supported the creation of local mineral processing centres where gold miners could pay a small fee to mill owners to process their ore. These same centres provided training to promote awareness of legalisation procedures. A well-known donor-funded project was the Shamva gold processing mill. The Shamva project was widely viewed as a proactive step toward improving economic efficiency, through technology sharing, and creating incentives for ASMs to become licenced, as only registered miners could use the milling services. In the early phase of Shamva's operations, the United Nations Economic Commission for Africa heralded the project as a "best practice in small-scale mining".<sup>43</sup>

Yet, the projects, including the Shamva project, did not find long-term success and were abandoned. Factors blamed for the failure included insufficient support from the national government and, in the case of the Shamva milling centre, the premature transfer of management from the international actors to a local association of miners, who abused their power.<sup>44</sup>

The Mining Investment Loan (MIL) Fund also failed to find long-term success. Housed within the MMMD, the MIL Fund was a loans facility designed to integrate sector-specific training and credit delivery to mining communities, in an effort to create incentives for ASMs to obtain a licence and become formalised. However, hyperinflation crippled the fund and there were accusations of corruption and election-motivated disbursement of funds.<sup>45</sup>

## 2000's: Crisis and Crackdowns

There was a sharp turn in policy in the early 2000's, largely driven by the economic crisis. In 2006, Operation Chikorokoza Chapera ('No More Illegal Mining'), was implemented, which effectively criminalised ASM and adversely affected many legitimate small-scale miners and custom millers.<sup>46</sup>

Zimbabwe's economic crisis during the early 2000's contributed to an environment which made ASGM a very attractive, if not an essential livelihood activity, for many Zimbabweans.<sup>47</sup> By 2006, mining was one of the country's few viable industries. However, while gold production did increase, most gold was sold on the black market. This was due in part to Government policies and in part to economic conditions. For example, gold miners were required to sell their gold to FPR at a fraction of the international gold price in an effort to enrich the national treasury.<sup>48</sup> In addition, exorbitant inflation rendered the country's payment and exchange system dysfunctional, resulting in everything from meat to fuel ceasing to be available on the formal market. This led to a thriving parallel informal market, in which gold was a valuable commodity.<sup>49</sup>

Although the Government had previously implemented crackdowns against illegal mining, notably a nationwide militarised intervention named Operation Mariyawanda ('too much money') in 2003, Operation Chikorokoza Chapera marked a pivotal turn in policy, effectively criminalising ASM and adversely affecting many legitimate ASMs and custom millers.<sup>50</sup> In 2006, the national government repealed Statutory Instrument 275 of 1991, disempowering RDCs and making riverbed panning completely il-

legal.<sup>51</sup> At this time, the Reserve Bank of Zimbabwe (RBZ) also confiscated stockpiles of ore from ASM operators and set up mills to process the gold.<sup>52</sup>

By early 2007, Operation Chikorokoza Chapera was in full swing and police units were traveling to different mining sites across the country, arresting hundreds of ASMers at a time. Twenty-six thousand people were arrested in the months following, and in May 2007 ten people died in police raids.<sup>53</sup> Some miners were imprisoned for as long as five years for illegal possession of gold.<sup>54</sup> Variations in state policing existed according to factors such as the geographical ease of access, the anticipated economic value of the different gold-rich areas, and the connections between mine owners and authorities, including police chiefs as well as politicians.<sup>55</sup>

A major justification given for the crackdown was environmental damage. Under the Environmental Management Act (2002), all miners have to submit environmental impact assessment (EIA) reports. Although EIA policies existed prior to Operation Chikorokoza Chapera, it was only in 2007 that the government began demanding that this requirement be met before miners resume work. By early 2007 Operation Chikorokoza Chapera had morphed into a nationwide environmental initiative in which all types of primary ore gold miners—both licensed and unlicensed—were shut down until they complied with environmental regulations.<sup>56</sup>

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# Regulation

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In recent years there has been movement back towards a policy of formalisation. In December 2013, the Minister of Finance announced that beginning on January 1, 2014, ASM would no longer be a criminal activity. While the policy statement was unsupported by legislation, arrests of gold ASMs has ceased.<sup>57</sup> The change in government leadership has further perpetuated optimism for policy changes which support the sector.<sup>58</sup> However, as discussed further in Key Findings, current legislation – specifically the Mines and Mineral Act (MMA), onerous licensing processes, and mismanagement of the cadastre system, has made it difficult to effect policies meant to stimulate growth within the mining industry and advance the nation socioeconomically.

## Legislation

Actors within the ASGM sector must comply with multiple pieces of legislation to operate legally. The two principal pieces of legislation governing the ASGM sector in Zimbabwe and the related gold trade are the *Mines and Minerals Act* (MMA), which forms part of the *Mining Code*, and the *Gold Trade Act*. Other legislation includes the *Explosives Regulations*, *Environmental Management Act*, *Forestry Act*, *Water Act*, and *Zimbabwe National Water Authority Act*, among others.

The MMA vests ownership of all minerals in the Zimbabwe President as a steward. A wide-ranging piece of legislation, the MMA contains regulations for prospecting, working, maintaining, and abandoning claims. The MMA provides for three types of exploration for mineral titles: Exclusive Prospecting Licence, Special Grant and Prospecting Licence.<sup>59</sup> It also provides the framework for establishing title over a mine development, such as through leases and claims. The MMA establishes the Mining Board to effectively manage the administration of the Act. It is currently under revision to enable harmonisation with the *Environmental Management Act*.<sup>60</sup> As discussed in greater detail in the section Key Findings, the MMA, along with other policies and regulations, inherently favours LSM over ASM.<sup>61</sup>

Whereas the MMA deals with property and rights over mining property, the *Gold Trade Act* focuses on the possession and dealing in gold. The *Gold Trade Act* prohibits the possession of gold by unauthorised persons and regulates dealings in gold, detailing the necessary licencing and permits.<sup>62</sup>

## Regulatory Actors

The plethora of legal instruments has resulted in a variety of actors being responsible for regulating the Zimbabwe ASGM sector. The dominant regulators of the Zimbabwe ASGM sector are the MMMD, the RBZ via the FPR, and the ZRP. Other regulators include the Environmental Management Agency (EMA), RDCs, National Social Security Authority (NSSA), and the Zimbabwe National Water Authority (ZINWA), among others. In addition, while traditional leaders do not regulate mining, they can play an import-

ant role in promoting and protecting community interests. For example, they may promote peace and respect of tradition, and, specifically in relation to mining, urge miners to rehabilitate land and fence mining pits.<sup>63</sup>

Due to the large number of actors and a lack of coordination, there is overlap and duplication in the responsibilities of the various actors. There have been efforts to improve coordination between the different actors. For example, the Gold Mobilisation Technical Committee has been established, comprising of RBZ, MMMD and ZRP officials. The primary function of this committee is to monitor the gold sector in order to stifle the smuggling of gold and parallel marketing of gold.<sup>64</sup> However, large-scale success in achieving greater harmonisation remains to be seen.<sup>65</sup>

## **Ministry of Mines and Mining Development (MMMD)**

The MMMD is the ministry responsible for mines and mining in Zimbabwe. The MMMD oversees the Zimbabwe Geological Survey and the Zimbabwe Government Mining Engineer. In regulating the mining sector, the MMMD works closely with the ZRP, in particular the minerals and border control unit in relation to smuggling. When an illegal mine is located, due to safety concerns, the ZRP minerals and border control unit are notified. The MMMD also works with the FPR. This includes monitoring the activities of gold buyers to ensure their records match the FPR's records.<sup>66</sup>

In addition to regulating the sector, the MMMD's work includes providing technical assistance, approving licences and work sites, and conducting dispute resolution (for example, miner-to-miner or miner-to-farmer).<sup>67</sup> Departments within the MMMD are also working to assist miners in adopting more economically viable mining practices. For example, agents will give technical advice on mining safety, as well as enforce mine safety regulations. MMMD agents will also explain compliance issues and assist ASMs to comply with gold trade regulations. Partnerships with the FPR are useful in this regard. Sharing information with the FPR enables the MMMD to track the impact of service projects and identify ASMs that may need assistance (i.e. if output has significantly decreased.)<sup>68</sup>

Limited resources severely limit the MMMD's ability to both regulate and assist the sector. For example, it is reported that there are only two vehicles shared by five departments, which significantly curtails the MMMD's ability to visit mine sites. The challenge of accessing mining areas is compounded by mountainous terrain with high rainfall, which requires either heavy-duty off-road vehicles or helicopters to navigate.<sup>69</sup>

## **Reserve Bank of Zimbabwe (RBZ) - Fidelity Printers and Refiners (FPR)**

As of 2014, legally, the RBZ is the sole buyer and exporter of gold in Zimbabwe. This was done to strengthen the RBZ's hand in monitoring and mobilisation of the ASGM sector and to boost foreign currency earnings. The FPR acts as the RBZ's gold-buying agency, giving FPR a monopoly to buy, refine and export gold in Zimbabwe.<sup>70</sup>

FPR is licensed to buy gold from small scale producers and holders of gold buying permits, as well as LSM operations. The company has decentralised its buying activities from Harare to cover the entire country, thereby significantly reducing the security risks associated with transporting gold for the small-scale sec-

tor. The FPR has offices as well as agents on the ground who buy gold. It may buy directly from miners or through secondary buyers and agents licensed to buy on behalf of FPR. In practice, the FPR mostly buys from licensed, small-scale operations.<sup>71</sup>

Gold delivered to the centres is paid for on the spot after carrying out a specific gravity determination of the gold content. (The customer does have the option of using the fire assay method to determine gold purity, however, if the customer opts for this method, payment will then be made after the analysis which is carried out at the Head Office in Harare.<sup>72</sup>) The price is dictated by the London Bullion Market Association (LBMA) gold spot price, with licensed buyers sent a gold price daily from the FPR via text message or WhatsApp.<sup>73</sup>

Efforts to better monitor and regulate the ASGM sector introduced by the RBZ include the requirement that ASMers and custom millers selling gold to FPR are supposed to be registered. Also, custom millers are obligated to submit monthly performance reports, declaring production and sales statistics to the MMMD and FPR. RBZ has also encouraged licensed gold buyers to report unregistered gold buyers operating in their catchment areas.

A key priority of the FPR is to make the official supply chain more attractive in order to better compete with informal and illegal buyers, and thus increase gold deliveries. This includes the adoption of a 'no-questions-asked' gold buying policy. This means that, while the FPR monitors ASGM, when they find illegal gold mining practices it will still buy gold and if an area is producing substantial amounts of gold it will set up a mobile buying clinic.

Other efforts include the creation of the gold mobilisation fund, which been credited with promoting the mechanisation of ASGM operations, and increasing production. ASMers apply for loans from the fund so that they may invest in modest equipment boosts so that they may move from artisanal mining to larger mining operations.<sup>74</sup> In 2017, \$74 million was disbursed to 255 small scale miners and in 2018, the figure has been doubled to \$150 million. However, greater transparency and monitoring is needed to assess the true impacts of the fund, as many ASGM stakeholders on the ground report being unable to access the funds due to a lack of collateral.

While the FPR is adopting policies to make it a more attractive gold buyer, it faces challenges in getting the message out to ASGM communities, who are inherently suspicious of authority, and coordinating with other government institutions.<sup>75</sup>

## **Zimbabwe Republic Police (ZRP)**

The ZRP's priorities are enforcing the MMA, in partnership with the MMMD, and combatting the smuggling of gold out of the country. Specific action includes checking mining permits and taking action when other authorities (such as the MMMD, the FPR, traditional authorities, or others) report illegal mining to the ZRP. However, like the MMMD, its ability to regulate the sector is limited due to limited resources, such as a shortage of motor vehicles, computers and scanners.<sup>76</sup>

The ZRP is quite visible in the ASGM sector, in particular agents from the Minerals and Border Control Unit (MBCU) and the Criminal Investigation Department (CID). In most cases, ZRP has been accused of

incessant visits to miners knowing that it is virtually impossible for ASMers to be compliant. This has led to strong allegations of harassment and bribery culture.

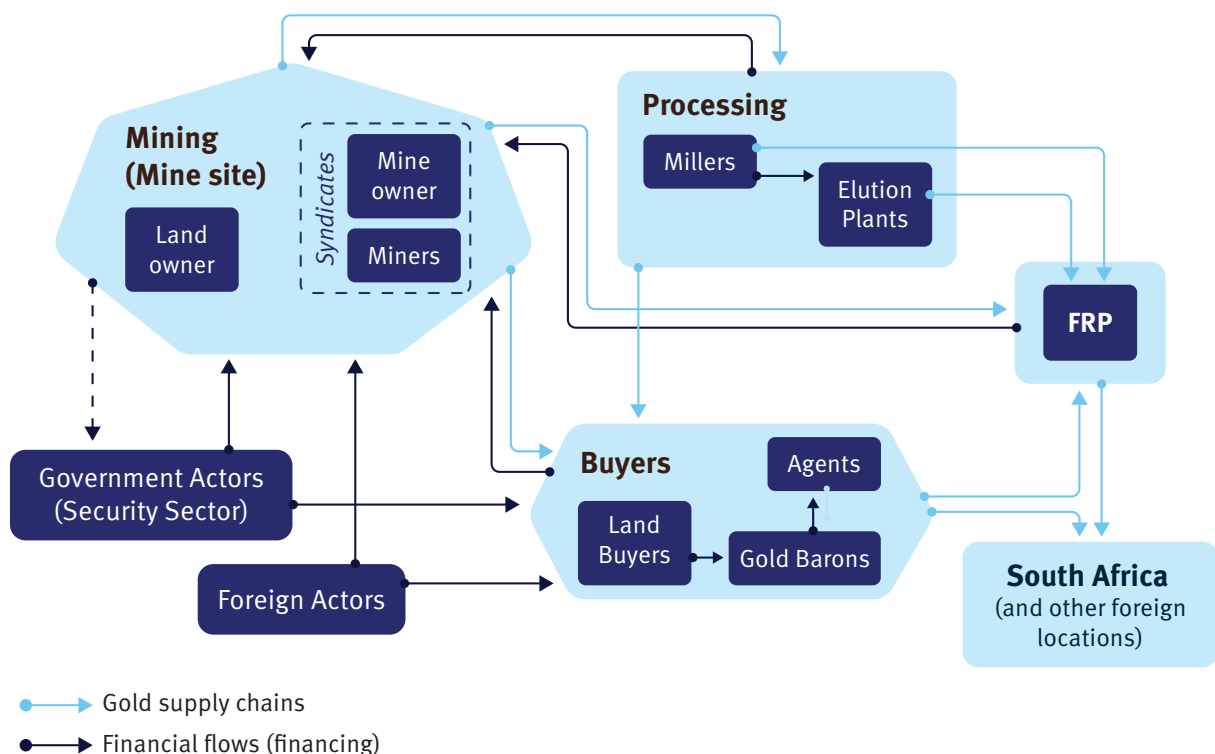
As of 2012, the ZRP has been carrying out border control. In conducting border control, the ZRP works with ZIMRA as well as the army. While the ZRP have a dedicated MBCU, its ability to detect and curb gold leakages is stifled by limited capacity and a lack of resources (such as detection technology, including metal detectors) and training.<sup>77</sup> For example, large amounts of gold have been seized at the border which were detected using physical searches, rather than technology.<sup>78</sup> If this type of seizure is detected by a physical search, the potential returns for investing in more advanced technology are substantial.

Like the MMMD and the FPR, the ZRP is undertaking efforts to work with ASMers. The ZRP is working to raise awareness about the 'no-questions-asked' policy and assuring ASMers they will not be arrested if they deliver their gold to the FPR, even if they are operating illegally.<sup>79</sup>

# Domestic Gold Supply Chain: Flows and Stakeholders

Like many other ASGM sectors throughout Africa and the world, the mapping of stakeholder, gold supply chains, and financial flows linked to Zimbabwe's ASGM sector reveals a complex, overlapping, and cyclical web of activity. While, a dearth of information, especially on financial flows, inhibits a detailed mapping and analysis here, research undertaken for other studies offers insight into Zimbabwe ASGM gold supply chains and stakeholders. Thus, while limited in scope, an overview of gold supply chains and stakeholders is provided here, as well as financial flows to the extent possible.

**Figure 3** Gold Supply Chains and Financial Flows





## Mine site

There are a large and varied number of actors active at the mine site level of the gold production chain. Actors include land owners, mine owners and managers, and the miners themselves. As stated by one interviewee: “everyone is trying their luck on mining”.<sup>80</sup> A large portion of miners are locals from the communities where ASGM is taking place.<sup>81</sup> Other groups reported to be active at mine sites include individuals from other parts of the country (especially in the case of gold rushes),<sup>82</sup> and, to a lesser degree, foreign nationals.<sup>83</sup> While there are reports of women and children increasingly engaging in ASGM, the sector tends to be dominated by men.<sup>84</sup>

The number and role of actors can significantly vary from mine site to mine site, as well as the legality of the operation. The categorisation of small-scale miners by Zimbabwe Miners Federation (ZMF) is helpful in understanding the different types of ASGM operations:

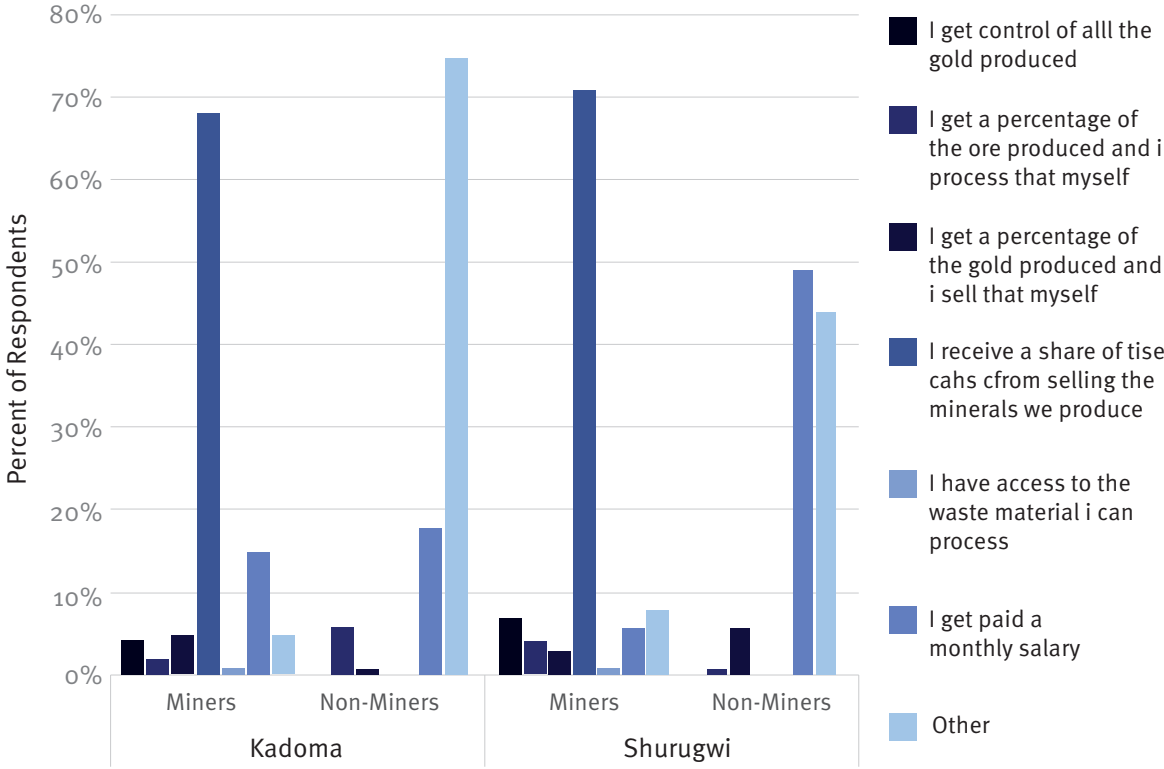
- **Class A:** Miners which have full mining permits, qualified mining management, standard mining operation and gold production of 5kg per month or more.
- **Class B:** Mining operations which hire technical expertise, like a geologist, and may hire equipment as needed. Gold production is up to 5kg per month.
- **Class C:** This category fits the majority of Zimbabwe ASMers. These are mining operations run by people with mining claims who hire labourers to work the site. Often this is done by syndicates, which have profit-sharing agreements.
- **Class D:** Artisanal miners, who use rudimentary tools, pick and shovel and do not have a mining title. Some may have a prospecting licence.<sup>85</sup>

While small-scale miners are thought to operate with a greater degree of legal legitimacy, it is widely asserted that the majority of ASGM in Zimbabwe is illegal. There are estimates asserting as much as 80% of the sector is operating illegally.<sup>86</sup> Informal, unregistered, or illegal producers are known locally as *makorokoza*, meaning ‘panners’.<sup>87</sup>

Miners are often organised into syndicates. Syndicates comprise a group of ASMers working together to extract ore and sharing the profits or gold after processing. Syndicates vary from organised and permanent operations, to impromptu alliances of convenience, to groups of nomadic miners moving from one gold rush to another.<sup>88</sup>

Labour agreements are often based on profit-sharing, with miners receiving a percentage of the profits rather than wages.<sup>89</sup> The break-down of profits can vary, often dependent upon whether machinery or equipment was used or if other expenses were incurred by a sponsor. A common distribution is 50% to mine labourers (normally after expenses are deducted) and the claim owner, sponsor, and/or land owner collecting the rest.<sup>90</sup> In other instances miners may only receive roughly a third of the profits; for example, if machinery is used or if profits are split amongst a larger number of parties (i.e. millers, mine owners, and investors).<sup>91</sup> Most land owners are interested in partnerships or syndicates, demanding a percentage of the mining proceeds in exchange for the right to mine on their land.<sup>92</sup> Similarly, claim owners often enter into profit sharing agreements, with reports they collect about 11% of the production as rent for mining on their claims.<sup>93</sup>

**Figure 4** Modes of Payment for Work Done (Source: Pact 2015)



Miners are often paid after the milling of the gold in cash. Gold tends to be sold directly after milling, as it is a higher risk to have gold than cash on hand.<sup>94</sup> At this stage in the gold supply chain, which most often consists of mine site actors selling to illicit buyers, actors appear to be paid a relatively high percentage of the gold price – roughly 83% to 95% of the value of the gold.<sup>95</sup> Attempting to put a dollar figure on financial flows is difficult because production levels at the mine site level can significantly vary. In its investigation, Pact (2015) found that most respondents made gold sales in small quantities of less than 10g and of a purity less than 50%.<sup>96</sup> Using these weight and purity rates, at current gold prices, this amounts to roughly US\$200 worth of gold.

Despite the relatively high percentage value of the gold being paid at this point in the supply chain, it is widely thought that the distribution of profits is unfair, with miners not being adequately compensated. This opinion was voiced by not only miners, but also buyers and government actors. For example, Pact (2015) reported that miners found the payment unfair (stating they could not afford to buy protective clothing), as did gold traders.<sup>97</sup>

## Processing

Due to the fact most ASGM in Zimbabwe consists of hard rock mining, the processing of gold ore plays an important role in gold supply chains. While a mine may have its own private milling services, custom mills are often used. Custom mills will buy ore directly from mines, as well as any other individuals who bring gold ore.<sup>98</sup> Miners will be paid in cash at the mill or by gold buying agents.<sup>99</sup>

There are many types of technologies used by custom millers, but the most prominent one is a stamp mill. Stamp mills crush ore bearing rocks into finer powders to free the gold. To facilitate gold capture, millers will use mercury once the gold ore concentrate has been produced. Other technologies include the ball mill and wheel grinders. Usually, custom mills will charge per tonne or per hour.

Elution plants may also be used. These are ordinary plants which use draining tanks to avoid underground leaching. Elution plants are used for treating dump tailings.

There are a number of ways in which custom mills and elution plants may profit from ASGM. The majority of profits are derived from the residual gold (or silver) captured from further processing the tailings (cyanidation).<sup>100</sup> It is estimated less than half of the gold is recovered by miners during milling process, leaving a hefty portion behind for millers to extract from the tailings. In addition, millers will charge a fee for processing gold ore. One miller reported charging US\$10 per MT of ore milled, as well as US\$15 to clean the screen box. They also charged US\$5 for the use of mercury to purify gold.

It is estimated less than half of the gold is recovered by miners during milling process, leaving a hefty portion behind for millers to extract from the tailings.

Custom mills and elution plants also generate income from the trading of gold. They often buy the gold they process, as well from other sources.<sup>101</sup> If operating legally, all gold is then sold to the FPR.<sup>102</sup> Millers are automatically agents for the FPR, meaning they are tasked with collecting government royalties, taxes, and charges and all the gold brought for processing must be sold to FPR. Millers tend to buy gold for US\$0.50 to US\$1.50 less per gram from the price the FPR will pay for the gold, provided on a daily basis by text or WhatsApp.<sup>103</sup>

Processing appears to be a vulnerable point in the gold supply chain. It is questionable how often or to what degree official procedures are being followed or enforced. For example, millers may not pass on the taxes and other charges to the FPR, instead pocketing the money. In other instances, millers may sell to illicit buyers to avoid fees and taxes. Millers who do this may be able to offer higher prices to miners as an incentive to use their mills. As such, the illicit market offers a very attractive avenue to avoid taxes and fees and to maximise incomes for miners and millers.

Another vulnerability is that there are increasing reports of miners doing their own milling, using hammer or ball mills, which enables miners to sell gold directly to illicit buyers. This puts pressure on custom mills seeking to operate legally, who are already operating in a competitive environment.<sup>104</sup>

## Buyers

The types of actors active at the buying stage of the gold supply chain are highly varied. In addition to licensed, official buyers (which include millers), buyers can range from individual, local buyers, to gold barons and the agents that work for them, to foreign buyers working independently or with local partners. However, there is not much clarity about who these actors are or their market share. Also, buyers

may fit in multiple categories, for example, a licensed buyer may engage in illegal buying practices, and there may be other types of buyers.

It is widely thought gold buyers are profiting the most from the gold trade. There are widespread reports of gold buyers buying houses and luxury items, such as cars, with their profits.<sup>105</sup> As one interviewee stated: people buying gold appear to be making a huge killing based on their lifestyles.<sup>106</sup> When considering the volume of gold buyers are turning over, it is not surprising some may be earning windfall profits, although this will greatly vary depending on the buyer. To give an idea of the scale of turnover, one buyer reported that if he had the cash available, he could buy up to 5kgs of gold (a value of over US\$200,000 at current gold prices) in one week and was currently selling a minimum of 500g of gold (a value of over US\$20,000) per month.<sup>107</sup>

People buying gold appear to be making a huge killing based on their lifestyles.

The first category of buyers are independent, local buyers. Licensed miners who buy gold from unlicensed ASMers are thought to be a significant portion of this group. In practice, there is a strong intersection between small registered works and illegal ASMers, with the former purchasing and processing gold from the latter.<sup>v</sup> For example, although the MMMD assisted some former mine workers to form small mining co-operatives or register individual claims, most of these claim holders ended up acting as middlemen, buying gold from local, unlicensed ASMers.<sup>108</sup> There are conflicting reports about the importance of local connections to the community. Some report it is important for buyers to come from the community and be known in the area,<sup>109</sup> while others assert the relationship is not hugely important as long as the buyer has cash and is willing to pay the right price.<sup>110</sup>

Another set of buyers are 'gold barons' and the agents (also known as runners) who work for them. 'Gold barons', as the name suggests, are thought to be major buyers of gold in Zimbabwe.<sup>111</sup> Operating outside the formal market and mainly based in Harare, they will buy gold from their agents as well as independent informal traders. Agents are quasi-employed agents. An agent interviewed for the PACT (2015) report, described receiving around US\$10,000 to buy gold and said he would buy as much as 200g of gold on a good day and 4kg to 5kg of gold in a good month. He noted that the country's top gold baron had thousands of runners. The gold baron would cover transportation costs while the runner would receive US\$0.50 per gram of gold.<sup>112</sup>

It has also been reported that mining syndicates may have their own networks of gold trading, which span local, national and regional Southern African borders.<sup>113</sup> It is unclear to what degree these networks are associated or controlled by high-level buyers, such as 'gold barons', if at all.

There are also licensed, official gold buyers. Licensed buyers can have up to five agents working for them. Buyers will often employ relatives or friends as agents because of the high levels of trust needed to operate.<sup>114</sup> Both buyers' and agents' incomes are said to be based on their negotiation abilities. The licence holder will offer a price for the gold and their ability to negotiate a price with sellers (mostly ASMers) determines their share of proceeds.<sup>115</sup>

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v see examples from Totororo in Mowawa, 2013

Foreign nationals and Zimbabwean diaspora also buy gold. This may take on a number of different forms, such as buying directly from ASMers, buying from local buyers, or partnering with locals.<sup>116</sup> However, there is a dearth of information on the role of foreign nationals and the Zimbabwean diaspora in ASGM and the related gold trade, including the legality of their activity.

Prices paid for gold by both illegal and licensed gold buyers are dependent on the LBMA gold spot price. Buyers will buy gold for a bit less than the price the FPR is offering in order to make a profit, for example US\$1 to US\$1.50 per gram, although, after accounting for purity, prices as low as US\$6 or more per gram below the LBMA spot price were reported.<sup>117</sup> Legal buyers are not supposed to offer less than 2.5% off the world market price.<sup>118</sup> Similarly, illegal gold buyers will determine a price by comparing it to what the FPR is offering, and, consequently, the LBMA spot price.<sup>119</sup> Bigger illicit buyers are able to take advantage of economies of scale and offer higher prices than small buyers. One buyer reported that the big buyers were trying to squeeze smaller buyers out of the market by only taking US\$0.50 off of the LBMA spot price, after accounting for purity.<sup>120</sup>

Royalties also influence the price buyers pay for gold. A 1% royalty fee applies to small-scale producers selling less than 0.5kg of gold per month and a range of 3.5% to 5% royalty charge for large-scale gold.<sup>121</sup> However, a 5% incentive is paid to ASMers for accepting payment in bond notes or through a bank transfer.<sup>122</sup>

One of the most influential government policies is the FPR policy of paying for gold partially with cash and partially with bonds. It has been reported the bank is paying as little as 60% of the value in cash and the rest in government bond notes;<sup>123</sup> however, current policy is to pay for the value of the gold in 70% cash and 30% in bond notes.<sup>124</sup> Most miners want cash and do not utilise formal banking systems, which is pushing buyers to sell gold on the black market. Compounding the problem are reports the FPR is struggling to pay the cash portion and is instead offering to transfer money into bank accounts.<sup>125</sup>

Buyers that continue to sell to FPR, mainly licensed buyers, report doing so to maintain relationships (and thus opportunities to access loans and machinery) and to avoid confrontation with authorities.<sup>126</sup> It is thought many miners and buyers are selling part of their gold within the legal supply chain in order to avoid getting in trouble with the legal authorities, and selling the rest of their gold on the black market to increase profit margins. However, this practice may result in a false sense of security, as official production numbers may be increasing as a result of overall production, not because a greater portion of gold is being captured by FPR.

The Government is taking proactive steps to combat the illicit trade. This includes the FPR policy of buying all gold on a 'no-questions-asked' and not discouraging agents from buying from illegal miners.<sup>127</sup> While the policy may contribute to the government capturing a greater portion of ASGM gold production, and thus increasing revenue, the policy may frustrate attempts to formalise other parts of the sector and introduce mercury-free technology and regulate mercury use.

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# Key Findings

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Key Findings are a series of red flags which are points, actors or phenomenon that may obstruct formalisation efforts, including those aiming to reduce mercury use.

## ASGM as a Sustainable Livelihood

- 1. ASGM plays a very important role in Zimbabwe as a source of sustainable livelihoods. As such, efforts which seek to eradicate the sector, rather than formalise the sector, are more like to push the sector into dark (i.e. the black market) than to curb activity.**

ASGM is a critical source of sustainable livelihoods for thousands, if not millions, of Zimbabweans, as well as delivers significant economic stimulus for local communities. Estimates on the number of individuals engaged in ASGM range from hundreds of thousands to millions. For example, a UNIDO report estimated that between 2007 and 2012, some 500,000 illegal, artisanal gold miners were operating in the country and that this number could grow.<sup>128</sup> Another UNIDO report found that by 2008 some 2 million Zimbabweans were dependent on ASGM.<sup>129</sup>

The importance of ASGM as a livelihood option is reflected in the increasing number and diversity of people who are dependent on ASGM for income across the country.<sup>130</sup> There are reports of people leaving farming, service work, the forestry sector, and even teaching and the police force to engage in ASGM. One village head estimated that over 1,200 people were engaged in ASGM and the number had increased by 75% over the past few years.<sup>131</sup>

Unemployment is a huge driver of this growth. Zimbabwe's economy began to deteriorate rapidly in the 2000s, particularly when inflation levels ascended dramatically in 2006.<sup>132</sup> As economic and political crises led to growing constraints on livelihoods in rural areas and left limited employment opportunities in the formal sector, informal ASM became increasingly important as an income source.<sup>133</sup> Droughts further contributed to the crisis, with ASM becoming the only viable alternative for resettled farmers.<sup>134</sup> As such, unemployment is the most heavily cited reason for entering into ASGM as a miner, and employment is stated as the greatest benefit of ASGM to communities.<sup>135</sup>

If it weren't for lack of employment opportunities, I would not be a miner. It is difficult for me to see any other way I can make money besides mining.<sup>CXLI</sup>

ASGM also offers higher earnings than most other local livelihood options. Pact (2015) found that ASMs' wages were much greater than the wages of their rural agricultural counterparts (farmers) — often five times as high and ASMs save nearly twice what non-miners do each month.<sup>137</sup> The increased income enables

individuals to save and invest in other income opportunities. For example, there are numerous reports of successful gold miners starting their own mining or milling operations or becoming gold buyers.<sup>138</sup> In turn, ASGM is one of the few avenues available to Zimbabweans not only for survival, but also for upward mobility.<sup>139</sup>

It is important to differentiate between diamonds and gold. The ASGM sector is thought to play a much more important role as a livelihood source than the ASM diamond sector. Gold is seen as a “people’s mineral” and it was repeatedly asserted the gold business is growing while diamonds are on the decline (this includes diamond buyers moving to the gold business).<sup>140</sup> Also, Government policy currently allows ASMers to mine gold without fear of arrest, but not diamonds.<sup>141</sup> Research in Sierra Leone, another country known for its diamonds, mirrors these reports, with gold growing in importance as a livelihood option and diamonds on the decline. The study also found that the logistics of gold mining versus diamond mining made gold a much more consistent and reliable income stream than diamonds. This made gold a much preferable livelihood option for many, especially women.<sup>142</sup>

The role of ASGM as a livelihood option is especially important when considering the current and potential benefits to women and youth. Large numbers of women and youth are engaged in ASGM, although it is hard to generate estimates due to a lack of information.<sup>143</sup> There are conflicting reports on whether women are engaging in mining themselves or only offering goods and services at mine sites, although this likely varies from mine site to mine site. Reasons ASGM is an especially valuable income stream for these stakeholder groups include a lack of other employment options (more so than adult, men), they are more likely to spend money on basic necessities and school fees, and women are more likely to save money and reinvest.<sup>144</sup>

While ASGM remains largely in the informal sector, women and children engaging in ASGM are highly vulnerable. Focusing specifically on financing, these population groups are less likely to have the necessary capital or business ties to access financing and are struggling to get meaningful benefits from ASGM. Reports of female miners who do receive financial support consist of charity or those who are “interested in sex”.<sup>145</sup> Also, children may be forced to drop out of school to support their families. It is critical to note that these risks are not presented as a reason to try to exclude these groups from the sector (at least in the case of female miners), but rather because efforts must seek to draw the sector into the formal sector to increase protections.

In addition to the direct benefits to miners and buyers, communities are benefiting from ASGM as an economic stimulus.<sup>146</sup> Beneficiaries include already established businesses (such as general stores), as well as businesses created to support the ASGM sector, like those providing equipment and explosives, diesel, drill bits and personal protective clothing.<sup>147</sup> As a result, areas where successful ASGM is taking place are described as a hive of economic activity.<sup>148</sup>

## Regulatory Challenges

### **2. Legislation does not differentiate between ASM and LSM, which inherently favours LSM and is difficult for ASMers to comply with and operate legally.**

A significant obstacle to formalisation of ASGM in Zimbabwe is that the MMA does not differentiate between LSM and ASM. Referred to by some as a colonial piece of legislation, it is widely recognised that the MMA is unfavourable to ASGM.<sup>149</sup> The Zimbabwe government is taking steps to rectify the

situation. For example, part of the broader agenda of the Parliamentary Portfolio Committee on Mines and Energy is to repeal the MMA and pass a bill that addresses issues such as the formalisation of artisanal miners.<sup>150</sup>

Negative outcomes for ASMers as a result of the MMA not differentiating between ASM and LSM include onerous licensing requirements and fees.

Also, the legislation enables LSM operations to establish ownership over large land areas. Thus, ASM operators are often unable to operate legally in many areas with (or thought to have) rich gold deposits because these are already “owned” by LSM operations, whose huge capital base enables them to hold onto large tracts of land for periods exceeding 10 years.<sup>151</sup> ASMers have to wait for the claims to be forfeited to access them and, in most cases, end up registering claims on the periphery of these tracts, where the mineral deposits are of low value.<sup>152</sup>

Facilitating greater access to land and deposits is a priority for various mining advocacy groups. Small-scale mining associations have long criticised the fact that many of the country’s mineral titles remain held by large companies and not small-scale miners.<sup>153</sup> One small-scale miners’ association representative stated they negotiate for the release of claims by LSM operations to facilitate access to claims for ASMers, in addition to legislative reforms that respond to the unique needs of the ASMers more generally.<sup>154</sup>

### **3. Long processing times and high costs are a deterrent to obtaining a licence at all points in the supply chain (mining, milling, and buying).**

Arduous licensing processes create a barrier between ASGM operators across the supply chain and the formal market. For example, miners are not able to meet licensing requirements and consequently avoid the formal market and authorities due to fear of arrest.<sup>155</sup> A reflection of the inter-connected nature of the key findings, this fear is perpetuated by the protection economies, discussed in the section Protection Economies. Thus, reforms to the licensing process are widely called for as part of the formalisation process.<sup>156</sup>

#### **Miners’ Licence**

As stated by one interviewee, to get a licence is quite hectic.<sup>157</sup> Pact (2015) found that ASMers who wanted to operate legally would have to go through 13 procedures and that the process would take at least 158 days and cost US\$3,220.<sup>158</sup> This timeframe was confirmed by an MMD representative, who reported the licensing process takes about 6 months at most, but 2 months is the target.<sup>159</sup>

To get a licence is quite hectic.<sup>CLXV</sup>

An overview of the licensing process illustrates the complexity of the procedure. First, an individual must buy a prospecting licence, whether ordinary or special, which gives the holder permission to conduct prospecting for 2 years. A miner must then get consent to access land, which may require a letter of consent from the landowner or the local government or permission from traditional authorities. An



applicant must then engage an approved prospector to take the coordinates of the area of interest. The coordinates are then brought to a maps office, where the surveyor checks whether the area is available. If available, a prospecting notice is posted for 30 days. MMMD officers also have to inspect the location and verify the coordinates. After verification, the registration fees must be paid within 14 days and a mine manager must be appointed before the mining licence is given. In addition to these processes, an EIA must also be conducted and a worksite plan approved. Once secured, a licence must be renewed annually.<sup>161</sup>

Large fees have also been cited as an obstacle to ASMers seeking to obtain a mining license. Most of regulators issue permits for a fee; however, there is little coordination amongst government actors. As a result, ASMers feel the government departments are treating the sector as a cash cow. For example, the services of an approved prospector are reported to cost an average of US\$400. Also, although an EIA prospectus only costs US\$138, the cost of undertaking an EIA is quoted at US\$3,000 to more than US\$4,000.<sup>162</sup> In addition, a permit to purchase and store explosives is said to cost US\$1,000. Furthermore, RDCs may charge their own fees.<sup>163</sup>

### **Millers' Licence**

Millers are also impacted by licensing. Many custom millers operate illegally; in fact, it is thought the majority.<sup>164</sup>

Pact (2015) found that to obtain legal authorisation to operate a custom mill requires going through 17 procedures and the process will take 271 days and cost US\$12,300 to complete — and that is before starting construction on the mill even starts.<sup>165</sup> To obtain a licence an individual must register with the MMMD, conduct an EIA and a site work plan. Also, a comprehensive project plan and metallurgical and geological reports are needed, as are cash flow projections for 12 months, which means that one must acquire an accountant, a bank account, and police clearance.<sup>166</sup> Additional processes, are necessary to run an elution plant - for example, obtaining a carbon removal permit - and consequently fees.<sup>167</sup>

As for costs, millers also deem the cost of annual licensing (US\$5,000) too high. On top of this fee, the EMA are said to have their own fee (US\$1,000 every 3 months), as do RDCs.<sup>168</sup>

In addition, securing power can be timely and expensive. Pact (2015) reports that to obtain a connection to the electricity grid takes at least 17 days and millers are often expected to purchase their own materials for the power installation, which costs an estimated US\$13,000. The Zimbabwe Electricity Supply Authority also charges US\$3,000 for labour, US\$11,000 for a transformer, and US\$4,800 per kilometre for wire.<sup>169</sup>

Furthermore, construction of a mill costs in excess of US\$68,000, bringing the total cost to more than US\$80,000.<sup>170</sup> Millers are supposed to have access to loans from the FPR, but due to a lack of sufficient collateral these are often not a real option for potential millers.<sup>171</sup>

### **Buyers' Licence**

Licensing barriers also impact buyers. Buyers must have a bank balance of at least US\$3,500 and the ability to deposit at least 500g of gold on a monthly basis. For cooperatives a minimum balance of

US\$10,000 is required. Many potential buyers find this initial cash requirement difficult to meet, especially accessing formal banking institutions, and end up working illegally.<sup>172</sup>

#### **4. The cadastre system and land access are not well managed, resulting in conflict and enabling corruption in securing access to deposits.**

The lack of a computerised cadastre system is a significant challenge to ASGM regulation. Due to the lack of adequate mapping, ASMers often deliberately encroach on and initiate illegal mining on legally registered claims.<sup>173</sup> In turn, a number of claim ownership disputes are occurring, with new claims being made on top of existing claims.<sup>174</sup> This can contribute to conflict because the Government says it is the responsibility of landowners or affected businesses to evict illegal miners.<sup>175</sup>

The lack of a computerised cadastre also constrains transparency and accountability in an environment where corruption levels are quite high. There are allegations of corruption linked to the MMMD, especially the surveying department, in relation to ownership disputes and the award of mining tables.<sup>176</sup> For example, a mining sponsor may exploit political connections to register a claim after a gold rush confirms the richness of a site.<sup>177</sup>

Also, it is impossible to manage returns or the payment of claim maintenance fees by miners. The treasury is thus short-changed in terms of revenues due from the sector.

The combination of unclear land ownership and mining rights, paired with opportunity for corruption, is a significant challenge to formalisation efforts as it further increases hurdles for ASMers seeking to operate legally and government actors seeking to regulate the sector.

## **Protection economies**

#### **5. Protection economies (the use of violence, corruption, and politics to secure illicit incomes) play an important role in determining who controls and profits from the ASGM sector. Government actors, in particular those in the security sector, are allegedly prominent players in this regard. However, the degree and form of their involvement is unclear.**

The informality of ASGM in Zimbabwe, paired with the high-value nature of the gold trade, makes the sector a prime target of illicit actors. As a result, protection economies – defined here as the use of violence, corruption and/or politics to secure illicit flows and incomes – play an important role in shaping flows and activity in the ASGM sector. Protection economies can take on different forms depending on the point in the supply chain and the political authority of the actor. While agents from the security sector are the most visible actors enforcing protection economies, it is thought influence extends far beyond mine sites, with politically and economically powerful individuals exercising ultimate control.

While agents from the security sector are the most visible actors enforcing protection economies, it is thought influence extends far beyond mine sites, with politically and economically powerful individuals exercising ultimate control.

The 2013 article ‘The Political Economy of Artisanal and Small-Scale Gold Mining in Central Zimbabwe’ by Showers Mawowa is particularly helpful in better understanding protection economies.<sup>178</sup>

Starting at the beginning of supply chains, exploitation can take place before mining even begins, with allegations of rampant corruption in the allocation of prospecting licences and access to land.

Once mining begins, it is alleged various government actors exploit illegal ASGM operations for personal gain, in particular actors within the security sector.<sup>179</sup> Agencies from which individuals are accused of collecting bribes include the ZRP, the army, the MMMD, the EMA, and RDCs. In particular, there are reports the ZRP move in and charge ‘fees’ for regulating gold mining sites, especially in the case of gold rushes.<sup>180</sup> Various agents will visit mine sites and mills frequently (monthly, or as often as weekly) to collect payment.<sup>181</sup> Agents in the security sector may also arrest some people in order to scare them and others into making payments.<sup>182</sup> The success of a mine site will impact the frequency of visits and amount demanded, with more successful mine sites and buyers the target of more frequent visits and higher demands.<sup>183</sup>

Often demands for payment are portrayed as fines for violating the law. For example, Pact (2015) conveyed reports of ZRP raids resulting in ‘fines’ of about US\$200, with agents from the said to be the most aggressive, levying fines as high as US\$500. Also, Pact (2015) received reports of the EMA charging between US\$200 and US\$500 when an ASMer does not comply with environmental and safety standards.<sup>184</sup> While a large number of ASMer are operating illegally, and there are likely grounds to fine mining operations, it is very likely such payments are going to the pockets of the agents collecting the ‘fines’ rather than to government coffers.

It is important to note that the presence of government agents (in particular from the ZRP and MMMD) is not always unwelcome. Some ASMer report there are benefits to engaging and making payments, to some degree.<sup>185</sup> For example, the MMMD and ZRP minerals unit were reported to offer technical advice, which increased the legitimacy of these agents in the eyes of ASMer and the local community, and thus their willingness of ASMer to engage with government agents. In contrast, some agents (in particular those from the EMA) demand payment and offer no technical assistance.<sup>186</sup>

The collection of unauthorised payments (i.e. bribes) is not limited to mine sites, with both millers and buyers reporting ZRP and other government agents were demanding payments from them as well.<sup>187</sup> For example, it is reported that police officers at mills can be easily bribed to permit gold to leave, rather than be sold to the FPR.<sup>188</sup> There are also reports of ZRP MBCU officers accepting payment for allowing gold to move illegally across the border.<sup>189</sup>

When assessing protection economies, it is important to recognise the most visible actors may not be the ones with the greatest control or power. Also, many actors do not fit squarely within the “bad guy” or “victim” boxes. This is especially important when seeking to understand the actions and motivations of ZRP agents on the ground. While these are often the most visible actors demanding bribes, their actions must be examined within the larger context. For example, what is their salary and has it been paid? Can they support their families if they do not collect bribes? Do they have the resources necessary to do their job, or do they rely on outside payments? Are superiors or other politically influential people pressuring them to collect payments or use violence to control the ASGM sector? What benefits, if any, are they providing to ASMer?

Investigations conducted by Mawowa (2013) in Midlands province, not far from Kwekwe, illustrate the need to develop a nuanced understanding of ASGM protection economies to inform responses. At the mine site, the police controlled access, instead of prohibiting it, allowing miners to take hourly turns in the tunnels for a standardised fee. The police charged Z\$3 million (a fee equivalent to a policeman's monthly salary in July 2007) per hour spent in the tunnel. Miners grateful to the police for managing access, creating order and averting violent conflict were happy to pay. Thus, a mutually beneficial relationship was established. So lucrative was the arrangement that the police presence at the tunnel increased rapidly and officers began to operate in two-day shifts in order to accommodate the greater numbers. In the same year, it was also reported officers were deserting their official duties to guard another mining tunnel, in accordance with an arrangement with their immediate superiors.<sup>190</sup> While the superiors did not go out to man the mines themselves, they did collect remittances from junior officers seeking 'redeployment' to lucrative mining sites.<sup>191</sup>

An unexpected consequence of the prevalent demands for payment is that they seem to be pushing ASGM stakeholders to operate legally. One of the main reasons cited for obtaining a licence and selling gold to the FPR was to avoid threats of arrest and demands for bribes from law enforcement officers, as well as other government actors from the MMMD and the EMA.<sup>192</sup>

Senior civil servants, politicians and military figures are also thought to play a critical role in ASGM protection economies. For example, former MMMD minister Walter Chidhakwa was arrested in December 2017 on charges of corruption.<sup>193</sup> Of particular importance, the role of politically influential people is thought to perpetuate the illegal trading and smuggling. Those arms of the state tasked with stopping 'illegal' mining operations often become actively involved in the smuggling.<sup>194</sup> Showers (2013) reflects that state appears to have been turned into a vehicle for private accumulation, both enforcing and refraining from enforcing legal provisions to regulate accumulation for the benefit of members of the ruling elite, or those connected to them. However, as reported by Mawowa (2013), these relationships are not always harmonious with reports of contests over ownership involving powerful figures not uncommon in the ASGM sector. In turn, the closer a sponsor's connection to the state apparatus, the greater the protection from both police harassment and rival groups.<sup>195</sup>

In addition to accumulating personal wealth, control of the ASGM sector is tied to the retention of political power. Political affiliations and connections are thought to influence the regulation of the sector. For example, it is alleged Zimbabwe African Nation Union – Patriotic Front (ZANU-PF) party structures often worked together with the police in the regulation of ASM, with the police accused of launching selective crackdowns on illegal mining sites. Mawowa (2013) reports that ASMs explained inconsistency on the part of the police as political: targeting perceived Movement for Democratic Change (MDC) supporters while sparing ZANU-PF supporters.<sup>196</sup>

Protection economies are not limited to the use of corruption, with high levels of violence also reported, known to result in serious injuries and death.<sup>197</sup> For example, there are reports of machete wielding terror gangs using violence to gain access and control of gold deposits and ASGM operations.<sup>198</sup> Lines of conflict are commonly the result of a local versus 'foreigner' (from another region or village) dichotomy, or registered syndicates against unregistered ASMs, or rivalries between elite-controlled syndicates.<sup>199</sup> Some syndicates may hire private security companies or the ZRP to bar rivals from accessing contested sites. In other instances, ASMs may mobilise and use violence to resist police raids. Also, it was not uncommon for members of the same syndicate to turn against each other in the wake of a rich find or in disputes over the sharing of recovered gold.<sup>200</sup>

Tribal dynamics may also influence protection economies, and thus access and control of the ASGM sector. However, while there are references to tribal affiliations impacting relationships (for example, the appointment of gold buyers with Shona-sounding names in Bulawayo Mining District, a predominantly Ndebele region causing resistance<sup>201</sup>), there is very little information on how or to what degree they shape the ASGM sector.

## Foreign actors

### **6. There are reports of foreign actors (including Zimbabwean diaspora) engaging in the Zimbabwe ASGM sector in various ways (i.e. buyers, sponsors, miners, etc.). However, the scale and form of their involvement, as well as their role in driving and shaping activity is unclear.**

It is widely reported that foreign nationals and the Zimbabwe diaspora are involved in the Zimbabwe ASGM sector. However, it is difficult to determine the form this involvement tends to take, the scale of activity, or to what degree it shapes and drives activity. A major reason for the lack of clarity is that foreign actors are often not clearly visible, hiding their activity behind partnerships with local agents. It is for this reason investigations into financial flows are essential to building a stronger understanding of the Zimbabwe ASGM sector.

Of the information available, a wide range of foreign nationals are identified as active in the ASGM sector. South African and Mozambique nationals were frequently referenced, in addition to foreign nationals from China, Lebanon, India, Israel, Korea and Russia.<sup>202</sup> Specific allegations include reports of Chinese engaging in mining, although they tend to hide behind indigenous partners;<sup>203</sup> and South Africans, Russians and Lebanese buying gold.<sup>204</sup> The identity of foreign actors is likely to influence the destination of gold flows out of the country. It is alleged a large number of foreign buyers are smuggling gold out of the country.<sup>205</sup>

Perhaps the most problematic aspect of the lack of knowledge on financial flows linked to foreign actors (both foreign nationals and diaspora), is the degree to which they are sponsoring local activity. This includes both direct financing of mining operations and tasking local buyers with securing gold. There are reports of foreign actors, in particular from the Zimbabwe diaspora, either partnering with locals or giving loans and sponsoring operations.<sup>206</sup> There are also reports foreign actors do not directly sponsor mining operations, and instead advance money to gold buyers who act as their agents, as this is seen to reduce risk.<sup>207</sup> As such, while foreign actors may be influential actors within the Zimbabwe ASGM sector, as long as they remain hidden investors, it is difficult to ascertain the degree to which they may pose an obstacle to formalisation efforts.

## Vulnerabilities in the Supply Chain

A large portion of ASGM gold is thought to be bought and sold on the informal (or black) market. For example, Pact (2015) found that almost half of miners were unaware of the FPR price for gold, while only 35% were unaware of the informal price, suggesting that miners were engaging more

frequently with informal buyers.<sup>208</sup> As long as supply chain vulnerabilities remain, illicit actors are able to exploit them, and, in turn, circumvent efforts to regulate and formalise the ASGM sector. Broken down into categories, weak points are the processing, buying and export of gold.

## **7. The processing point appears to be both a weak and influential point in the supply chain. However, the degree and form of their involvement and control of gold supply chains and financial flows is unclear.**

Gold millers (and to a lesser extent elution plants) occupy an important spot in gold supply chains because their services are essential to ASMers seeking to process ore and sell gold. Consequently, millers are well positioned to buy gold from both legal and illegal mining operations and to sell gold to both legal and illegal buyers. However, like foreign actors, there is a lack of information on financial flows linked to actors in the processing stage of gold supply chains. As such, it is unclear to what degree gold mills are sponsoring mining operations, and thus shaping activity in the sector.

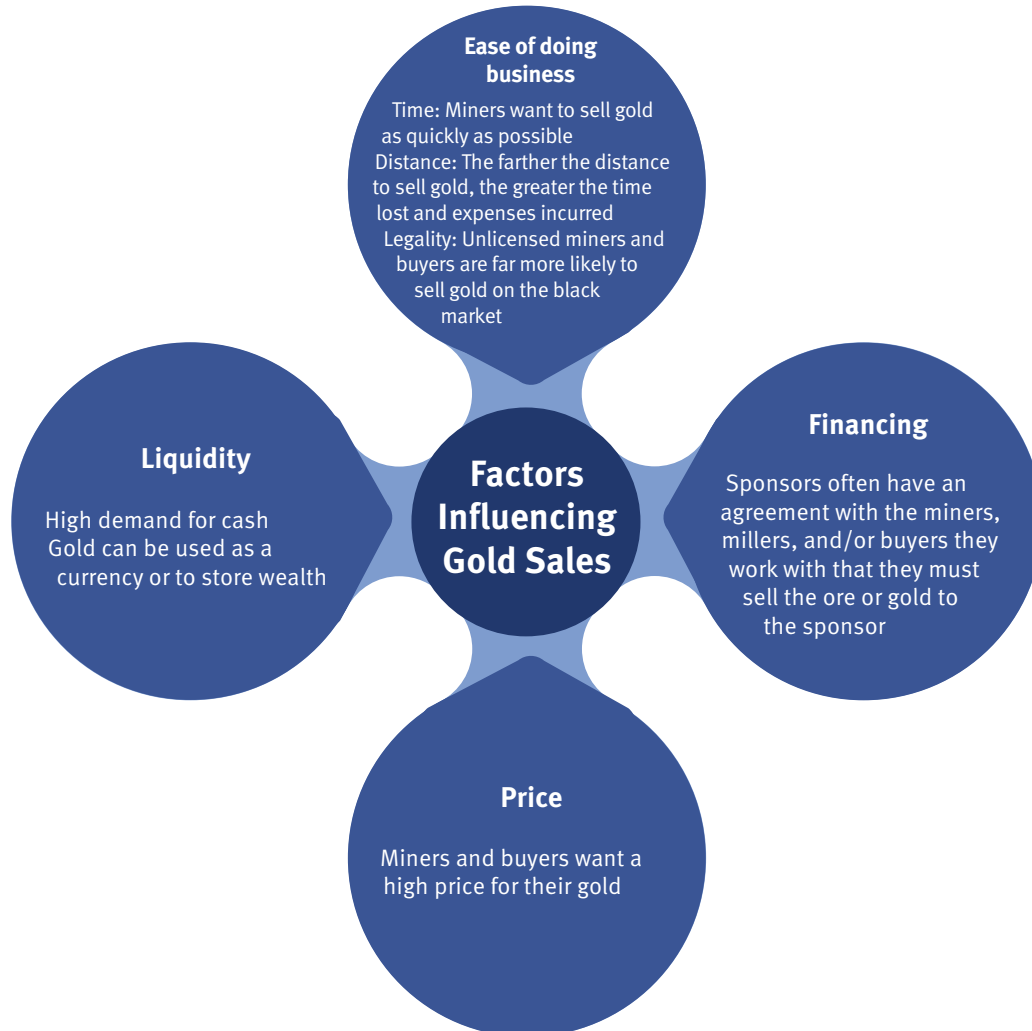
There is evidence that millers are playing an influential role as sponsors of ASGM operations. Competition from within the industry, both from other millers and the miners themselves, puts pressure on millers to sponsor mining operations in order to secure supply chains. For example, some mills are said to offer to sponsorship in the form of machinery like compressors, explosives and drill bits, generators and water pumps as well as the transport of ore.<sup>209</sup> Furthermore, there are reports many miners are now doing their own milling, which is threatening the viability of custom millers.<sup>210</sup> When a mill sponsors a mining operation, it is often the agreement that the ASMers must bring their ore to the mill to be processed and sometime they must also sell their gold to the mill.<sup>211</sup>

Millers have the potential to be an important and influential advocate or obstruction to efforts to curb mercury use. Without a better understanding of their role and influence, it is difficult to determine how to best engage with this set of stakeholders.

The Zimbabwe government is working to mount a response. Pact (2015) found that millers used to be a major seller to the informal market, but had ceased this activity since the deployment of security officers to mining and milling sites in July 2014.<sup>212</sup> Despite the intervention, there continue to be reports of gold millers engaging with the informal economy.<sup>213</sup>

**8. A number of drivers are pushing actors to sell gold on the black-market. Central to shaping the market is: i) price paid for gold, ii) liquidity, iii) ease of doing business, and iv) financing.**

**Figure 5** Factors influencing gold sales



**Price**

Illicit buyers are able to offer higher prices than the FPR, while still generating sizeable profits. One runner, interviewed for Pact (2015), revealed that he was buying gold at US\$35.80 whereas FPR was buying at US\$36; however, because of taxes and charges levied by FPR, its price to miners would effectively be US\$32.75. On the day of the interview, the informal sector was buying gold at 6.4% less than world price, while FPR was buying at 14.4% less than world price.<sup>214</sup> The difference in pricing makes it very difficult for legal buyers to compete with illicit buyers in the black market.

**Liquidity**

Liquidity is a very influential driver of the gold trade. In fact, liquidity is so important, ASMers will accept lower prices for gold if the price is paid immediately and in 100% cash, specifically US dollars.<sup>215</sup>

As such, the FPR policy of paying for gold with 60% cash and 40% government bonds is having a significant impact on gold flows, pushing many to buy and sell gold on the black market.<sup>216</sup> Furthermore, it is reported FPR is struggling to honour the cash portion of the payment and is instead offering to transfer the money into bank accounts. (This is not the first time the Zimbabwe government has struggled to pay for gold. In 2008 Metalon Gold, which accounted for 55% of Zimbabwe's annual gold output, suspended operations due to the non-payment of US\$18.3 million in lieu of gold deliveries by the RBZ.<sup>217</sup>) This is problematic as most ASMers and buyers do not utilise formal banking systems and, for the few stakeholders that do hold bank accounts, banks may not have cash available.<sup>218</sup>

In contrast, illicit buyers operating in the black market have more ready access to cash (US dollars), and are willing to pay 100% cash, on the spot for gold. It was repeatedly asserted that as long as one has cash they can buy as much gold as they want. Furthermore, if there are cash shortages (such as during the Christmas holidays), gold sellers will seek out buyers offering cash.

As a result, the FPR policy is pushing both ASMers and buyers to buy and sell gold on the black market, as well as empowering foreign actors who have easy access to US dollars.

Also related to liquidity is the use of gold as a currency and as a way to store wealth. In particular, there are reports of traders (especially fuel importers) buying gold and then selling it abroad in order to secure foreign currency (US dollars). The use of gold in this manner is said to be driven by local currency shortages. There are also reports of gold being used to store wealth, including illicit incomes that the holders may want to keep hidden.

### **Ease of doing business**

Ease of doing business also influence the gold trade, with time (how quickly an individual can sell gold), distance (how far an individual has to travel to sell gold), and legality (the legal requirements one must meet) shaping the ASGM market. Unfortunately, each of these factors tends to weigh in favour of the illicit market.

Illicit buyers are much more able to quickly pay for gold entirely in cash, thus dwarfing the amount of time it takes to secure the same amount of cash for gold sales through formal channels.

In addition, ASGM operations are widely dispersed, and can be a very far distance from FPR buying offices of other official buying agents. In contrast, buyers who are willing to travel (the sometimes very far) distances to mine sites or make themselves easily available to ASMers drastically reduce the travel costs of ASMers and other individuals seeking to sell gold. The value of these service is further increased because many ASMers lack the capability to travel to FPR buying sites. Furthermore, by buying gold at mine sites, and thus significantly reducing transportation costs for ASMers, buyers are able to buy gold for lower prices than what the FPR is offering, thus increasing illicit profits and making it more difficult for legal buyers to compete.

Legal hurdles also increase the cost of doing business in the formal sector. Unlicensed ASMers and buyers are unlikely to sell gold to the FPR. In addition to licensing issues, ASMers may not be able to meet the FPR's minimum buying requirements. The FPR requires individuals to be selling a minimum of 5g of gold with a purity of 75%.<sup>219</sup> Many ASMers are unable to meet these minimum standards, and thus are forced to sell gold to buyers on the black market.



## Financing

While financing is thought to play an important role in shaping the ASGM sector (including mining and processing methods), very little is known about this financial flow.

It was repeatedly stated that financing did not play an important role in Zimbabwe's ASGM sector because start-up costs are very low, enabling individuals to self-finance operations and rendering outside financing unnecessary. For example, it was stated individuals could finance ASGM through the sale of assets like cattle or produce or by investing retrenchment packages.

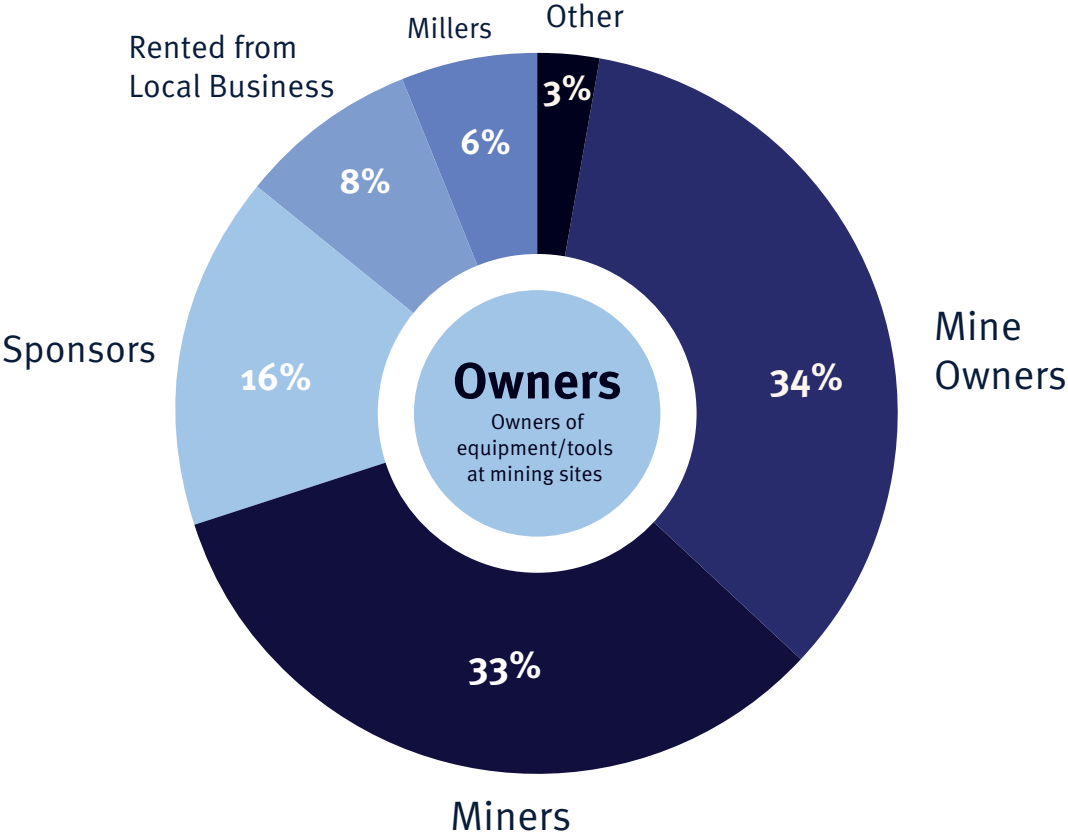
Although start-up costs may be low, there are strong indicators ASMs, as well as millers and buyers, are in need of financing. For example, Pact (2015) found that to obtain the equipment necessary to establish small-scale mining operations required no less than US\$12,300.<sup>220</sup> In addition, some individuals may have to find a sponsor to cover the US\$100 it can cost to buy the most basic equipment.<sup>221</sup> Perhaps the greatest indicator financing is taking place though is that ASGM stakeholders (ASMs, millers and buyers) are seeking financing.

Formal financing options include FPR loan facility and bank loans. The FPR manages a US\$40 million loan facility for gold miners, (This is not the first time the Zimbabwe government has offered financing to ASMs. In 2005 the Government's ASM-sector microfinance programme was profiled at a UNIDO conference as one of the most proactive examples of how acquisition of a small-scale miner's licence could lead to benefits such as credit access.) However, statistics are not publicly available on the number of individuals benefitting from the loans and it is reportedly difficult to identify beneficiaries of the loans, especially amongst female miners. In addition, while some banks purport to give loans, requirements tend to be too stringent for ASGM stakeholders, and very few are benefitting. According to one miller, banks are not willing to invest in mining because it is too risky, but they will give loans to millers. A key reason miners and millers are unable to access formal financing is lack of collateral.

A key reason miners and millers are unable to access formal financing is lack of collateral.

Consequently, ASGM stakeholders are forced to turn to the informal sector and illicit actors for financing. The lack of insight into financing from illicit sources is thought to be the result of purposeful secrecy as well as financing agreements which are not straightforward loan agreements, but rather take the form of acquiring equipment or advancing payment for gold purchases. One form of sponsorship centres around the ownership and use of equipment. When questions about sponsorship were reframed as to focus on the provision of equipment, it was reported that there were a large number of sponsors in the sector and gold buyers (which can include mine owners and millers) are normally the ones providing equipment and other support to ASMs. Equipment provided includes compressors and explosives, and more rudimentary tools like pickaxes, spades, hammers and chisels. Sponsors may also provide food. While equipment may be rented, often it is owned by the sponsor or mine owner. In addition, buyers will give loans to the ASMs and smaller buyers from who they buy gold.

**Figure 6** Owners of equipment/tools at mining sites (Source: Pact 2015)



The trend of buyers securing loans is especially important to understanding why financing within the ASGM sector may not be entirely obvious. While both ASMers and buyers have difficulty accessing loans, buyers cannot access some of the loans (hypothetically) available to ASMers, like the FPR loan facility. In parallel, there are reports informal investors see investments in buyers and mills as less risky than investing directly in mining operations. As a result, buyers are being both pushed out of the formal sector and pulled into the black market. Investigations which focus solely on the mine site will fail to identify this trend, which may contribute to the reason many believe financing does not play a major role in the Zimbabwe ASGM sector. Buyers hold an important role in shaping activity and flows, playing a critical role in linking ASMers to consumers, and it is important to recognise the sponsorship of buyers as a significant financial flow.

Financing has a direct impact on gold flows and is widely employed method of securing supply chains. If miners are sponsored in some way, they often have to sell the gold they produce to the sponsor, and violence may occur if they violate the agreement. The use of violence (as well as corruption) to reinforce supply chains relates back to the issue of protection economies. For example, syndicates are often linked to and supported by powerful political or business person whose connection to the state provides protection from both police harassment and rival groups.

Like buyers, probably because they are often the same person, sponsors are thought to greatly profit from the Zimbabwe ASGM sector. The potential for significant economic gains is drawing a large number of actors to become sponsors. Reportedly this includes police, army and MMMD officials. Business owners are another prominent type of sponsor. In general, sponsors are locals.

## **9. A large amount of gold is reportedly being smuggled out of Zimbabwe, primarily to South Africa, with higher prices being a major motivating factor.**

Gold exporters (both legal and illegal), who may also hold the role of buyer and sponsor, are thought to be generating windfall profits.

The FPR is the only legal exporter of gold produced by ASGM in Zimbabwe. The FPR sells its gold to the Rand Refinery in South Africa. Zimbabwe is unable to sell gold bullion on the international market because it lost its membership to the LBMA. Zimbabwe lost its LBMA accreditation in 2008 because it was no longer able to meet the minimum production of 10 tonnes per annum to maintain membership.<sup>222</sup> Despite consistently meeting the minimum production in recent years, Zimbabwe has not re-joined the LBMA.

However, it is widely thought a substantial portion of gold is being smuggled out of the country, with estimates putting the figure at around 50% of gold production. Indicators of smuggling include the monthly gold production targets set by the MMMD not being met. In addition, it is difficult to see how some ASGM stakeholders can afford the lifestyle they are maintaining based on their official gold production and trade figures. Despite widespread allegations of smuggling, it is rare for gold to be confiscated.

It is thought an enormous amount of gold is being smuggled to South Africa. There is not much to deter the cross-border smuggling, due to a porous border between the two nations. It is thought most of the gold is moved across the border via road transport. The connection is so strong, there are reports of South African buyers buying directly from mine sites and competing with local buyers.

The dominant reason given for smuggling gold to South Africa is higher prices. As described by a senior FPR official to Pact (2015), gold will be smuggled to South Africa where it is bought by a recovery works plant under the guise of it being scrap metal. The South African government doesn't charge value added tax (VAT) on scrap gold; however, processed gold is subject to VAT. Thus, the VAT incentivises gold laundering using a method that converts illegally mined gold into "legitimate" second-hand scrap gold. Shaxon (2014) describes an army of 'pen pushers' that fabricate false identities and use trade mis-invoicing tricks to produce false documentation convincing enough to pass audits from the tax authorities. Once the illegally mined gold has been laundered into scrap gold with the appropriate paper trail, the VAT is claimed back. Consequently, the South African government ends up paying these fraudulent traders 14% VAT over and above what they make on their illicit gold. The estimated losses are reportedly in the billions of Rand.<sup>223</sup>

There are also strong connections with Mozambique. Like South Africa, due to proximity and porous borders, gold can easily be moved across the border. However, it is unclear which direction gold is flowing. There are reports Mozambique buyers are paying higher prices than what is being offered in Zimbabwe – as much as twice the price, and gold can be sold for a higher price in Mozambique. Conversely, there are also reports Mozambicans are bringing gold to Zimbabwe because the price is better and it is easier to secure foreign currency (US dollars). As such, further investigation is needed to better understand these gold and financial flows.

In addition to intraregional smuggling, there are also claims of gold being smuggled to Dubai in the United Arab Emirates.

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# Conclusion

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The formalisation of ASGM and the elimination of mercury usage go hand-in-hand. However, without a nuanced understanding of the sector, interventions may be ineffective or negatively impact marginalised populations, rather than disempower illicit actors. Responses need to take into account social and cultural relationships and political economies, and at times may require engaging with low-level, illicit actors.

The recommendations provide a starting point for addressing obstacles to formalisation and can be used to inform practical strategies for tackling informality and illicit activity in the Zimbabwe ASGM sector.

## Recommendations

### **1. Enhance understanding of the sector: conduct further research**

There is a need for general research on Zimbabwe's ASGM gold supply chains and financial flows. Investigations need to focus on actors or points in the supply chain which are thought to heavily influence activity and flows. These are the point of gold ore processing (millers and elution plants), gold buyers (of all types) and foreign actors (both foreign nationals and Zimbabwean diaspora). Research ought to seek to identify who these actors, financial flows they are participating in (especially the sponsorship of ASGM operations and gold processing), their market share, and the degree of control they exercise over ASGM operations and the ASGM gold supply as a whole.

Without adequate support, ASMers are unable to engage with formalisation efforts due to a reliance on more powerful actors who are more likely to be engaged in illicit activity. If influential actors do not see benefits, they are likely to resist formalisation attempts. Attempts to cut out these actors rather than engage them in solutions may risk ostracising not only an influential actor, but also the communities they work with. As such, this line of research will enable stakeholders to better understand financial flows and how influential actors may act as barriers to or champions of formalisation efforts.

### **2. Account for protection economies: conduct political economy analysis**

Analysis of the Zimbabwe ASGM sector reveals entrenched protection economies, maintained through corruption and violence. As such, the complex and unhealthy relationship between crime, business and politics has blurred the lines between the legitimate and illegitimate. If not taken into account, political and economic elites heavily invested in the ASGM sector may block efforts to eradicate the activity.

Political economy analysis can assist in untangling and responding to the threat. Political economy analysis is concerned with the interaction of political and economic processes in a society: the distribution of power and wealth between different groups and individuals, and the processes that create, sustain and transform these relationships over time. The definition draws attention to politics, understood in terms of contestation and bargaining between interest groups with competing claims over rights and resources. It is equally concerned with the economic processes that generate wealth and that influence how political choices are made. Because of these two dynamics analysed together, it offers great insights to how criminal actors and illicit flows affect the legitimate political economy. In essence it examines the incentives, influence and interests of various stakeholders to better understand the context for programming.<sup>224</sup>

In doing these exercises, it is critical to lower the level of analysis down to specific communities. Control is a very local phenomenon. It is crucial to recognise the uniqueness of each ASGM site, and consider climatic, geological, political, and cultural differences in designing interventions.<sup>225</sup> Furthermore, subsequent mapping of efforts would be valuable in understanding how actors and markets are adapting to interventions.

### **3. Improve regulatory obstacles: differentiate between mining types and address land access issues**

While the government of Zimbabwe has undertaken efforts to make regulation of the mining sector more ASGM friendly, obstacles which prevent success remain, namely that the MMA does not differentiate between different mining types and the cadastre system is vulnerable to mismanagement. As such, at many stages throughout the gold supply chain, legislation governing ASGM remains difficult to both enforce and comply with. ASGM stakeholders view informal activities as the preferable -if not only- option. Government policies and regulations ought to be reviewed with the objective of drawing the sector into the formal sphere.

### **4. Strengthen relationships with ASGM stakeholders: build on efforts to productively engage with the ASGM sector**

The complexity of the ASGM sector will require the development of innovative, if not ideal, responses and interventions. For example, the government and international development agencies can learn from lessons such as the Shamva project. While there are foreseeable obstacles, past experience has shown this may be a pragmatic approach to pulling gold supply chains and financial flows into the formal sector.

Interventions may include efforts to decentralise regulation. The experience of Zimbabwe underscores how ‘decentralisation’ in the 1990s and early 2000s was thwarted due to a variety of political factors at play, including changing power dynamics within the ruling party and the failure to build the capacity of RDCs.<sup>226</sup> Lessons learned from Zimbabwe’s experience as well as the experiences of other gold-producing countries which have successfully decentralised legal supply chains ought to be taken into account in deciding how to proceed with decentralisation efforts, if at all.

Engaging with communities is also important. ASGM is a critical source of livelihoods in Zimbabwe, especially in rural communities. Any attempt to formalise the sector must recognise the intrinsically

intertwined nature of financial flows if it hopes to be successful without further marginalising vulnerable populations. Mapping financial flows can be helpful in this regard, as it makes it possible to identify how and to what degree the ASGM sector is positively contributing to the economy.

Also, great care has to be taken in working with associations to ensure that a few powerful members do not monopolise benefits for individual gain. Again, the Shamva project serves as an example. The executive committee was composed of a group of ‘established’ small-scale miners who were ‘not concerned’ about poorer miners. Government agents, donors, and foreign experts need to be sensitive to the complexities of miners’ organisational structures in their programming.<sup>227</sup>

## **5. Tackle drivers of gold smuggling: engage with intraregional neighbours Mozambique and South Africa**

The differing gold buying practices and royalty rates of Zimbabwe’s neighbours Mozambique and South Africa are likely to heavily influence gold flows, specifically the smuggling of gold out of the country. Efforts ought to be undertaken to collaborate with other states to investigate and better understand flows and drivers, as well as develop policies which are in the countries’ mutual best interests.



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