



ROSA LUXEMBURG STIFTUNG SOUTHERN AFRICA

**"ALL THESE ILLEGAL MINING
ACTIVITIES ARE A RESULT
OF HIGH UNEMPLOYMENT."**

ZIMBABWE'S RUGGED ARTISANAL & SMALL-SCALE MINING SECTOR

Analysis by Kennedy Nyavaya, photographs by Kuda Mushauri

ANALYSIS

November 2021

ZIMBABWE'S RUGGED ARTISANAL & SMALL-SCALE MINING SECTOR

ANALYSIS BY KENNEDY NYAVAYA, PHOTOGRAPHS BY KUDA MUSHAURI

This analysis gives an insight of the organization, structure and legal framework of artisanal and small-scale mining (ASM) in Zimbabwe with a special focus on the gold sector. It mainly looks at two areas, that is, Mazowe in Mashonaland Central and Kenzamba (Makonde) in Mashonaland West where a couple of mines were visited in order to illustrate factors that constitute ASM work, which is a major part of the country's mineral driven economy. The findings are based on interviews with artisanal miners at the mining sites, stakeholders including representatives of civil society organizations as well as other individuals within the gold supply chain. The interviews were complemented by news reports, legal documents and other public information.

With unemployment numbers generally soaring high and successive droughts immensely affecting subsistence farming, youthful populations in and near mineral rich areas like Mazowe (Mashonaland Central) and Kenzamba (Makonde, Mashonaland West) are fast resorting to a more lucrative alternative, artisanal and small-scale mining (ASM). In some instances young people, mostly men, travel from faraway places to set up base in gold rich areas and only travel back to their hometowns after striking a huge gold deal.

In Zimbabwean mining terms, there is no separation between artisanal and small-scale mining although there is a slight distinction between when it is done formally and informally. Although it carries various meanings, ASM is loosely defined as "an activity that encompasses small, medium, informal, legal and illegal miners who use rudimentary methods and processes to extract mineral resources."¹

Ascertaining the number of mining sites in Zimbabwe has of late become a very arduous, if not impossible, task. In gold rich areas, shafts mushroom daily but official statistics point at the country having over 4,000 gold deposits in its length and breadth.² The Parliament of Zimbabwe estimates that there are some 500,000 small-scale miners (mainly mining gold) in the country who support up to three million dependents although they currently operate without clear policy regulation or government support.³

According to the Zimbabwe Miners Federation, there are about 50,000 registered small-scale miners in the country who employ at least 10 workers each on average.⁴ But, with the economy failing while the price of gold soared particularly in 2020, the ranks of artisanal miners have risen to around 1.5 million. This has resulted in more mining sites being opened legally and illegally in all gold rich areas in what makes the actual numbers hard to ascertain.

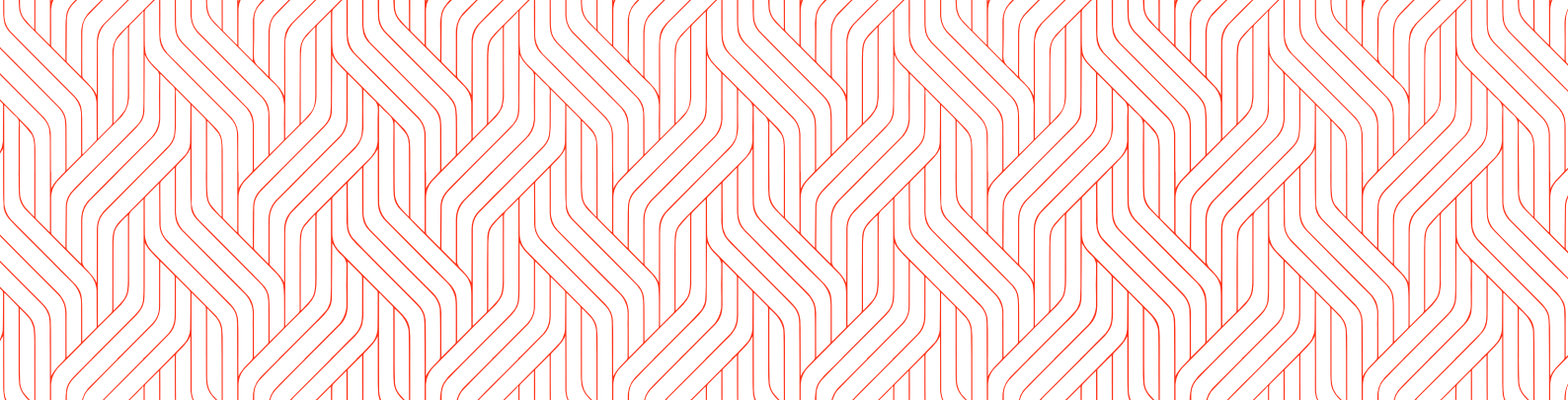
Armed with usually hired ordinary tools like picks, shovels, ropes, blasters and hammers among others, laborers in the ASM bracket produce a huge chunk of Zimbabwe's gold. According to Fidelity Printers and Refiners (FPR), a subsidiary of the Reserve Bank of Zimbabwe and sole legal buyer of the precious metal, local gold production has been increasing over the years mainly due to ASM. In 2018, FPR said that ASM produced 21.7 tonnes compared to mining companies' 11.5 tonnes.⁵ This is notwithstanding huge gold leakages that come through individuals selling to a lucrative black market where the precious metal is believed to be then smuggled to neighboring countries, mainly South Africa. However, despite high production and subsequent incomes, the laws regulating



Above: One of the many small mining shafts dotted around Mazowe’s Jumbo Mining area where a gold rush –over the years– has resulted in many people (particularly young men) coming to the area to participate in mining activities. A shaft like this usually has about five people working on it, with four inputting the labor including: digging, blasting, carrying the quarry etc. while another, called the “sponsor” provides the tools (he owns or hires), food and water among other needs during the extraction. Everyone who participates in the “syndicate” gets an equal percentage of the money earned after subtracting the sponsor’s costs when the final product is sold.

Below: A group of artisanal miners working on the same shaft pose for a picture. Miners usually work in groups of four or five per shaft, who share the financial outcome equally, they conduct most of the process from cracking the gold belt underground, carrying the full sacks out, grinding it at the mill and washing to separate ore from dust. However, in most cases theirs is the manpower only but the tools and welfare like food during the work is taken care of by a “sponsor”. Payment to the sponsors is an equal share of profits gained from what has been extracted by the whole group after subtracting operational costs. *Mazowe (Mashonaland Central)*





ASM are still unclear although the business is high risk and dangerous with virtually no adherence to health and safety regulations expected in mining.

The Mines and Minerals Act (MMA)⁶ (drafted in 1961 and enacted in 1965) and the Gold Trade Act (1940) mainly govern the gold sector of Zimbabwe. Small-scale mining, which refers to operations conducted by individual people or small groups as opposed to larger companies, is permitted in Zimbabwe unlike a number of other countries. Of concern to local ASMers, however, is the non-recognition of its members in the Mines and Minerals Act. The principal Act was first crafted in 1961 and was last reviewed in 1996. In 2015, the Mines and Minerals Amendment Bill (MMAB)⁷ was placed before Parliament to re-align the archaic MMA to best international practices and to address contemporary challenges affecting the mining sector. However, the Bill – still to be adopted – has divided opinions between stakeholders and authorities in the mining sector for years owing to pitfalls in fully recognizing ASM work and its related challenges.

The vague description of ASM has opened up loopholes for abuse of their work in the country. Under section 41(1)(b), the MMAB simply defines a small-scale miner as a ‘holder of a mining location who is not a large-scale miner’ and no attempt has been made to define an ASMer beyond that. The Mines and Mineral Act permits any individual, provided they are a “permanent resident of Zimbabwe,” to apply for a mining license. However, obtaining a mining license is beyond reach for artisanal miners. The costs are unaffordable for many. While a prospecting license costs US\$100, it costs between US\$300 to US\$500 to pay a mining consultant to peg a claim. A prospector, responsible for marking where one should start digging, charges an average of between US\$200 and US\$300.

In addition to the cost barrier, artisanal miners must deal with a stampede by multiple government institutions regulating the mining sector. These include the Ministry of Mines and Mining Development, Zimbabwe Republic Police, Environmental Management Agency (EMA), Zimbabwe National Water Authority (ZINWA) and local government authorities among others. All of them are in place to ensure adherence to different regulations that most ASM workers have complained saying they are hard to meet.

Thus our inquiry on most ASMers at the sites we visited showed that the majority is not licensed. The reasons they

name as decisive vary between not having enough money to get licenses, fear of being apprehended for having operated illegally before, bureaucracy that could eat into their productive time and lack of sufficient knowledge about the processes. Adding to this is the fact that selling gold on the black market is currently very lucrative so ASMers see no reason to part with their money in an attempt to formalize part of their operations when they will most probably sell the end product illegally. All in all, the majority of local gold mine workers are unregistered and thereby operate informally.

With the level of informalization that characterizes local ASM, one can imagine how hard it is to organize anything to the effect of a union of sorts. However, the institutions that purport to represent ASMers, like Zimbabwe Miners Federation (ZMF), in most cases represent registered miners. Even worse, in most instances their interests are detached from the actual needs of miners on the ground and they hardly influence better conditions for artisanal miners.

Technically, small-scale mining is tolerated, and sometimes encouraged in Zimbabwe due to the significant contributions to the country’s economy. However, the non-recognition of ASM activities has led to the criminalization of their operations. Not clearly legally defining ASM work has led to political manipulation in the recent past and created frosty relations between the miners and the state.

Last year, a police operation code-named “Chikorokoza ngachipere” (putting an end to illegal gold panning) resulted in the arrest of thousands of ASMers under the guise of removing machete-wielding gangs from mining areas like Mazowe. However, the miners insist that they are targeted wrongfully as they are not gang members and that the known gang lords are spared out because of their political influence. In the end, miners depend on bribes and running away from state agents whenever there is an operation. Those close to the politically connected gang lords just pay a “protection fee” so they are able to operate under a certain gang’s jurisdiction.

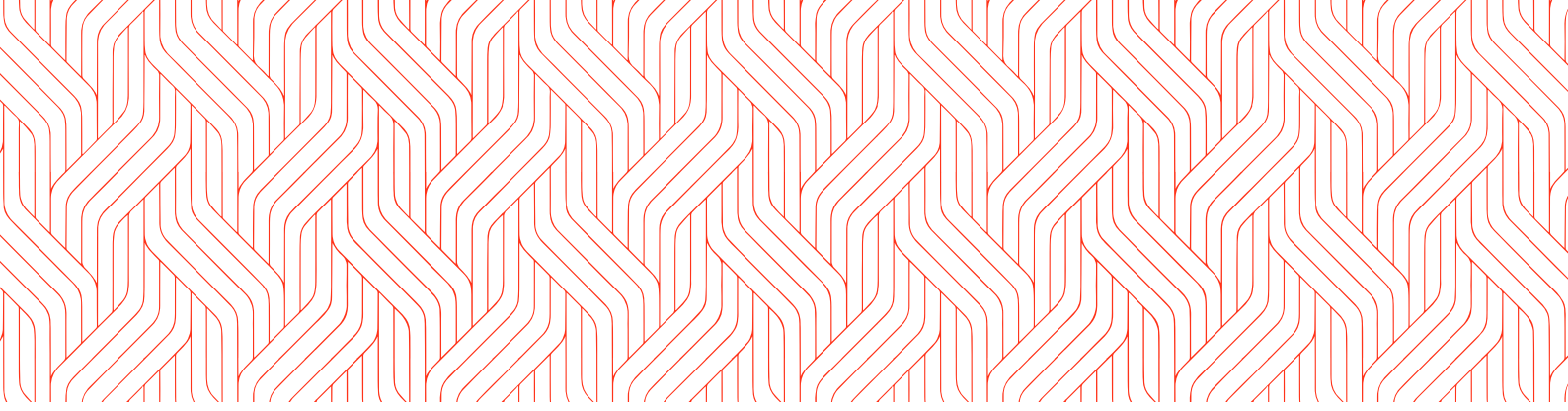
ASMers also pay such fees when they bump into armed robbers known as mashurugwi or mabhudhi. This specific group is infamous for using machete and other weapons to rob ASMers of their ore, gold or money in all mining areas across the country. The mashurugwi reign of terror is longstanding and there have been reports that these groups are usually foreign and are not originally from the mining towns. The well-



Above: The shafts come in different set ups and in some instances a number of shafts are situated in one place particularly where there are more gold deposits. These places are hotly contested and usually a hotbed of violence and constant bribery to powerful gangs. Apart from gold mining, a lot of money exchanges hands here with vendors, usually women who most times double as sex workers, selling food, water, alcohol and drugs.

Below: After extractions the quarry is carried in sacks to the mills dotted across the mining area. The mills are usually owned by middle-aged men born locally. They also serve as a middleman between the artisanal miners and mobile as well as secretive men that roam around the area in expensive cars. These are the ultimate buyers who are mostly believed to be fronts for incumbent government politicians and powerful business people not keen to be associated with the murky mining activities here. *Mazowe (Mashonaland Central)*





coordinated and ruthless gangs go to mining towns specifically to rob miners and mete out violence to stamp their authority in what has seen gang clashes turn bloody. In some cases and areas the gangs have been linked to powerful politicians who use them to maintain influence in gold rich areas as well expand their political expediency.

Unclear laws regarding the selling of gold between ASMers, particularly those unregistered, has opened the door to illegal black market sales in the country. Interestingly, FPR has announced before that they would be buying gold from all sellers on a “no questions asked basis”, which shows their acknowledgement that there are gold leakages at a grand scale owing to the trade systems in place.⁸ But there is no certainty an ASM will experience this attitude of buying gold on a “no questions asked” basis every day. Oftentimes, local authorities and law enforcers brand them illegal and institute operations to wipe them off gold rich areas. Consequently, a lot of money has exchanged hands as miners bribe law enforcers who often run operations against unregistered ASMers.

Further fueling this is the fact that FPR as the country’s sole buyer of gold offers very low and uncompetitive prices, which are in turn not attractive to ASMers. This has led to a rise in black market trade, gold smuggling leakages that are costing the country over US\$100 million per year according to the Home Affairs and Cultural Heritage minister Kazembe Kazembe.⁹ By September 2020, it was also reported that the country’s gold deliveries to FPR plunged by 73 percent to 1.36 tonnes from 2.8 tonnes in the same period in 2019, a sign that the country’s gold definitely ends up in the wrong hands.

Due to such plundering and leakages of revenue through informal markets, mining has largely benefited individual buyers and middlemen. Others re-invest in buying new equipment or building grocery stores in mining areas but there is hardly any investment towards the collective benefit of the mineral rich communities.

Artisanal and Small-Scale Mining in Mazowe

When what was once a large-scale gold mine named Jumbo Mine under Metallon Gold closed in 2018 (reportedly due to a financial crisis), hundreds of former mine employees in Mazowe were left jobless. Most of them had depended on the mine as their main and only source of income and thus struggled to make ends meet after the unprecedented closure.

With the agricultural exploits failing largely as a result

of drought and with not many alternative employment opportunities but knowledge that the place is rich with the highly priced metal, most locals and people from surrounding areas were left with but one option, which was to mine on their own.

More and more people from the area and other parts of the country continue to mine the gold rich area and the numbers of those that can be characterized as ASM miners rise virtually on a daily basis. Although there are no official figures obtained so far, local people and former mine workers estimate that between 5,000 to 8,000 individual miners work there.

The majority of the economically active population consists of the miners also known as Magweja or Makorokoza (those who enter the shafts illegally). Most of them are young males as young as 16 to mid-30s and while a lot of locals are active, there has been a huge jump in numbers of miners from other cities and towns. A recent trend owing to the implications of COVID-19 has seen a significant number of children absent from school, and instead flocking to mining shafts, with unemployed women too.

If one decides to enter the decommissioned gold shaft, where they attest to paying bribes to gain entry, they are bound to work alone (mostly using hired equipment) through the entire process from digging for ore to carrying it to the mill where they cash-in. This is due to the fact that miners have to pay in order to get access to known gold-rich levels underground. Entry to these levels is reportedly through the Jumbo mine guarded by the Zimbabwe Republic Police and other security personnel who allegedly charge an illegal fee as bribery for entry.

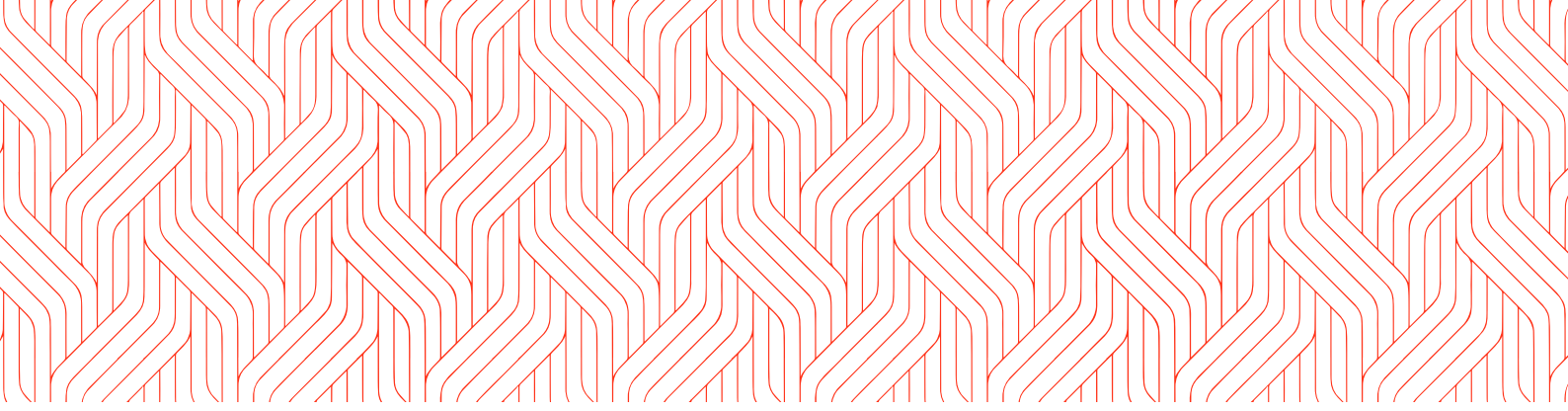
In areas with fewer deposits, miners usually just start digging the ground in hope to get lucky. However, and this is the majority, if they decide to mine anywhere else in Mazowe, they work in groups (known as syndicates) of five on average per shaft. Members of a syndicate share the financial outcome equally, after conducting most of the process from cracking the gold belt underground, carrying the full sacks of gold ore out, grinding it at the mill and washing to separate gold from dust. A “sponsor” is responsible to provide tools such as picks, shovels, ropes, explosives, blasters and hammers among others and other required resources.

A sponsor is a person who owns or hires mining equipment needed by a group of miners, or the syndicate, to extract gold.



Above: After milling, most miners take the visible gold and leave, usually paying 10% off their loot as a milling cost. In some instances, the millers are also the immediate buyers of the gold which means a miner can immediately exchange their yellow metal for money. However, mining experts say the soil left behind carries more gold deposits and millers nowadays have their own workers who are largely teenagers who get into a process called cyanidation where cyanide is used to separate tiny gold deposits missed by the naked eye from dust. This process is said to produce more gold than the one found from milling quarry.

As a result of the highly competitive and violent nature in parts of the area known to have more gold, teenagers and young men in their early twenties usually find themselves in less rich areas or assisting at the mills. Most are locals but some of them travel from nearby areas including the Capital City of Harare (some 40 kilometers away). *Mazowe (Mashonaland Central)*



Thus, the position is largely occupied by fairly rich men in society like local business people or those with connections to powerful politicians including traditional leaders, local authorities like councilors or members of parliament. Normally, a sponsor's payment is an equal share of monetary value obtained from what has been extracted by the whole group after subtracting costs that include food supplies, milling cost, repairs and replacement of any broken equipment. However, in other instances, they use their influence to become some sort of middlemen between miners and illegal gold buyers.

Since the miners' work is daunting and entails continuous time underneath the earth, they hardly get time to leave their work stations unless they have picked a big stone. Consequently, miners depend on vendors for food and refreshments including water. These are roles mostly played by women and children and in common instances, these same women camp next to the shafts where they serve as sex workers at night.

After extracting stones, the miners have to proceed to the mill where the owners charge a standard of 10 percent from the monetary value of the gold realized after selling to the buyers. Some of the mill owners also work as immediate buyers of the gold, which they sell to shadowy characters who make the decision to either take the mineral to FPR or smuggle it through the black market.

The ultimate buyers consist of city businesspeople and other dealers believed to be fronts for politicians among other individuals not easily susceptible to arrests. This is as far as many can track the final destination of much of Zimbabwe's gold. Once it is taken into tinted windows of top of the range cars, the yellow metal's tracks from the mining sites are blurred.

Artisanal and Small-Scale Mining in Kenzamba

Ever since exploration for gold began in the early 2000s, the lives of locals who once depended on peasant farming changed forever. Fields as well as the hilly scenery in the area were turned into mining shafts as the local youth searched for the valuable metal that they claim was sometimes found close to the ground without much digging. As the years passed and alluvial gold disappeared, the insatiable appetite for the yellow metal remained. With few fields for farming left, both the youth and middle-aged had little choice but to pound the earth in search of glad tidings.

Some small-scale miners, mostly from other parts of the

country, are slowly buying mining claims and hence are sometimes taking over shafts that were illegally sunk over the years. This has forced collaboration between local miners and new claim owners, with the latter interchanging roles as sponsors and gold buyers in instances where they have a milling machine. With a longstanding history of undocumented work, it is thus difficult to ascertain with surety the number of mining sites in an area like Kenzamba.

A characteristic of the region is that the mining community is separated from the nearest town of Chinhoyi. Because of the bad roads, people might spend months without going to town where they could access the nearest FPR offices. Miners in Kenzamba say that in the years between 2005 and 2010, FPR agents would come to their area to buy gold directly from them and that proved very convenient with them. Now, however, sponsors who assist in the process of extracting the ore usually become buyers who purchase the gold in bulk for resale when they travel to towns. This brings them into a powerful position which is reflected in them oftentimes running shops where they sell different commodities and make frequent visits to the towns where they sell to either FPR or black market. This elite grouping largely consists of businesspeople and politicians – especially those within the incumbent government structures – who pay much lower prices than they will sell for especially at the black market. In places like Kenzamba, ASMers prefer buyers like that because they bring everything to a position near them as opposed to travelling distances to sometimes meet unfamiliar faces that can dupe them. In other instances, gold is traded for an equivalent in food groceries or other similar household needs. These intermediaries also bring, to the miners, basic commodities and work consumables (like explosives, machinery and fuel) so ASMers mostly rely on them to the extent that thinking about formal markets like FPR becomes near impossible.

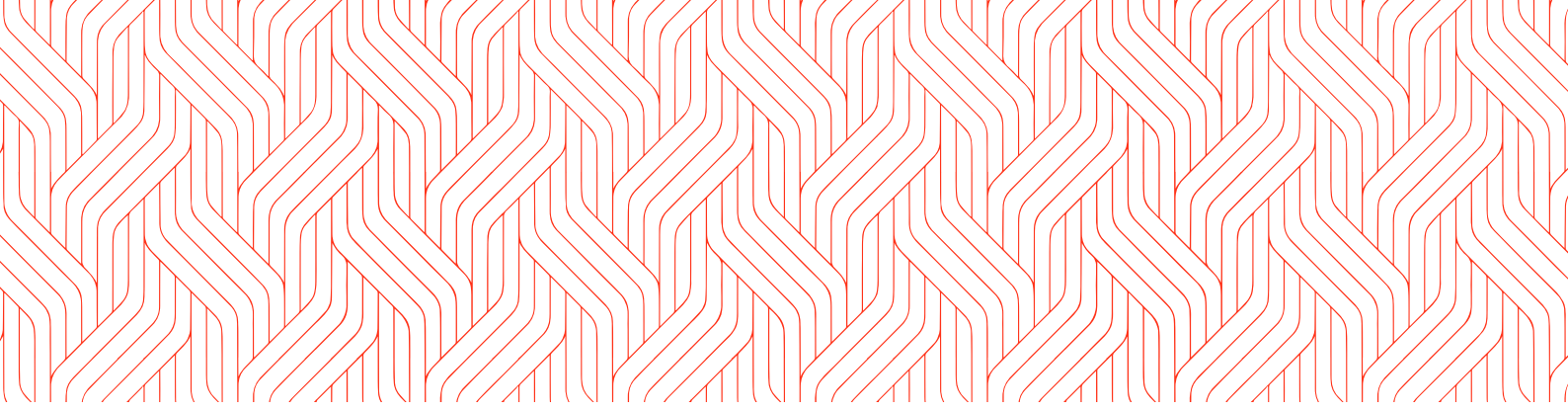
Ultimately, everyone within the cycle takes their own share home, with some taking a total of US\$700 for 10 grams on good days and some US\$70 for a “point” on bad days.¹⁰ An inquiry with most of the miners shows that they believe their buyers get up to three times more than what the miners take home. This is largely true as most middlemen buyers use their mobility and easy access to the communities as a profiteering mechanism by offering ASMers much less than what they end up selling for on the official or black market. Without much of an alternative of knowledge about the gold markets, the artisanal and small-scale miners are forced to agree to the price offered.



Above: A local shows off the inside of a shaft he has mined in search of gold for years. As a result of careless gold extraction since the early 2000s, by people with little knowledge, most of the shafts look like death traps and have been left defunct because of fears that they might collapse.

Below: Starting afresh: A man drills through an underground rock as a “syndicate” builds a new shaft in one of the gold claims. *Kenzamba (Mashonaland West)*





Formalisation As A Way Forward

According to most miners interviewed, an inclusive and more practical formalization would be a positive game-changer for the gold sector if done right. Essentially, they called for a formalization process that is not too demanding as well as enabling facilities closer to them and the mines. Informal operations may be lucrative in terms of prices but they have consistently proven unsustainable for the miners or the government, as both parties lose money.

The ASMers yearn for security of their earnings as well as competitive incomes for their hard work. If the artisanal mining could be done formally, it would be most welcome. They detest the violence they go through or witness daily, which has seen the miners being branded as violent. Some have had to form their own gangs and carry weapons as a mechanism to defend their income from assailants. Further exacerbating the situation has been the growing perception that law enforcers are enemies meant to disturb their work or demand for bribes only. According to a considerable number of unregistered ASMers, having the big mines that are decommissioned reopened so that they can work there as employees could be a master stroke to ensure stable income and guarantee their safety.

A clear policy defining small-scale mining according to the realities on the ground and setting clear parameters would definitely bridge the gap that has seen corruption, arbitrage and violence among other wrongdoings thriving in the country.

ASM has proven that it is an important sector in terms of poverty alleviation in the country. From employing hundreds of thousands to supporting the livelihood of millions of people, ASM in the gold sector is definitely a mainstay of the local economy. However, the manner in which it is being conducted in most cases is unsustainable to the extent that in some instances its long-term, including environmental, costs far outweigh the benefits.

One of these negative impacts is that the environment is left an eye sore and a danger for people and livestock. Mining has proven to be ecologically unsustainable although there are chances of rehabilitation or safer ways of extraction when it is done formally. The bulk of ASM work done, informally, in the country is largely destructive with negative effects to the environment including deforestation, siltation, unfilled gullies that pose a danger to humans as well as animals and the use of harmful chemicals like mercury and cyanide – which poison

water sources.

But further factors such as violence (resulting in injuries and death), corruption, drug abuse, sex work and child labor are, among others, vices that need to be dealt with for ASMers to be fully respected for their economic contribution in the country. If properly formalized, ASM could turn the fortunes of the country for the better and create a well of opportunities even for other unrelated sectors. Finding way of how to increase formalization in practice is a missing but key component towards ensuring that the full benefits of ASM reach every citizen of the country directly or indirectly.

It is no doubt that Zimbabwe desperately needs foreign currency to manage its waning economy. Currently, there are plans to increase the mining sector into a US\$ 12 billion industry by 2023, over 300% more than the current output, but it is pertinent for ASM operations to be regulated to guarantee equal benefits for mine workers, mineral rich communities and the entire nation through the government. As it stands, ASM has caused more harm than good in all aspects of local life causing damage to the environment, fueling corruption, violence and other criminal activities.

It is with this in mind that the nation should be working towards pursuing sustainable ASM methods in order to protect and balance current interests and those of future generations. Below are some recommendations¹¹ and further explanations of how this can be achieved:

Amendment to the Mines and Minerals Act: Parliament should ensure that the amendment to the Mines and Minerals Act fully defines and recognizes artisanal and small-scale miners. As said, often, the activities of unregistered small-scale miners are branded unlawful yet the government has not stopped benefitting from their work in what exposes massive policy inconsistency. There ought to be efforts to not only recognize but also protect ASMers because of their economic contribution. With an ambitious plan of achieving a US\$ 12 billion economy (currently it is around US\$4 billion) by 2023, Zimbabwe needs to take ASM work in the gold sector seriously if it is indeed going to contribute a third to the national plan as envisioned.

Formalization: The Central Bank should continue to fund the operations of ASM through the revolving fund as a strategy to encourage formalization of the sector. Efforts should be made towards the ease of doing business for ASM workers whose



Above: Two exhausted miners take a breather after helping each other through a rock blasting process to ensure a smooth commencement of mining activities underground. Most small scale miners conduct their work without enough Personal Protective Equipment (PPE) which makes them vulnerable to work related illnesses, injury and death. *Kenzamba (Mashonaland West)*



time should largely be dedicated to sustainably extracting minerals. There should be efforts to offer competitive prices for their gold as well as sending buying agents near the miners to suffocate the shadow market that has encouraged the smuggling of gold. With the necessary documentation and appropriate backing from the government through relevant institutions, ASM will produce more and for the benefit of the entire country.

Decriminalization of ASM: The decriminalization of ASM should be inscribed in law and should not be left to the discretion of the Minister of Finance or the Central Bank Governor. The Gold Trade Act should be amended clearly outlining decriminalization of ASM. Leaving laws that are supposed to regulate the sector open-ended has left them susceptible to misinterpretation and abuse. More often than not miners are at the receiving end of the chaos that arises from the mix-up and in the end, they develop unethical means of shielding themselves like bribery, evading the law and even becoming violent towards law enforcers.

Cost of Compliance: The Ministry of Mines and ASM associations need to develop a comprehensive cost structure that is affordable to the sector. The number of licenses needed and their related cost are proving way out of reach particularly for small-scale miners that are starting out. During research, we noticed that owing to the cost and somewhat complicated nature of the compliance process, most miners are finding it easier and more convenient to pay a bribe to the law enforcers if and when they are caught.

Linkages between ASM and Large-Scale Producers: Large-scale producers should be compelled either by law or through a Memorandum of Understanding (MOU) to offer technical support to ASM within their vicinity in order to promote sustainable mining methods and to minimize invasion of mining claims. Competition between the two will only lead to animosity and losses in terms of gold production in the country.

Environmental Awareness: The Environmental Management Agency (EMA) needs to fully implement the dictates of the Environmental Management Act (Chapter 20:27) through monitoring and advocating for sustainable mining methods in ASM. In 2015, the country's Auditor-General's report revealed that despite having mining licenses, some 986 small-scale mines were operating without Environmental Impact Assessments (EIAs).¹² This is in contravention of the EMA

Act¹³ and calls for the institution's agents to be proactive rather than reactive in the issue of sustainability in gold mining. In the absence of laws that are enforced poorly, miners may not comply with EIA procedures, rehabilitate the land, or develop mine closure plans—all of which negatively impacts the community.

Also, with numbers of ASMs increasing lately, if EMA does not move in quickly to reinforce their work, the country will rapidly turn into gullies and pits with no vegetation to talk about as well as contamination of water sources.

There needs to be concerted efforts to sensitize miners, particularly those not registered, on better and more environmentally friendly ways of conducting their work. The current antagonistic strategy of approaching miners with an intention to arrest or make them pay fines is fueling corruption and constant cat-and-mouse activity with little benefit to the conservation or rehabilitation of ecology in gold rich areas.

Access to Credit and Finance: A bulk of ASM workers consider their inability to access credit a major hindrance to the growth and sustainability of their work.¹⁴ Many banks rightfully consider loans to ASMs to be high-risk because of the sector's lack of capacity to avail bankable mineral resource estimates. Unfortunately, the challenge is cyclic because it is not cheap to hire experts to conduct bankable resources estimates. There is therefore need for technical and financial support to ASMs before projects can be regarded bankable and therefore standing a chance of getting loan approvals from banks. In Zimbabwe, traditional banks are generally considered less supportive to the ASM sector compared to microfinance institutions that are prepared to take risks of potentially bad loans.



A local miner displays what a “point” of processed gold looks like; from here the metal is either destined for Fidelity Printers & Refiners (the country’s sole official gold buyer) or the black market, which offers better buying prices. *Kenzamba (Mashonaland West)*



¹ Ncube-Phiri, Siduduziwe et al. (2015): Artisanal small-scale mining: Potential ecological disaster in Mzingwane District, Zimbabwe, *Jamba*, 7, 1, Art. 158, online at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6014108/>; last accessed 26.03.2021.

² Ministry of Mines and Mining Development (w.y.): Zimbabwe's Mineral Potential, online at: [http://www.mines.gov.zw/?q=zimbabwe%E2%80%99s-mineral-potential#:~:text=There%20are%20over%204%20000,the%20richest%20in%20the%20world](http://www.mines.gov.zw/?q=zimbabwe%E2%80%99s-mineral-potential#:~:text=There%20are%20over%204%20000,the%20richest%20in%20the%20world;); last accessed 26.03.2021.

³ Gutu, Angeline (2017): Artisanal and Small-scale Mining in Zimbabwe – Curse or Blessing?, online at: <https://www.parlzim.gov.zw/component/k2/artisanal-and-small-scale-mining-in-zimbabwe-curse-or-blessing>; last accessed 26.03.2021.

⁴ Zimbabwe Miners Federation representative (interview on December, 2020)

⁵ Industriall Global Union (w.y.): Calls for safety standards in artisanal mining as Zimbabwe's flooded gold mines claim 28 lives, online at: <http://www.industriall-union.org/calls-for-safety-standards-in-artisanal-mining-as-zimbabwes-flooded-gold-mines-claim-28-lives>; last accessed 26.03.2021.

⁶ Government of Zimbabwe (1961): Mines and Minerals Act, online at: http://www.mines.gov.zw/sites/default/files/Downloads/Zimbabwe_Mines_and_Minerals_Act_Chap_21_05.pdf; last accessed 26.03.2021.

⁷ Mines and Minerals Amendment Bill (2015), online at: <https://www.parlzim.gov.zw/component/k2/mines-and-minerals-amendment-bill-final-h-b-19-2015>; last accessed 06.04.2021.

⁸ Ncube, Richard and Sibanda, Mukasiri (2019): Impact Assessment of Buying Gold On No Questions Asked Basis, in Tax Justice Network Africa Blog, online at: <https://taxjusticeafrica.net/impact-assessment-of-buying-gold-on-no-questions-asked-basis-by-richard-ncube-mukasiri-sibanda/>; last accessed 26.03.2021.

⁹ Netsianda, Mashudu (2020): US\$100 million gold smuggled out of Zimbabwe, in *Chronicle*, 07.09.2020, online at: <https://www.chronicle.co.zw/us100-million-gold-smuggled-out-of-zimbabwe/>; last accessed 26.03.2021.

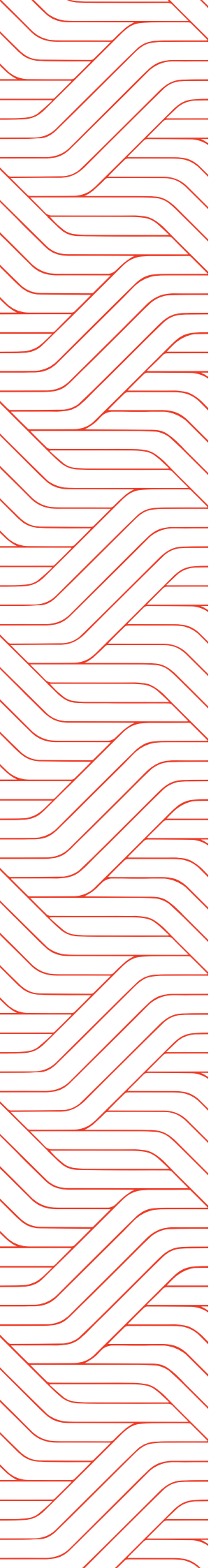
¹⁰ Figures obtained in January 2020.

¹¹ These recommendations are based on our observations as well as inspired by Gutu, Angeline (2017): Artisanal and Small-scale Mining in Zimbabwe – Curse or Blessing?, online at: <https://www.parlzim.gov.zw/component/k2/artisanal-and-small-scale-mining-in-zimbabwe-curse-or-blessing>; last accessed 08.04.2021.

¹² Report of the Auditor-General on the Environmental Monitoring of Mining Operations by the Environmental Management Agency under the Ministry of Environment, Water and Climate presented to Parliament of Zimbabwe on July 14 (2015), online at: <http://www.auditorgeneral.gov.zw/downloads/category/1-special-audited-reports?download=5:environmental-monitoring-of-mining-operations-report>; last accessed 26.04.2021

¹³ Environmental Management Act, online at: <https://www.ema.co.zw/agency/downloads/file/EMA%20ACT.pdf>; last accessed 26.04.2021

¹⁴ Zimbabwe Economic Policy Analysis and Research Unit (2018), online at: <http://www.zeparu.co.zw/sites/default/files/2019-11/pathways%20to%20formalisation%20of%20artisanal%20mining.pdf>; last accessed 08.04.2021



VISIT **ROSALUX.CO.ZA**