The Bricoleur Economy

Indigenous Gold Mining in Zimbabwe

ANNIE BARBARA CHIKWANHA Duniversity of Johannesburg achikwanha@uj.ac.za

Abstract

This article uses the concept 'Bricoleurs' to analyse the different categories of indigenous small-scale miners in Zimbabwe. Indigenous citizens constitute the bulk of the small and medium scale gold miners who continue to use antiquated methods of extraction and processing and they market their gold through illegal networks managed by middlemen. The study highlights the challenges Bricoleurs encounter in forcing inclusion into the mainstream mining economy, and the government's failure to capture them into the formal gold market. The indigenous gold miners' experiences reveal the trials posed by fragmented and incoherent legal and institutional policy frameworks that militate against the Bricoleur miners' productivity. With gold deposits found all over the country, and in the absence of supporting organisational structures, the Bricoleurs' self-empowerment through devious means has become accepted by mining authorities. Data for this article was collected mostly through interviews with different stakeholders in the gold mining industry in Harare, Shurugwi and Chakari in Zimbabwe.

Keywords: Bricoleurs, artisanal mining, indigenous miners, self empowerment, small-scale, Gold mining

DOI: https://doi.org/10.36615/xhfzaq60

Introduction

For over a century, peasant farmers in Zimbabwe traditionally practiced small-scale gold mining to supplement their income. Since 2001, the significance of small-scale gold mining was emphasized by the shift to gold being the main source of cash income for many of the citizens. The persistent droughts in the country and the continuously shrinking job market over the last 15 years forced many people to turn to illegal gold mining. The intractable harsh political and economic challenges in the country since 2002 stifle the different stakeholders in gold mining, stalling development. Extensive institutional decay, endemic and systematic corruption, mining policy inconsistencies, and political vulnerability, all militate against the resilient miners.

This paper aims to give an introspective account of these legal and illegal indigenous gold miners, the Bricoleurs', methods of forcing inclusion in the gold mining economy in Zimbabwe. The reflective approach partly contributes an explanation to the contradictory policy tendencies seen in the country's mining environment and reveals the complex dynamics that have shaped indigenous actors' activities in gold mining in the country. Bricoleur is used as a metaphor to explain the sum of Zimbabwe's indigenous gold miners who are constantly in motion and shifty in improvisation during the informal gold production process. It is an all-embracing allegory that encapsulates the various categories of indigenous gold miners.

The data in this article was collected mainly through interviews with different groups of stakeholders in the gold mining industry in Zimbabwe and focuses on the period 2013 to 2017. The groups included artisanal miners, civil society organisations (CSO), interest groups,



and some of the government departments that work on mining. The fieldwork was conducted during the ongoing political and economic turbulence in the country in 2017, which made it difficult to conduct interviews openly and snowballing was used to identify interviewees. The polarised views of Zimbabweans on all socioeconomic and political issues made it essential to separate the emotions of the interviewees from the facts on the gold mining environment in the country. Anecdotal evidence from media reports too was just as polarized. These limitations necessitated verifying the information against anecdotal evidence and consulting natural resource governance researchers in Zimbabwe.

The next section discusses the concept 'Bricoleur' and its applicably to the mining landscape in Zimbabwe. The different categories making up this Bricoleur group: *Makorokoza*, small scale gold miners (SSGM), women and the new players, the Chinese artisanal miners, are analysed with emphasis on their organisation, extractive and marketing methods, and the hurdles they face in this informal sector. The gender dimensions are essential for explaining inclusion and the hazards of being female in this male dominated environment. The legal and administrative mining framework and how the different categories relate to this system follow next, and the paper winds up with a brief discussion of the conflicts encountered in the Bricoleur mining arena.

Bricoleurs

Bricolage usually refers to things put together in a rather unsystematic and rudimentary fashion, and the indigenous gold mining landscape in Zimbabwe resembles such a colourful ensemble of gold miners. The sector is composed of a collection of largely destitute rural peasants. Many of these rural dwellers have been scrounging around for gold for generations. Add to these is a nouveau middle class of entrepreneurs who operate registered mining companies, politicians, bureaucrats, and by the end of 2010, Chinese artisanal miners had also entered the fray. These miners use unusual archaic and dangerous techniques and tools to extract gold. The majority of the SSGM in the country are all Bricoleurs who do not always have a specific strategy and program, but always make use of what works in practice, using whatever they cobble together and what is available (Panagiotis 1999). Their mining knowledge and skills are passed on orally down to younger generations. According to Lévi–Strauss(1994) a Bricoleur is:

...someone who works with his hands, using devious means... his universe of instruments is treacherous, and the rules of his game are always to make do with whatever is at hand, that is to say, with a set of tools and materials which is always finite and is also heterogeneous (Rodgers 2012).

Bricoleurs accumulate their skills, arsenal of tools and other essential resources over time. A logic of consequences (March and Olsen 2004) is used to determine the usefulness of tools for the different processes in their gold production processes. Following a logic of consequentiality implies treating possible rules and interpretating them as alternatives in a rational choice problem, confirming that "man's natural proclivity is to pursue his own interests" (Brennan and Buchanan1985, ix). To advance their own socio-economic transformation, Bricoleurs evade and avoid officialdom and work on the margins. In the case of gold mining, this is often done violently and in fierce competition. Constantly challenging the modern dominant commercial methods of gold extraction and processing gives scope to Bricoleurs to define themselves and their overall relationship to society. Cheater (1989 cited in Maphosa 1998) concurs with this view as she observed that every kind of change, social, political, and economic, results from the manipulative tactics of cultural dissidents. Cultural dissidents are people with courage to challenge and redefine society's norms and values in pursuit of their own interests (ibid) and survival. Through their small successes, these Bricoleur gold miners have challenged formal

gold extraction methods and demonstrated their value to human development and to the great continuum of human culture. They have thus triggered many narratives, both positive and negative, about their work.

In Zimbabwe, Bricoleurs becomes a metaphor that explains how indigenous gold miners have embraced flexibility through continuous movement and diversity through weaving complex collaborations and using different extractive and processing styles. They straddle both the primitive and modern gold mining methods, signaling the need for the development of appropriate technologies that can be applied by relatively unsophisticated self-made mining engineers (Rodgers 2012). Bricoleurs allow for dynamics and contexts to dictate and determine which methods they employ, giving them an aptitude for creativity as they can combine different techniques and methodologies in different situations to mine and market gold. With flexible and appropriate support measures for uplifting Bricoleurs in the country's mining regime, their productivity can increase tremendously.

By defining indigenous gold miners as Bricoleurs, knowledge on the subtle divide between the formal and informal gold mining practices and processes are easily exposed and these portray the narrative constructed by these enterprising individuals.

Who are the Bricoleur gold miners in Zimbabwe?

The Bricolage of gold miners in Zimbabwe is composed of many sub-groups formed within two distinct categories of indigenous gold miners in the country: artisanal miners, the *Makorokoza* (those on the lowest rung who scrounge around), and the SSGMs. The line between the SSGMs, who are often formally registered, and the illegal *Makorokoza*, who roam the country in search of gold deposits, is very thin as they both use similar extractive processes and often collaborate in their mining ventures (Saunders 2008). Many categories all face different challenges that raise questions on the knowledge and technologies required to transform their mining practices in their ever-shifting communities. Each category of miners interacts differently with the mining administration system and regulatory institutions and interprets the mining legislation differently. The legally registered SSGMs have been targeted for assistance by different institutions such as the Ministry for Women's Affairs and private banks, yet most of the miners in this category continue to face viability constraints as they operate informally.

The key determinant for who is a *Bricoleur* in this paper is set by the country's Indigenisation and Economic Empowerment Act (2010), which defines an indigenous Zimbabwean as "any person who, before the 18th of April 1980, was disadvantaged by unfair discrimination on the grounds of his or her race, and any descendant of such person" (Matsika 2010). The act remains shifty and contested, though the intention behind the noble idea was to indigenise the Zimbabwean economy by promoting and increasing the participation of indigenous miners in business and in the exploitation of all the country's economic resources (Magaisa 2012). This article refers to all categories as Bricoleurs but makes a distinction between the various classifications when necessary.

The largest category of indigenous miners, the SSGMs and *Makorokozas*, has largely eluded state economic capture in both the extractive and marketing processes. These Bricoleurs have thus remained on the periphery though their gold finds its way into the formal market. Many small–scale miners are hesitant to join the main association of SSGMs, because they do not feel that it represents their interests [Interview in Harare]. The national miners' association has attempted to formalise all small–scale mining operations to enhance the accountability of gold ore and prevent revenue leakages through theft.

From 2011, the Bricoleurs increased their produce to overtake the more resource endowed large-scale commercial miners (LSCM) in the country. The Ministry of Mines and Mining Development estimated that the small-scale miners contributed 30% of the total tons of gold produced in 2012, and it noted that they were responsible for 65% of total production in the first six months of 2012 (Government of Zimbabwe 2012). This prompted the SSGMs to set a production target for themselves of 17 000 tons for 2013 (ibid). This prompted the (Minerals Marketing Commission of Zimbabwe) ZMMC to express optimism about mineral receipts that were envisaged to increase by 500% for the then next five years to \$6 billion from the 2012 reserves of \$1,2 billion (ibid). In 2016, the artisanal miners contributed 45% of the country's gold production (Parliament of Zimbabwe 2018) and by 2018, the artisanal miners had contributed over half the 24,8 tons of gold Zimbabwe produced that year and by 2028, both artisanal and smallscale miners accounted for 53% of total gold deliveries (Chenjerai 2016). These achievement came at a great cost to the environment. For instance, Manicaland province reported illegal mining damage of around 600 hectares of prime timber owned by the Allied Timber company in Chimanimani, and the Mazowe River has had part of its course diverted and is now characterized by deep pits, with large sections of the river heavily silted (ibid). Damage of prime agricultural land and river pollution due to cyanide poisoning is widespread in the country.

For many years, LSCMs dominated the mining landscape with very little local participation. The government, through the ZMDC, tried unsuccessfully to implement broad though disjointed gold mining empowerment projects. A few smaller scale initiatives by independent indigenous miners were more successful though this was done using artisanal mining practices. The line between the SSGMs and artisanal miners remains blurry and is defined by the legal status of the former. The majority of the SSGMs are a result of a bottom-up self-empowerment process by the miners (Saunders 2008). Other than lack of capital, the expansion of indigenous gold mining was hindered by reports of constant harassment by government officials and security agents' accusations of smuggling gold. Both the shareholders and the Zimbabwean government lose revenue through smuggling, as the proceeds from many of the big commercial gold mines are not accounted for. The irony is that even in the big commercial companies, the Zimbabweans who own shares are not aware of the actual production capacity and volumes of these big companies (Maguwu 2011).

Sub-categories of SSGMs-Small-scale miners

Within the category of SSGMs, there are different layers of categories that are defined by the amount of money a mine owner can afford to invest. In these categories, three important subcategories stand out regarding the way the miners relate to the mining institutional framework. These are the women who were organised by the government's gender development department, middle class business savvy small company owners and low–end businessmen who were initially farmers. Irrespective of each groups' financial status, they all use the same extractive processes though they go through slightly different mine acquisition processes. The largest categories, *Makorokoza*, are clearly illegal gold miners.

Most, if not all, small-scale miners operate seasonally. Their claims are usually in areas with the potential for alluvial gold. Alluvial gold mining is often considered to be the most environmentally friendly form of gold mining since it only requires dredging land surfaces and rivers (Hilson 2003). The controversial method of open pit mining, in which there is no vertically descending mineshaft, is also used. This is an environmentally unfriendly method in which layers of earth are scrapped away to form a deep wide-open pit where gold ore is extracted as the digging goes downward in layers. Such mining practices take place in the open making

operations possible only in favourable weather. Without water draining equipment during the rainy season, Makorokoza miners must wait for the dry seasons. This means no steady income is guaranteed therefore it is not possible to secure loans to buy equipment.

Bricoleurs do not qualify for most private loan funds and with government schemes, it is more complicated as the main criterion is reportedly politicised: that of being a ruling party member. Due to political uncertainty and instability in the last decade, mines ceased to work as collateral with all financial institutions in the country. For the Bricoleurs, lobbying is impossible as registration fees demanded by the Chamber of Mines keep them out, hence they do not get any assistance in improving their extractive capacity. For SSGMs, this is complicated by the difficult partnerships that the more formal SSGMs have with their Rural District Councils (RDCs).

'Makorokoza'

The Artisanal miners - Makorokoza, are largely unregistered miners who are divided into different categories too. Most of them are poor rural people trying to eke out a living, but there are groups that over time morphed into a dangerous security threat in the gold mining industry, MaShurugwi and Magweja [the destroyers]. In this paper, Makorokoza refers to groups made up of gold diggers and panners (men, women and children) who are scattered along Zimbabwe's major rivers. The latter sub group, MaShurugwi, named after Shurugwi, a small mining town, and Magweja, are very violent and they invade the big commercial mines at night (Interviews). They move about rapidly in very large groups, sometimes as many as over 500 and these marauding groups of miners have bases in the forests that are very well organised mimicking military regiments (ibid). They all use two distinct mining methods: panning for gold along rivers and sometimes digging alongside the riverbanks, and unsophisticated underground methods that lack proper support structures. Makorokoza divide into smaller teams and when they work in bands of fours, they very often manage to sell about 50 to 70 grams of gold for about USD\$2 000 which is reportedly mostly spent recklessly in a typical 'lilies of the field-marginals who live for the moment' (Day et al, 1998) attitude they depict. In many of the gold mining areas where they move around, women reportedly come out at night in massive numbers to make money from the artisanal miners (Interviews in Chakari and Shurugwi).

A well-known excuse for criminalising artisanal mining in Zimbabwe is the damage to the environment and the poisoning of water in the rivers. Since *Makorokoza* move around quickly, it is difficult to make them take responsibility for the damage. *Makorokoza*, just like the millers, use mercury and other dangerous chemicals, such as cyanide in processing gold. The health costs of gold mining are immense to the *Makorokoza* as many of them die from mercury poisoning (Mtetwa and Shava 2003). Illegal gold buyers and millers supply the mercury that is used by *Makorokoza* miners in the amalgamation process, a cheap way to collect small gold particles from sediment (ibid). The amalgam is formed by the combination of mercury and gold and is burned over an open wood fire or with a blowtorch to separate the mercury from the gold. Nitric acid is also used to remove impurities in conjunction with mercury amalgamation in gold extraction (van Straaten 2003).

Many researchers reported that many *Makorokoza* have burns on their hands due to the use of nitric acid without protection. Since, most artisanal mining takes place alongside rivers, the chemicals end up in the waterways. On contact with soil or water, mercury becomes methyl mercury that easily enters the food chain. The Global Mercury Project (GMP) developed interest in Zimbabwe due to the high number of artisanal miners who were poisoning the regional water body, the Zambezi River (Global Mercury Project 2007). Since then, it has been encouraging the banning of whole ore amalgamation and regulation of the mercury trade.

Zimbabwe is a signatory to the GMP, which aims to promote knowledge and capacity building on the links between SSGMS practices, health, ecosystems, and social factors to prevent mercury pollution and exposure. Unfortunately, the government has not taken action to implement the recommendations on the responsible use of mercury. Still, the GMP has been building capacity in the Zimbabwe Panners Association that has countrywide membership. In 2006, the GMP trained over thirty SSGMs trainers in all the country's gold mining districts. The significance of this training was the miners' needs identification that presented the following problems: environmental impact assessments, financing mining operations, dewatering mines, milling costs and transport, disruption of family life as miners roamed the country sides, water shortages, diseases, and alcoholism (ibid).

Women in gold mining

In 2006, the Ministry of Women and Gender launched a country-wide programme to lure women into mining and to assist them. The ministry sponsored women to register mining claims and paid for the prospecting costs. A significant number of rural women were able to register gold mine claims through this process. In Banket, the ministry also paid for access to the geological maps that were produced by the German settlers who were the first farm owners in the area around 1930. The Banket area is rich in alluvial gold, which is easy to mine for people without advanced technology. These attempts to uplift women in gold mining were done under the March 2004 National Gender Policy, which addresses policy discrimination against women in line with the United Nations Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW). Zimbabwe is a signatory to the CEDAW protocol, has a national Women in Mining Association, and is a member of the SADC Women in Mining Trust.

According to the Zimbabwe Artisanal and Small-Scale Mining Council's data, there are an estimated 500 000 artisanal miners' country-wide and 30% are women and children. This was an increase from 1996, when only 10% of the then 20 000 legal mining claims were female owned (ibid). By 2001, approximately 70% of these women were full or part my owners. The rest of the women were engaged in ore grinding using mortars and pestles (ibid). From then on, more women registered mining claims. Unless they own the mines, women are usually labourers in the SSGM group (panners, ore carriers and processors), providers of goods and services (cooks, shopkeepers) and are often solely responsible for domestic chores. In the Makorokoza category, women get more involved in mineral processing activities ranging from crushing, grinding, sieving, washing, and panning, including amalgamation and amalgam decomposition. Generally, in gold mining, women tend to get confined to processing aspects and are thus at risk of more exposure to dust and mercury (Hinton et al 2003). There have been reports that in some cases, men are aware of the dangers associated with mercury use hence they consign women to undertake processing responsibilities (Mtetwa and Shava 2003).

There are many impingements against the advancement of women in mining in the country. A disturbing trend is that most of the women who pursue mining are single parents (Interviews Shurugwi). Due to the physical demands of managing a mine, most women who own mines have secured the help of male relatives to manage the production and marketing of their gold (ibid). Women miners reported needing a man all the time since the miners are rough and difficult to handle and tend to challenge the women's instructions. The security threats in the gold mining sector deter many women from being actively involved in all the mining activities hence the costs of hiring a male middleman affects their economic empowerment.

Secondly, developing the mines remains an impossible feat because the women lack collateral needed by the financial institutions to lend them money. Neither their land or farms, nor the

mines are accepted as collateral by the banks and other financial institutions. Thirdly, the women lack many essential skills needed in running a business. Most women do not treat mining as a business, they do not have business accounts and they live from hand to mouth (Interviews Shurugwi and Chakari). Even though the ministry tried to have the women form cooperatives, the women failed to reinvest in the mining industry, as all stakeholders wanted the profits shared immediately. For many women, despite being registered mine owners, mining is a subsistence economic activity just as it is for the Makorokoza. This means that small-scale gold mining will remain a labor-intensive exercise unless extensive remedial measures are designed to target the miners. For now, there is no hope of forward development into a business consortium model by the miners. Lastly, the delays in the issuance of mining licenses cause more problems for women. Officials were accused of giving licenses to multiple applicants and women very often must fight off several other claimants. This dissuades many women from participating in gold mining because the men always win the physical fights hence the women's security is always threatened. Other than those women who own mines, most of those hanging around the different categories of miners tend to provide more of the other services such as sex, food vending, alcohol, and drugs at times. Sometimes the women are forced to join syndicates where they sell sex to access panning sites. The police are aware of this as they have been known to do the facilitation for panners when they sell their gold (Interviews in Chakari).

Middle class business savvy Small Scale Gold Minerss

Business savvy small-scale individual miners seem to go through different experiences with the mining administration. Registration for them is quick as they simply buy existing mining shelf companies. With the assistance of former black government employees who know where mining concessions are located, shell companies are then used to peg the area (Interviews Chakari). This is done through the mining commissioners' offices that are in the major mining districts.

Ideally, the commissioners issue the prospecting license, and the prospectors are supposed to do their own pegging. It is an anomaly that the mining commissioners' office reportedly do the pegging. The peggers wait patiently like vultures outside the commissioners' offices for the estimated one thousand people who register gold mining claims weekly leading to the slogan 'Mining takes precedence over farming' (Interviews Harare). This group uses the reported trend of 'air pegging' that is done by the commissioners' offices. In air pegging, potential miners identify vacant areas on maps and just peg on paper without visiting the site (ibid). This leads to major conflicts since the air pegged land might be occupied by someone else. After pegging, registration then takes place with the ministry's mining office. Though a miner is supposed to serve public notices before registering a claim, this does not happen due to the air pegging practice. Mining under such circumstances becomes an illegal activity because the Environmental Management Authority's (EMA) compliance certificate is supposed to be acquired before registration can be completed.

Some of the middle-class business savvy SSGMs have instituted what is called a 'mining tribute' (Interview Harare). Under this system, the small-scale mine owners allow other poor miners to use their claims and after selling their produce, they then pay a fee to the mine owner. Farm owners too are known to encourage this practice as they permit all categories of small-scale miners to work on their land, 'You can mine in the middle of my farm once you have a mining license' (ibid). With each claim covering 5 hectares, the law on the size of these small claims is unlikely to be changed as it benefits the farm owners and many of these farm owners are politicians.

Despite being more resource endowed, the business savvy group also suffers from a general lack of expertise in sinking my shafts. There are no drill rigs for going down the shafts in most of

their mines (Interviews Shurugwi and Chakari). Very few miners in this category have the technical capacity to get a lot of ore out of the ground. Even with the few who have the shafts, there is no headgear to provide safe access to the shaft. In some of the gold mining regions, there are rifts that pass through the mines making it dangerous to dig haphazardly.

The tools of production used during the extraction process, wheelbarrows, and pickaxes; in typical Bricoleur fashion, cause severe damage to the environment as digging takes place randomly. The miners just take out the ore without supporting the walls and this can be hazardous to their lives (Saunders 2008). Mining techniques that do not damage the soil, pollute, or waste water, while allowing miners to maximise gold extraction with the lowest possible impact on the environment can ensure the sustainability of production in terms of soil conservation and water usage (Rodgers 2012).

Extracting the gold is too labour intensive such that the registered small-scale miners invite the *Makorokoza* miners to do all the digging and they then share the proceeds equally. Profit margins dwindle when *Makorokoza* miners are invited by the SSGMs because *Makorokoza* miners are accused of stealing gold from the mine owners. Many mine owners interviewed reported that the hired *Makorokoza* workers go down at night when the employer is asleep and digs for gold. The basic security services provided by the middle-class business savvy SSGMs are inadequate to fight off the *Makorokoza* workers hence the mine owners often work around the clock to deter theft.

An interesting group that is significant notches above this group is that of the Indigenous Commercial Miners. These are composed of local mine owners who manage to attract foreign investors, but they only remain at the helm of the mining ownership and get involved in some management capacity. Unfortunately, under the current Mines and Minerals Act, commercial miners follow the registration process and once they complete the acquisition process, 'they do what they want' regarding the extraction and environmental care. This is partly due to the lack of technical capacity to supervise mining activities by the government (Interview). A major concern for all the big commercial companies, including the indigenous ones, is the need for constant political support due to the high uncertainty in the environment. Though the small companies need political support too, they do not stand to lose as much as the big companies. A notable difference between the LSCMs and the SSGMs is the understanding of corporate social responsibility. The relatively competitive SSGMs think that corporate social responsibility is for the big mining companies only. And yet, as local companies, they too ought to contribute in whatever way they can.

The Chinese factor at the small-scale level

The Chinese miners have been trying hard to penetrate the small-scale mining category that is usually reserved for poorly resourced local miners. Though they work as local artisanal miners, they are not indigenous miners in Zimbabwe. Local miners interviewed reported encountering the Chinese miners walking around in known gold rich areas in search of mines. Many of the Chinese miners approach the local miners directly with offers of partnerships and purchasing at times, but the unfavourable conditions they offer have been rejected as undesirable by most local mine owners. The partnerships they offer are alleged to reduce the owners to employees. The few mine owners who took them on as partners faced financial difficulties as the Chinese reportedly took advantage of their illiteracy in running such ventures (Interviews Harare). The fact that the Chinese come in organised groups has raised suspicions that corrupt public officials are supporting their endeavours. Mining officials in the ministry are believed to assist the Chinese in identifying the mining hot spots on maps through air pegging, from their offices in the city.

One former mining commissioner was even accused of delaying the issuing of licenses to local applicants and he would then later then sell off the claims to the Chinese (ibid). In the last decade, the Chinese have brought in mining equipment such as compressors, bulldozers, ball mills for processing and earthmovers, but they still use manual labour too to drill shafts and pay pithy wages that are between \$2 and \$5 per metre dug (Interviews). With no monitoring of the mining processes, the Chinese use the *Makorokoza* too, as they argue that 'the human eye sees much better and can spot the gold better than any machines' (ibid). Their machines have wreaked havoc on the environment. Another problem is that they come into the country pretending to want to do professional mining but instead they resort to cheap extractive methods and labour.

The Chinese miners are also accused of invading mines at night, digging up quickly, and vacating immediately. In the few instances when they got caught, there was no prosecution or legal action taken against them (ibid). Taking punitive action against them is complicated by the fact that the government relies on Chinese diplomatic support in the international arena and that many Chinese officials collude with senior level bureaucrats and politicians. The Chinese miners have thus become more daring as they have the government on their side. For as long as they offer an alternative to the closed western investments, the government of Zimbabwe will tolerate the Chinese miners.

The legal and administrative mining framework

Mining operations of SSGMs are complicated by the fact that institutional responsibilities are scattered across different entities, which complicates the task of both registration and compliance. The many impromptu policies have caused grievances as they are not applied consistently by the fragmented mining fraternity. The Mine and Minerals Act Chapter 21:05, in force since 1965, is the principal law governing mining in Zimbabwe. This law specifies the conditions for security of tenure and outlines clear provisions for the acquisition, maintenance, and relinquishing of a mining title. The government amended the Mines and Minerals Act in 2008. These amendments outlined the indigenization requirements for the mining sector. For gold, which falls into the precious metals and precious stones category, 25% of the shares must be transferred to the state without compensation and another 26% must be owned either by the state, or by indigenous Zimbabweans.

Miners in the country deal with a fragmented legal and administrative system that covers 45 legal Acts, 60 different statutory instruments, 15 ministries and 20 local boards that are directly involved in mining. The Ministry of Mines and Mining Development has the overall responsibility for the formulation and enforcement of the mining policy. The Ministry of Industry and Commerce simultaneously oversees the management of extracted minerals. The state's central regulatory and market role is also located within institutions like the Zimbabwe Mining Development Corporation (ZMDC) and the ZMMC commissioners in the six mining regions who issue licenses in their jurisdiction and adjudicate in disputes. The commissioners' report to the Permanent Secretary in the Ministry of Mines and Mining Development. The President's Office overrides all other procedures as it gives 'Special mining grants' which supersede any other grants given by any of the other offices. The Mining Affairs Board (MAB) was tasked with granting authority for prospecting on reserved ground, but it is not clear if the body has ever functioned in line with its mandate. The MAB also exercises oversight on the issuance of mining titles and the effective administration of the Mines and Minerals Act. The Permanent Secretary of the Ministry of Mines and Mining Development chairs the board which brings together the different administrative and experts in the mining sector.

The myriad actors and policies cause both confusion and loopholes for mining companies as they can be selective on who to deal with, and which policies to comply with, causing confusion and instability. Both the managers and the miners deal with constant shifts in the administrative procedures. Stakeholders in mining are not part of the policy making process that is dominated by the government. Social responsibilities of miners are thus relegated to the background in such a scenario. This has resulted in the widespread failure to integrate mineral rights, land use planning and development as evidenced by the many conflicts on mining claims. The chaotic situation works in favour of the unscrupulous politicians and bureaucrats by creating room for political interference and corruption since the reporting lines become blurred undermining the legislation.

Unlike the commercial miners, the small-scale miners bypass many of these administrative and legal hurdles the big companies must go through. The SSGMs have special prospecting and mining arrangements that are acquired through a claim system (ibid). But contrary to this, all respondents had similar information on the particularistic criteria used to acquire mining concessions. After registering their claims with the Ministry of Mines and Mining Development, the SSGMs go to their local boards in their respective RDCs for the land use authority where they pay \$20 to register and another \$30 annual fee for land use. The next step is the acquisition of a health clearance certificate from the EMA that needs signatures from at least eight other government depts. In addition, other prominent people are required to sign on what the SSGMs call 'the big book', which is part of the miner's application in support of the miner. Usually, the District Chief must sign, plus any other person of standing in the community. All the SSGMs must be registered and fall under the jurisdiction of RDCs (Singo 2012).

According to interviewees, the process of mine acquisition is relatively easier if known gold deposits are on one's land because all they must do is buy a prospecting license. However, if one intends to secure a claim that is below 100 hectares that is located on someone else's land, the landowner must be consulted first. If the claim is over 100 hectares, a prospector can only take 10 hectares around the claim area and each block must be 10 hectares only. The license for the 10 hectares costs \$500 hence small–scale miners can afford very small claims. The claims may be small, but more people can then afford to own some means of income generation. These small–scale claims are estimated to yield about 60 milligrams from a ton of ore in the open cast mines (Interviews in Harare).

Conflicts amongst mining groups

The government is aware of the tensions that exist between large-scale mining companies and the SSGMs. It is equally aware of the opportunities that the LSCM operations can offer in supporting the development of SSGMs yet there are no efforts to initiate a dialogue between the two sides. Hence conflicts continue between the two groups for many reasons amongst them: allegations of encroachment on mining territory by the SSGMs; accusations of mineral theft by *Makorokoza* and allegations that both the legal SSGMs and *Makorokoza* cause health, safety and environmental hazards. Similar conflicts occur in other countries too, for example, in Siguiri mine in Guinea, some estimated 10,000 artisanal miners were estimated to be operating illegally within the AngloGold Ashanti's operation mine lease area. At times during the rainy season, an estimated 10,000 artisanal miners reportedly invade the mining pits in Siguiri when working areas are flooded or inaccessible (Mining Technology undated).

In Zimbabwe such mining boundary disputes top the conflict list, though many other misunderstandings and suspicions affect the development of harmonious relationships between the Bricoleurs and LSCMs which view all SSGMs as security threats and lump them in the same

category as the Makorokoza. Respondents in Chikari gave an example of a big gold mining company that fixed the road that branches off from the main road to its mine. Many registered small–scale miners surround this big mine, but this company skipped all the sections of the road that branched off to the small miners' claims and continued onto its mine location. This signaled resentment and intolerance of the presence of the SSGMs. On the other hand, the SSGMs are resentful of the fact that large–scale operators are granted land rights, yet they are the owners of that land traditionally (Interviews Shurugwi and Chakari).

There is a general failure by different stakeholders to articulate how the LSCMs can assist SSGMs with improved access to processing and mining technologies, better health, safety and environmental practices, product marketing and equipment supply without affecting their own profit margins. In fact, the LSCMs can benefit tremendously from Bricoleurs' indigenous knowledge in environmental conservation and gold deposit tell-tale signs, which can be used to identify future prospecting areas. More importantly, the SSGMs category can be that crucial link between the large companies and the local communities that complain of neglect by the mining companies. Such a liaison would ensure stability and some common understanding of the expectations of each actor.

New gold sites continue to pop up in the country and they trigger a rush by both the Makorokoza, the relatively more stable and legal category of the SSGMs, and the more resourced indigenous LSCMs. When gold deposits were discovered in several new locations between 2012 and 2013 in Mlonga Village 17, Jambezi area under Chief Shana in Hwange District in Matabeleland North Province and in Amaveni in Kwekwe, thousands of Makorokoza flocked to these areas after word spread of the new gold deposits (David 2012). The flood of Makorokoza turn chaotic very quickly hence a security response is always used to keep the entire SSGMs miners out of new finds. According to anecdotal evidence, new gold finds have social consequences too; "The gold find triggered a spending spree in nightclubs around Kwekwe, where panners from Amaveni who had been lucky were buying expensive drinks for patrons" (ibid). The government reacts brutally whenever there are new mineral wealth finds. The police cordoned off the Amaveni area to prevent illegal gold panning under the usual pretext of curbing the social ills that accompany such gold rushes. But by the time geologists from the Ministry of Mines and Mining Development arrived to collect soil samples for analysis, some politicians had already lodged claims for the recent finds. This effectively leaves out the SSGMs who can then only lodge claims for peripheral areas to the central claims area. The government's securitised mining approach effectively keeps SSGMs on the lower rungs of the mining wealth ladder and opens opportunities for the political elites and the well-connected aspiring miners.

Conclusion

Problems besetting the gold mining sector reflect the general economic environment in Zimbabwe since about 14 years ago. The chaotic mining environment has kept miners in the Bricoleur mode, and they have become a recognised entity due to their large production volumes, and this is partly a function of the archaic and confusing legislation and policy frameworks that govern access, exploitation, and management of gold mining in the country. Compliance and enforcement remain a major problem for the Bricoleurs. Safeguarding the mining environment from degradation and creating marketing opportunities that connect the small producers to the bigger and more lucrative legal markets is paramount. The big commercial gold miners that use more sophisticated extractive methods have never attempted to build capacity to uplift the indigenous gold miners. There is a history and evidence of resentment between these two categories: the large-scale mechanised miners and the Bricoleurs.

The unmet aspirations of the indigenous gold miners and the failure to capture them into the formal markets reveals their unacknowledged and unrealized potential in contributing to the nation's economy. Zimbabwe's economic decline has been driven partly by policy uncertainty over the issue of local ownership (indigenisation) of mining concessions. Due to the muddled administrative environment, Bricoleurs will continue to have the upper hand if the process of acquiring mineral rights remains politicised and complicated.

References

- Asuah Yaw Augustine and Anokye Prince Aboagye, 2013. The Resilience of Mining Communities in Obuasi, as Anglogold Ashanti Shifts Position, https://www.researchgate.net/publication/309718130_The_Resilience_of_Mining_Communities_in_Obuasi_as_Anglogold_Ashanti_Shifts_Position/citations
- Brennan G. and Buchanan J.M. 1985. The Reason of Rules. Constitutional Political Economy. Cambridge University Press. https://doi.org/10.1017/CBO9780511895937
- Chenjerai Evidence. 2016. 'Zimbabwe's small-scale artisanal miners emerge as the country's biggest gold producers', GPJ Accurate, Accessed 28 February 2020, https://globalpressjournal.com/africa/zimbabwe
- David Smith. 2012. 'Zimbabwe gold deposits 'claimed' by Robert Mugabe's Zanu-PF', 9 January 2012, Accessed 10 February 2020. https://www.theguardian.com/world/2012/jan/09/zimbabwe-gold-claimed-mugabe-partythe guardian.com
- Day Sophie, Papataxiarchies Akis and Stewart Michael. 1998. Lilies of The Field: Marginal People Who Live for The Moment, Westview Press.
- Global Mercury Project. 2007. 'Activities in Zimbabwe 2002–2007', October 2007. http://archive.iwlearn.net/globalmercuryproject.org/countries/zimbabwe/docs/Zimbabwe%20Final%20report.pdf
- Hilson G. 2003. The Socio-Economic Impacts of Artisanal and Small-Scale Mining in Developing, Swets Publishers, Netherlands, Accessed 20 February 2020 https://pdfs.semanticscholar.org/10fa/5f76cfd530eb8572b02c0eef932f5f1 0a8c1.pdf
- Hinton Jennifer J., Marcello M. Veiga and Christian Beinhoff. 2003. 'Women and Artisanal Mining: Gender Roles and the Road Ahead' in G. Hilson, (ed) The Socio-Economic Impacts of Artisanal and Small-Scale Mining in Developing Countries, Swets Publishers, Netherlands, Accessed 20 February 2020, https://pdfs.semanticscholar.org/10fa/5f76c fd530eb8572b02coeef932f5f10a8c1.pdf
- International Crisis Group. Zimbabwe: Political and security challenges to the transition, ICG Briefing (70) Africa, 3
 March 2010, https://www.crisisgroup.org/africa/southern-africa/zimbabwe/zimbabwe-political-and-security-challenges-transition
- ICLG. 2020. 'Mining 2020- Laws and Regulations Zimbabwe', Accessed 28 February 2020, https://iclg.com/practice-areas/mining-laws-and-regulations/zimbabwe.
- Lévi-Strauss Claude. 1994. The Savage Mind, Weidenfeld & Nicolson.
- Maguwu Farai. 2011. 'Socio-economic impacts of gold mining in Penhalonga', Centre for Natural Resource Governance, Zimbabwe Chamber of Mines Zimbabwe, Annual Report 2011.
- Maphosa France. 1998. 'Towards a Sociology of Zimbabwean Indigenous Entrepreneurship', Zambezia, xxv (ii).
- March James G. and Olsen Johan. 2004. The Logic of Appropriateness January 2004 https://doi.org/10.1093/oxfordhb/9780199548453.003.0034
- Matsika Batanai. 2010. 'A Closer Look at Zimbabwe's Mining Sector' September 10, Accessed 20 August 2019, www. howwemadeitinafrica.com/a-closer-look-at-zimbabwes-mining-sector/3769/.
- Mining Technology. no date. Siguiri Gold Mine, Republic of Guinea, West Africa, Accessed 28 February 2020, https://www.mining-technology.com/projects/gold_siguiri/
- Government of Zimbabwe. 2012. Ministry of Mines Annual Mining Report. Zimbabwe.
- Mtetwa Celani and Soul Shava, 2003. 'A Sociological Survey of Small-Scale Artisanal Gold Mining in the Kadoma-Chakari Area', (UNIDO) 2003.
- Panagiotis, Louridas. 1999. 'Design as Bricolage: Anthropology Meets Design Thinking', Design Studies Vol 20, No (6) (October 1999), pp 517–535. https://doi.org/10.1016/S0142-694X(98)00044-1
- Parliament of Zimbabwe. 2018. Zimbabwe Parliamentary Committee Warns Over Artisanal Gold Miners. Presented at the Zimbabwe Mining Investment Conference is Underway on 21/02/2018, Accessed 10 February 2020, http://gmaz.org/wp/

- Rogers Matt. 2012. 'Contextualizing Theories and Practices of Bricolage Research', The Qualitative Report, Volume 17, T&L Art. (7), ps 1–17, Accessed 20 July 2018, http://www.nova.edu/ssss/QR/QR17/rogers.pdf.
- Saunders Richard, 2008. 'Crisis, Capital, Compromise: Mining and Empowerment in Zimbabwe, *African Sociological Review* 12, 1, pp.67–89. https://doi.org/10.4314/asr.v12i1.43530
- Shaban Abdur Rahman Alfa, Zimbabwe introduces fresh \$5 bond notes to ease cash crunch, Africanews, 03/02/2017, https://www.africanews.com/2017/02/03/zimbabwe-introduces-fresh-5-bond-notes-to-ease-cash crunch//
- Singo Patience. 2012. 'Small Scale Mining Is Here to Stay', presentation to the Department of Mining Engineering, University of Zimbabwe.
- The Economist. 2017. Zimbabwe's new "bond notes" are falling fast, 18 February 2017 politics-taking-root-in-zimbabwe, 8 July 2016.
- Van Straaten Peter. 2000. 'Mercury contamination associated with small-scale gold mining in Tanzania and Zimbabwe', The Science of the Total Environment, 259. ps105-113. https://doi.org/10.1016/S0048-9697(00)00553-2
- Zimbabwe Artisanal & Small Scale for Sustainable Mining Council. 2019. https://www.facebook.com/ZASMC

Bio

Annie Barbara Chikwanha is an Associate Professor in the Department of Politics and International Relations at the University of Johannesburg where she teaches comparative politics, peace and conflict studies, political risk analysis and contemporary African politics. She has extensive regional experience on democracy & governance, human security, security sector governance and peace and conflict, and has consulted and published on these themes for regional and international organisations. She is a member of the International Advisory Committee (IAC) for the Research Programme on Security & Rule of Law in Fragile and Conflict–Affected Settings (FCAS) Programme that is managed by the Netherland Research Council and the NWO– WOTRO Science for Global Development and of the National Transitional Justice Working Group's (NTJWG) on Zimbabwe. She is also an Advisory Board Member of: the African Research Universities Alliance (ARUA) Center of Excellence for post–conflict Societies at the Institute of Peace and Security Studies (IPSS) at Addis Ababa University; and the Consortium for Regional Integration and Social Cohesion–Social Elevation (RISC–RISE). Annie is a former Member of the Board of Advisors of the Institute for Democracy and Electoral Assistance.