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The Governance of Zimbabwe's Artisanal and Small-scale Gold Mining (ASGM) sector: An actor-oriented approach



Gold extraction pits for the artisanal and small-scale gold miners. Picture supplied by a miner in Matobo District.

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Abstract

In Zimbabwe, the artisanal and small-scale gold mining (ASGM) sector remains the most important source of employment and foreign currency flows due to an economic crisis that has driven many people to the margins. This means that artisanal and small-scale miners play a crucial role in the country's economy. However, the ASGM sector remains largely informal or at least semi-formalised making it an interesting study topic from the perspective of governance. This study explores how this sector is governed at the local level using the frameworks of street-level bureaucracy and negotiated governance. These frameworks are complemented by Helmke and Levitsky (2004)'s typology of interactional relationships between formal and informal institutions. The study is based on 32 interviews conducted with participants comprising miners, local regulatory authorities, and NGOs/mining experts in Gwanda and Matobo districts in the Matabeleland South Province of Zimbabwe.

The study finds that the major challenge with mining policies in Zimbabwe is that they remain ambiguous and ill-adapted to the realities and dynamics of the ASGM sector. There is also poor coordination and sometimes duplication of roles among the various mining regulatory departments. Together, the ambiguous mining policies and poor coordination among the regulatory authorities has resulted in quasi-formalisation strategies at the local level. These arrangements are mediated by negotiations between the miners and local regulatory authorities on the one hand, and among the state departments as they compete to govern the ASGM sector, on the other hand. The formal governance of the ASGM sector is hindered by the prevalent political culture of clientelism, widespread corruption and bribes which seem to form a stronger regulatory system than formal rules. In this context, it is argued that street-level bureaucrats do not have "substantial" discretion as often assumed. Rather, they have limited discretion due to top-down policy pressures and the strong interests of political elites who covertly control the ASGM sector.

Key words: governance, state, formalisation, policy, artisanal, small-scale, gold mining,

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1. Introduction

Africa is known for possessing significant natural resources worth 30% of all global mineral reserves. It is estimated that 70% of the total African export earnings come from mineral resources and contribute to about 28% of the continent's gross domestic product-GDP (AFDB, 2016). Mining by large extractive companies accounts for most of the official mining revenue as this sector is usually regulated and therefore formalised, albeit often not sufficient to fully benefit the general population. However, in many African countries the most common mining practices are dominated by artisanal and small-scale miners (ASM). This category is largely unregulated and/or even not recognised in formal mining policies. The common feature of the ASM is therefore informality, intensive manual labour, poor mining technology and low capital investment in extractive operations (Lahiri-Dutt, 2018). Unlike the large-scale mining sector, the ASM sector remains largely informal or at least poorly regulated due to underdeveloped governance structures and institutions, and lack of political will by policy makers (Hentschel, 2003; Hilson, 2009). Thus, "the ASM sector represents a radically different kind of mining" from the usual mining associated with "industrialised, large-scale extractive operations" (Lahiri-Dutt, 2018: 4).

Despite their informal feature, artisanal and small-scale mining practices have become the primary source of income for many households (Hilson & Maconachie, 2017). However, this sector remains problematic for governance due to its largely informal practices and the large number of miners involved. Thus, there are efforts and growing calls to formalise this sector to improve rural livelihoods and prevent environmental degradation. Literature shows that mining laws in Africa have been gradually reforming to respond to challenges of the mining industry (Nalule, 2020). Meanwhile, the World Bank (2019) argues that there is still lack of "complete, accurate and reliable data" to inform policy interventions in the ASM sector; be it formalization or on ways of improving livelihoods and empowering miners. Accordingly, there is need to "shine a light on this 'hidden sector' by researching, collecting, and sharing data to better inform policy makers" (World Bank, 2019).

Much research has been done on formal institutions (e.g., rule of law) that supposedly facilitate 'good governance' of natural resources in Africa. However, there remains less attention on how formal institutions may work in a largely informal sector such as the artisanal and small-scale gold mining (ASGM). This requires more research into how gold mining is organised and

governed at the local level, despite the broader national political economy challenges that most scholars have focused on.

The present research thus contributes to the literature on natural resource governance by using an actor-oriented approach through the lens of negotiated governance and street-level bureaucracy. This approach allows the researcher to explore how national policies are experienced by local miners and how the local policy implementers experience governing the ASGM sector, far away from central governing powers. Using gold mining as a case, the hypothesis of this study is that the nature of the organisation of the ASGM sector at the local level necessitates negotiated arrangements amongst the miners themselves, and between the miners and the regulatory authorities on one hand. On the other hand, it also necessitates negotiation within the regulatory departments themselves. In the end, the ‘street-level bureaucrats’ have to exercise a ‘negotiated discretion’ in implementing the regulatory policies at the local level. The thesis starts by discussing the debate around formalisation of the ASGM sector which leads to the research questions of this study. The chapters that follow present the theoretical framework, the research methods, and the results of the study. The final chapter discusses the results of this study reflecting on the theoretical framework. This leads to the conclusion of the study.

1.1 The Formalisation Debate

Some scholars believe that developing countries have not been able to benefit from the economic potential of the artisanal and small-scale (gold) mining sector (ASGM) due to failure to regularise this sector. Without properly regulating the ASGM sector, governments are not able to tap tax revenues from this sector. According to Hilson (2009), some of the challenges in governing the ASGM sector emanate from its heterogenous structures which come with different operational and organisational methods. Within the ASGM sector, there are artisanal miners, who are mainly unlicensed, use rudimentary hand tools, are highly mobile and thereby engaged in abrupt and disorganised mining activities. The term ‘artisanal’ usually depicts “labour intensiveness, low technology and low capital investment” in mining operations (Lahiri-Dutt, 2018: 2). Another part of the ASGM sector is the licensed small-scale miners who use semi-mechanised mining methods and have established formal management structures. This group usually has basic management structures and exhibits some moderate order in its activities. Although licensed, this group may engage in informal activities for various reasons

including tax evasion, barriers to compete in the global markets, or due to their connections with illegal buyers (Hilson, 2009).

Taken together, the ASGM sector is deemed informal given that even where miners are licensed and operating legally, their mining practices are still determined by informal rules and norms. This is more evident in the characteristic informality in labour and production structures of small-scale mining practices (Lahiri-Dutt, 2018). In essence, this sector remains problematic to formally govern, further justifying the need to research how formal governance works in a largely informal sector. There is a polarised debate on how informality can explain the ASM phenomena. Hilson and Maconachie (2017) present three main schools of thought have become prominent in this topic. First are the dualists who disassociate informal activities from the formal economy. Second are the structuralists, who see a close connection between informal and formal economies, whereby the latter may sometimes exploit the former. Thirdly, the legalists argue that micro-entrepreneurs opt for informal operations due to excessive bureaucracy and costs, yet they need property rights to legitimise their assets (Hilson & Maconachie, 2017). However, Hilson and Maconachie (2017: 447) argue that these perspectives are insufficient to explain “the dynamics of a sector as unique and complex as ASM” as they were formulated using experiences from urban as opposed to rural contexts. To add to this list, a fourth school of thought is that bureaucrats have an interest in informality because it enables them to tap resources (bribes) for their personal gain. Smart (2017) argues that for bureaucrats in charge of controlling informal economic activities, regulation always provides opportunities for (personal) profits. Hence informality may also be deliberately created and facilitated by those with discretion over the rules that control informal activities.

Geenen (2012) discusses the theoretical underpinnings of institutional economists (e.g., Steiger and De Soto) who emphasise that economic development is strongly linked to exclusive property rights which have to be protected by the state. Proponents of formalisation reason that property rights give exclusive, and transferrable legal rights to access, use, and exchange resources. Strong property rights are believed to give right holders collateral power, incentives to invest in resources and easy access to markets (Geenen, 2012). In this way, the state has to create an enabling legislative framework to give miners legal and transferable mining titles so that both the state and the ASM miners can benefit from resource extraction. Related to property rights, a second argument for formalisation is that property rights enhance order and security since title holders will respect each other’s properties. Hentschel (2003) also argues

that there is a positive relationship between informality and weak governance, although there are debates about causality between these two variables.

There are several challenges that proponents of formalisation downplay. First, formalisation is not necessarily in the interest of the livelihoods demands and welfare of the poor miners. For instance, mining licenses and permitting processes can be too costly for artisanal and small-scale miners especially in contexts where the bureaucratic permitting systems and regulatory processes were originally designed for large-scale operators (Hilson & Maconachie, 2017). When miners in the ASM sector are now required to follow these licensing and permitting processes, they struggle to comply due to lack of financial resources and may therefore be forced to operate informally. Besides, formalisation may be used by states as means for revenue extraction through bureaucratic 'rent-seeking' practices that include high licensing fees and complex compliance processes that tend to perpetuate informality (Spiegel, 2015).

Secondly, the context and nature of mining activities may play a more important role in determining the kind of property rights preferred by miners. In some cases, miners may not need strong formal property rights since they may not perceive any problems with being in the informal sector if they have customary land rights which they view as more legitimate (Geenen, 2012). A third challenge is that there are structural elements so embedded in the informal mining system that it is not easy to break the social relations, dependencies and power imbalances which are deeply rooted in local and regional dynamics of informal mining by replacing them with formal structures. Lastly, formalising the ASM sector assumes that benefits will accrue equally to everyone. Yet, there are risks of reinforcing inequalities as formalisation may benefit the rich and middle class leaving out the poor. Overall, the main challenge is whether the costs of formalisation outweigh the benefits for the people concerned (Geenen, 2012).

Formalisation can therefore be constrained by a variety of factors including unavailability of adequate land suitable for formal mining, ineffective policies and bureaucratic inefficiencies, time losses and high logistical costs of obtaining legal documents. Moreover, miners may need state support in order to afford the high investment costs required in the formal mining sector. Lack of education may also hinder miners' ability to manoeuvre through bureaucratic and technical procedures of formalising their activities (Geenen, 2012; Hilson, 2003). These perspectives give important insights in seeking to understand the organisation and governance of artisanal and small-scale gold mining in Zimbabwe.

1.2 Aims of the research

As Geenen (2012) has observed, context and nature of mining activities play an important role in determining the appropriate governance mechanisms. More so, mining activities may be so embedded in informal arrangements that make it difficult to disentangle the social relations, dependencies and power relations that govern this sector. For this reason, the present study is an explorative exercise which takes an actor-oriented approach to understand the local context of the organisation and governance of the artisanal and small-scale gold mining (ASGM) sector in Zimbabwe. Thus, the study employs perspectives from street-level bureaucracy (Lipsky, 1980) and negotiated governance (Hagmann & Peclard, 2010) as key theoretical frameworks. Furthermore, this study explores how formal mining regulations work in a largely informal sector by using Helmke and Levitsky (2004)'s typology of interactions between formal and informal institutions.

1.3 Research Questions

The main question for this research is:

What is the role of formal mining licenses in the governance of the Artisanal and Small-scale Gold Mining (ASGM) sector in Zimbabwe?

This question is answered through the following sub-research questions:

- a) What are the current formalisation policies in place for the ASGM sector in Zimbabwe?
- b) How is the ASGM sector organised in practice at the local level, and how do mining licenses influence the organisation of this sector?
- c) What are the perspectives and experiences of the ASGM sector miners on the formal governance of this sector?
- d) What are the key challenges of formally governing the ASGM sector at the local level?

The next chapter discusses the theoretical framework underpinning the research questions of this study.

2. Theoretical Framework

The scholarly debates on the governance of natural resources in the Global South (Latin America, Asia, Middle East, and Africa) have been predominantly tackled from structural and institutional perspectives which take ‘the state’ as the unit of analysis. Most of this literature has sought to theorise the causes of poor outcomes of natural resource governance in resource rich countries, for instance due to the ‘resource curse’, ‘rentier states’, ‘predatory states’, ‘dictatorships vs democratic states’ and ‘extractive vs inclusive institutions’ (Yates, 1996; Ross, 1999; Robinson & Olson, 1993; Acemoglu, 2012). The main message from this body of literature has been a global promotion of ‘good governance’ of extractive resources as the answer to poverty and lack of economic development in resource-rich countries. Good governance is often associated with democratic public institutions which adhere to certain standards including rule of law, transparency, accountability, inclusiveness, fairness, and equitability in conducting public affairs and in the management of public resources. Dietsche (2014: 32) argues that the challenge with the ‘good governance’ perspective is that it has been oversimplified and often equates governance with good institutions and thereby risks downplaying the “critical country context-specific circumstances”. Context is indeed crucial as the World Bank argues that “policies will be effective in leveraging natural-resource-led development only when they are compatible with the level of institutional quality and the political economy context of the country in question” (Barma, et al 2011: 1).

In the case of Zimbabwe, scholars have often applied the political economy theories to analyse the governance of the artisanal and small-scale gold mining sector (ASGM) arguing that the state deliberately facilitates informality of the sector when it suits the interests of some elite groups within the state (Mawowa, 2013; Spiegel, 2015). Krasner (2018) relates this phenomenon to rational choice institutionalism theory, which observes that state elites are always self-interested and calculating and therefore will always pursue decisions and policies that strengthen their ability to remain in office. In this view, elites that control the state’s instruments of violence “will never allow changes, whether economic or political, that would threaten their power” (Krasner, 2018: 34). Accordingly, the governance of the ASGM sector rests upon the willingness of the political elites to create institutions that constrain their own arbitrary exercise of power.

According to Mawowa (2013), the Zimbabwean ASGM sector is not just about grassroots livelihoods, but also entails power politics of elite accumulation and patronage which plays out

in politicisation and contestation over controlling the extraction and trade of minerals. When state power is captured by the elites, the state then becomes a vehicle of accumulation, whereby the state elites form a ‘shadow state’, “enforcing and refraining from enforcing legal provisions to regulate accumulation for the benefit of members of the ruling elite, or those connected to them” (Mawowa, 2013: 294). In this case, the state institutions become captured by the military or other elites to extract natural resources. For Spiegel (2015: 544), the state can play with the informality of the ASGM sector to decentralise power and consolidate it again when suitable, rather than distributing development opportunities to its citizens. Overall, the most influential perspectives of natural resource governance in Zimbabwe tend to be state-centred and take a top-down analysis. The present study seeks to contribute to a growing literature which starts from an actor-oriented approach of understanding governance at the local levels where policies are implemented. This approach acknowledges the challenges of the wider state’s political economy but argues that when faced with policy dilemmas at the local level, ‘street-level’ bureaucrats exercise some agency and negotiate the way they apply their discretion in implementing policies.

2.1 The need for an actor-oriented approach

The perspectives offered by the structural and political economy theories on governance of natural resources give important insight into the challenges of governing the ASGM sector. However, these approaches pose a challenge by being state centric as they assume that the challenges of informality in the ASGM sector can simply be addressed by strengthening the state’s capacity (central government) to implement or enforce laws. Although these perspectives are helpful in explaining the political rationales of state policy makers, they are less helpful when one seeks to understand the ASGM sector from a local level. Thus, to understand how miners organise themselves and how the ASGM sector is organised at the local level, one needs to apply actor-oriented approaches.

Hilson (2007) observes that due to a poor understanding of the dynamics of artisanal mining, many regulatory international development interventions to regulate the ASGM sector have failed to address the challenges of this sector. Indeed, some studies show that formalisation policies have reinforced elite interests at the expense of poor miners. For instance, a study of artisanal mining in Liberia indicates that mining legislations have significantly discouraged formalisation by increasing costs and barriers for many poor miners. As a result, a range of informal negotiations between the local authorities and miners have emerged as miners seek

informal mining permits (Bockstael, 2014). In the Southern Philippines, formalisation policies have reinforced exploitation of informal labour by allowing only a small-class of entrepreneurs to be formalised while excluding the majority of the poverty-driven mine workers (Verbrugge, 2015). This is viewed as a deliberate structural organisation that serves the accumulation interests of the elite.

According to Long (2001) the starting point of an actor-oriented approach is to understand the 'lived-experiences' of everyday life and perceptions of the individuals and groups affected by an external intervention (e.g., national laws at the local level). The actors are taken as active participants with agency. Hence, "all forms of external intervention necessarily enter the existing life worlds of the individuals and social groups affected and are therefore mediated and transformed by these actors and structures." Accordingly, the task of a researcher is to understand "the ways in which people steer and muddle their ways through difficult scenarios turning 'bad' into 'less bad' circumstances" (Long, 2001: 14). In line with Long's advice, the present study adopts an actor-oriented approach to understand how miners in the Zimbabwean ASGM sector organise access rights and operations of their mining activities at the local level. Additionally, the study goes on to draw a picture of how the ASGM sector is organised and governed at the local level. To understand the ASGM sector from a local level, the study adopts the lenses of negotiated governance (Hagmann & Peclard, 2010) and street level bureaucracy (Lipsky, 1980).

2.2 Negotiated Governance (statehood) in the ASGM sector

Hagmann and Peclard (2010) argue that the state or statehood is inherently a contested phenomenon which includes a variety of actors and a host of conflicting interactions in the state-society relations that define the state. The authors propose a heuristic and interpretative approach aimed at understanding "how local, national and transnational actors forge and remake the state through processes of negotiation, contestation and bricolage" (p.543). "Negotiated statehood" recognises that state formation is a dynamic and at least partly undetermined process which involves constantly evolving power relations. This approach challenges researchers to look beyond state institutions, bureaucrats, and policies but "to consider the diverse strategies by which various actors and groups compete, both successfully and unsuccessfully over institutionalization or power relocations into distinct forms of statehood" (p. 544).

In other words, when this framework is applied to the governance of the ASGM sector, there is need to move beyond the state centric approaches and investigate how the miners themselves organise their mining activities and experience the state agencies governing this sector. On the other hand, this perspective also helps to understand how state representatives negotiate the governance of this sector, both with miners and across the regulatory bodies governing the mining sector. According to Titeca and de Herdt (2011: 225), “the state does not automatically establish itself as a central authority, or as a supreme rule enforcer”, but needs to collaborate with other actors to implement decisions. It is therefore crucial to tap into some of the key questions asked by Hagmann and Peclard to answer the questions of the present research. For instance, the authors ask: “by whom and how state domination is fashioned (actors, resources, repertoires), where the processes of negotiating statehood take place (negotiation arenas and tables), and the main outcomes and issues at stake (objects of negotiation) (Hagmann & Peclard, 2010: 544).

Negotiation is central to the ASGM sector as some scholars argue that artisanal and small-scale miners operate at the ‘margins’ of mineral resource governance. According to Fisher (2008: 200) the margins are places where “practices and politics of everyday life reconfigure the political, regulatory and disciplinary practices that constitute the state.” In other words, the state is continuously transformed and shaped by daily practices at the local level. These are places where “state law and order continually have to be re-established.” These marginal places appear in various forms including “peripheries or territories where the state has limited power, contested or illegitimate spaces, forms and practices in which the state seeks control, and the space between bodies, law and discipline” (Asad, 2004: 279).

Very often, mining laws themselves are insufficient to facilitate formal participation of most artisanal and small-scale miners as they tend to be disconnected from the realities of the prevailing local mining practices (Bockstael, 2014; Jonsson & Fold, 2009). This creates discontinuities between state laws and daily practices resulting in diverse localised practices of trying to access mineral resources. In turn this creates distinct forms of mining organisation, power relations, exploitative relationships, and ways of collective bargaining (Fisher, 2008). As a result, ASGM sector miners may resist and/or negotiate with state representatives and other key actors like large mining companies to access mining rights.

2.3 Street-level Bureaucracy and negotiated discretion

Street-level bureaucrats (SLBs) play a key role in the day-to-day governance of the ASGM sector. Lipsky (1980: 3) defined street-level bureaucrats as “public service workers who interact directly with citizens in the course of their jobs and have substantial discretion in the execution of their work.” The SLBs are a larger part of public activity at the local level and are therefore important actors as they exercise significant discretion over the criteria, categorisation and decisions of inclusion and exclusion of people in government programs. They also exercise authority over enforcing sanctions on non-complying citizens. Consequently, the SLBs are the real policy makers due to the decisions they make, their routines, and the tools they develop in trying to cope with uncertainties and work pressure. Therefore, their practices become the real policy as compared to written laws made by high-ranking administrators (Lipsky, 1980: xii).

Johannessen (2019), argues that Lipsky and other scholars building on his theory overemphasised the discretion of SLBs and neglected negotiation between the SLBs and their clients. To remedy this weakness, more attention should be paid to interactional dynamics of SLBs which acknowledges that they do not act alone in making ‘policies’ at the local level. Therefore, ‘street-level policy’ should be viewed as a product of ‘negotiated discretion’ where local public officials negotiate their decision making with their clients (Johannessen, 2019: 54). SLBs occupy a unique but challenging position which necessitates negotiation. On one hand they have considerable discretion and autonomy, yet on the other hand they have to work within ambiguous rules and settings (e.g., public health) where clients have legal rights to a service which cannot be explicitly denied, yet resources to provide that service may be limited (Johannessen, 2019).

Lipsky in his work also recognises the dilemma created by the working conditions of SLBs. The first challenge has to do with voluminous and ambiguous rules that are open to discretionary interpretation and application. Moreover, where rules and guidelines tend to be too elaborate, they may limit exploration of alternative solutions thereby making the application of rules too complicated to translate into applicable programs. The second challenge is that besides impartially applying rules, SLBs have to show humanity in some situations where they implement their rules (e.g., compassion and flexibility) (Lipsky, 1980: 15). Within this context, Johannessen (2019: 518) brings negotiation to the forefront by exploring “inter-individual negotiation” to assess how bureaucrats and clients negotiate access

to services and the broader conditions that shape these negotiations. The present research therefore incorporates this revised theory of street-level bureaucrats, combined with negotiated statehood towards an exploratory qualitative study of the organisation and governance of the ASGM sector at the local level in Gwanda and Matobo districts in Zimbabwe.

2.4 Corruption and Bribes as negotiation tools

In the context of the present study, corruption may be viewed as a tool of negotiation in the governance of gold mining. Corruption is defined as “the abuse of entrusted power for private gain” and may manifest in different forms including bribery, extortion, nepotism and favouritism (Transparency International, n.d.). According to Amundsen (2019: 5), “there is always a public servant or politician (holders of public power) involved” in facilitating corruption. Thus, corruption is viewed as a relationship between public-power holders and the non-public power holders (e.g., individual citizens, businesses, civil society) in which both parties seek some returns or gains from the misuse of powers by public-power holders. Corruption occurs at various levels of the governance system. Amundsen (2019) differentiates between political corruption which occurs at the highest level of the political system, and bureaucratic or administrative corruption which occurs at lower levels of governance where policies are implemented. Political corruption occurs when political decision makers (the president, cabinet ministers, high-level government officials and ruling political party leaders, as well as other high ranking civil servants) abuse their power for private gain. Bureaucratic or administrative corruption may be viewed as ‘everyday’ or ‘street-level’ corruption which is facilitated by civil servants at the lower levels of policy implementation and service delivery.

However, these two levels are dependent on each other and tend to be mutually reinforcing. For instance, political decision makers may facilitate lower-level corruption by creating policies that reduce the risks of sanctions and increase opportunities of corruption. Alternatively, high-level decision makers may normalise corruption by establishing predatory institutions and even demanding street-level bureaucrats to implement corrupt policies on their behalf. On the other hand, widespread street-level (bureaucratic) corruption tends to facilitate and support higher-level corruption. Street-level bureaucrats may indeed corrupt higher level decision makers out of loyalty (e.g., gifts to impress principals or identifying local-level gaps for corrupt activities) (Amundsen, 2019). Recognising these two levels of corruption, notwithstanding that they may overlap and mutually reinforce each other, may be helpful for

understanding the use of corruption (in this case; bribes, extortion, nepotism, and favouritism) as a negotiation tool at the local governance level.

Several studies consider corruption as a ‘wicked problem’ typical in mining and other extractive industries due to the specific nature of natural resources extraction and the resultant governance challenges (Chene, & Hodess, 2007; Keuleers, et al., 2009; O’Higgins, 2017). Several ‘unique’ characteristics of the extractive industry arguably make it more susceptible to corruption than other economic sectors. Firstly, the high commercial value of natural resources expands opportunities for ‘rents,’ especially for the ruling elites, but also for the local public officials to demand bribes and engage in other corrupt activities like misappropriation or plundering of resources. Secondly, the extractive industry is often characterised by complicated regulations and high levels of government control through requirements of special permits for access rights and trade. This results in various forms of corrupt activities including demand and payment of bribes to favour an application for a mining concession, issuance, or approval of permits, and to speed up bureaucratic processes or secure favourable contract conditions (Chene & Hodess, 2007). Besides, bribes may be used as a cost-cutting mechanism especially in the mining sector which involves large investment capital and financial risks.

Naturally, mining companies (and individual miners) have vested interest to maximize their profits and reduce costs to ensure returns on their capital, even if it means engaging in corrupt activities to minimise payments to the host governments (Chene & Hodess, 2007). However, in contexts where corruption is strongly embedded in the governance system, the extent to which corruption reduces costs of mining is debatable as systemic corruption may be more costly if it becomes an avenue of extortion. Keuleers, et al (2009: 659) provide a more precise list of conditions that facilitate corruption in the extractive industry, including:

- (1) lack of access rights, especially for the poor majority;
- (2) limited supply of natural resources leading to extreme scarcity (and competition);
- (3) remote location and difficult accessibility (of mining areas) and lack of transparency which lead to rampant corrupt behaviour;
- (4) too much discretionary powers of the government over natural resources, and oftentimes state monopoly over control and ownership of natural resources;
- (5) excessive discretionary powers of private actors over natural resources, (e.g., in remote areas where the state power/control is limited or when the state is ‘captured’ by interests of powerful private actors); and,
- (6) lack of market prices for some aspects of the natural resource sector (e.g., services and processing), which make

corruption more attractive as the true burden of corruption ends up being born by the general citizens, not the corrupt individuals.

The extent of corruption depends on the quality and capacity of the state institutions. According to O'Higgins (2017), in countries with weak institutional structures and governance systems, corruption and extractive sectors tend to be mutually reinforcing. Weak (governance) institutions refer to lack of stability in the predictability, consistency and durability of formal rules which are meant to guide social behaviour (Levitsky & Murillo, 2009). The enforcement of these rules in practice tends to be discretionary, leaving room for non-compliance and therefore may not be binding to all actors or at least not taken seriously by certain political actors. A key characteristic of weak institutions is the unexpected and dramatic change in rules and rule-making processes, which create uncertainty and mistrust in formal rules. Furthermore, the discretion of political actors often overrides formal rules as they not only select the strategies of applicable formal rules but may also pick other strategies outside the formal rules (Levitsky & Murillo, 2009: 116).

In the extractive industries, weak institutions allow rentier actors to exercise excessive discretion over natural resources while avoiding accountability due to the clandestine nature of corruption (Chene & Hodess, 2007). Additionally, there are low chances of detection of corruption in extractive industries, as a chain of middlemen are often involved in the value chain of processing and selling of minerals. Bribes are also more common where the state is not able to provide security to investments and in contexts with high political risks which force investors in extractive industries to resort to non-legal ways of protection including forming corrupt networks with powerful and influential actors (Chene & Hodess, 2007). Weak institutional capacity may also be in the form of insufficient knowledge and technical expertise within the state bureaucrats in charge of natural resource governance which eventually hinders both effective policy formulation and implementation. Consequently, the state may fail to get the full value of its natural resources. This contributes to a vicious cycle of poverty and severely affects prospects of development in resource-rich countries (Keuleers, at al., 2009).

2.5 Interaction between formal and informal institutions

Taken together, the perspectives of street-level bureaucracy and negotiated statehood indicate an interaction between formal and informal institutions. According to North (1990: 3), institutions are “the rules of the game in a society”, the “humanly devised constraints that shape human interaction”. Institutions can be formal (rules, laws) and informal (norms and

behavioural codes). The key function of institutions in a society is to structure incentives for human interactions and reduce uncertainty by enabling structured everyday life interactions (North, 1990). While it is often assumed that human behaviour is primarily structured by formal rules, Helmke and Levitsky (2004: 726) strongly argue that informal rules are equally, if not more, important since formal institutions tend to be strongly shaped by informal structures in “important and unexpected ways”. Whereas informal institutions are “socially shared rules, usually unwritten, created, communicated, and enforced outside the officially sanctioned channels,” the formal institutions are “written rules and procedures that are created, communicated, and enforced through officially sanctioned channels” (p. 727).

Helmke and Levitsky (2004) propose a typology of interactional relationship between formal- and informal institutions based on the effectiveness of formal institutions and the intended outcomes of informal institutions (table 1). In a context characterised by effective formal institutions, the informal institutions may either complement or accommodate formal institutions. A complementary relationship between formal and informal institutions occurs when informal institutions pursue the same goals as intended by formal institutions (convergent-effective) (p. 728). In contrast, accommodating informal institutions occur when actors disagree with the outcomes of formal rules, and have their own interests which they try to fulfil within the bounds of formal institutions (divergent-effective).

In cases where formal institutions are ineffective, interactions can be either substitutive or competing. Informal institutions may substitute formal ones in cases where actors seek to complement the goals of formal ineffective institutions (convergent-ineffective). On the contrary, competition occurs when informal rules are not systematically enforced and can be easily ignored or violated resulting in competing informal institutions whose outcomes are incompatible with formal rules (divergent-ineffective) (Helmke & Levitsky, 2004: 729). These interactions are summarised below.

Table 1. A typology of (in)formal institutional interactions (Helmke & Levitsky, 2004: 728)

Outcomes	Effective formal institutions	Ineffective formal institutions
Convergent	Complementary	Substitutive
Divergent	Accommodating	Competing

This typology provides additional ways of looking at the governance of the ASGM sector considering the role of both formal and informal institutions. The present research does not

claim to have sufficient ethnographic data to strictly apply Helmke and Levitsky's (2004) typology in the analysis of Zimbabwe's ASGM sector. Rather, within the limited data available, this typology provides a useful lens to understand the role of mining licences (formal institutions) in governing the prevailing informal mining practices at the local level. Through this framework, the present study takes an actor-oriented approach, premised on bottom-up analysis of governance while also acknowledging the broader political economic context under which these local institutions interact. The next chapter discusses the research methods employed in this study.

3. Research Methods

Since this research seeks to understand the key characteristic organisation, and perspectives on the local-level governance of the ASGM sector, qualitative research methods were used. The first step of the research included desktop research to understand the policies and regulations governing artisanal and small-scale mining in Zimbabwe. These included the relevant licensing requirements and regulations from the ministries of mines, environment, and local government (rural district councils). This was done in order to appreciate the official policies that are meant to inform mining governance practices at the local level. The second, and major component of this research was in-depth, semi-structured interviews with artisanal and small-scale gold miners and key stakeholders involved in the governance of the mining sector in Zimbabwe. The interviews were conducted with participants from Gwanda and Matobo districts in Matabeleland South Province, in Zimbabwe. There is a detailed section on the interviews below. Other important sources of information for this research were newspapers, statutory instruments, and secondary literature on mining in Zimbabwe. These data collection strategies informed each other and were applied in a non-linear way of moving back and forth between interviews and policy or literature research as new insights emerged.

3.1 The Study areas: Gwanda and Matobo Districts in Matabeleland South Province

The case study is based on data collected from Gwanda and Matobo districts in Matabeleland South Province, Zimbabwe. The province has seven administrative districts covering an area of 54,172 km², with a total population close to 700,000 (Figure 1). Gwanda is the provincial administrative capital, and the largest district hosting 17% of the provincial population while Matobo, the 3rd largest district has 14% of the provincial population (ZIMSTATS, 2012). The two districts fall within the broader socio-economic profile of the Matabeleland South Province. The population in this province is predominantly rural based (83%) and young (43% are below 15 years).

Artisanal and small-scale gold mining is one of the main economic activities alongside small-holder farming and cross-border trade and migration to South Africa and Botswana, countries which are closer to these districts (Dube, et al., 2016; Ndlovu, et al., 2020). According to the International Crisis Group (2020), Matabeleland South Province is the 4th largest gold producing province in Zimbabwe making 13% of the national gold output.

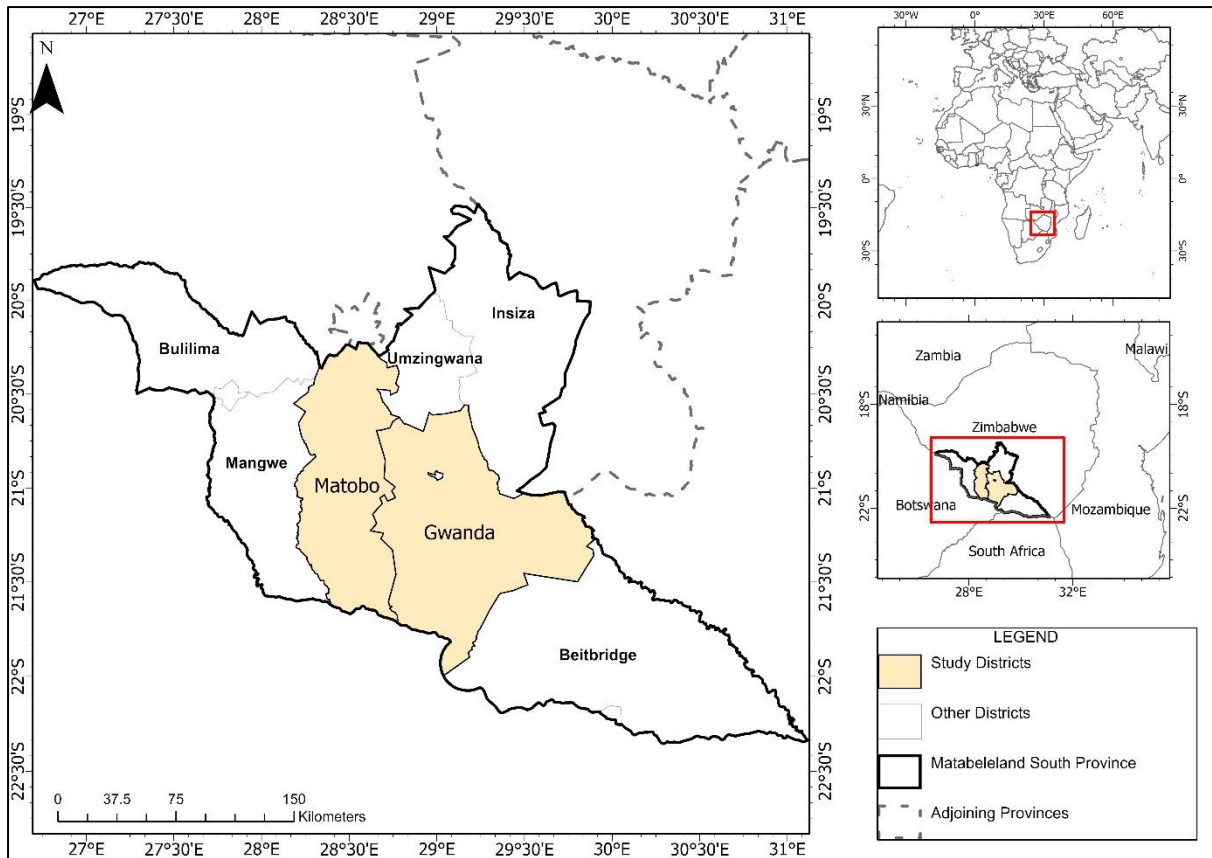


Figure 1. Map of the study area. Source: Author's construct

The province also lies in the dry region of the country which is vulnerable to very low rainfall, and constant droughts. Consequently, due to this geographical location and increased effects of climate change, the province heavily relies on humanitarian aid from the government and aid agencies (Ndlovu, et al., 2020). There is little literature on the governance of artisanal and small-scale gold mining sector in the districts and the province chosen for this study. Even newspaper reports on mining related issues like violence and illegal mining tend to cover other parts of the country, especially the Mashonaland East and West provinces, perhaps due to controversies of diamond mining (2006-2012) and recent machete violence in the mines. For these reasons, this case study provides fertile ground for a local-level based study.

3.2 Interview Sampling

Mining is increasingly a sensitive topic in Zimbabwe. Moreover, it is generally difficult to gain access to the artisanal and small-scale miners as I discovered during the research that most prefer to remain discrete about their activities and identities. I also did not have any prior experience of research in the mining sector and therefore did not have a readily available database of contacts. Consequently, I relied on the snow-ball interview sampling strategy whereby potential participants were identified through referrals from interviewed participants,

thereby expanding the participants' circle (King & Horrocks, 2010: 34). The first interviews (with a consultant from a mining college, a journalist, and a key informant) were therefore crucial for recommendations to more interview contacts. The key advantage of this strategy is that it helped to develop trust with participants and helped to boost the response rate.

The downside of this strategy is that it is prone to bias as the initial participants may recommend those who share their views on the phenomenon being researched, resulting in one-sided data (King & Horrocks, 2010). While acknowledging this possibility, I strongly believe that this was minimal in this research as the first three participants did not know each other and lived in different cities. Moreover, I also used other strategies for getting interview participants. A few participants were referred to me by fellow Zimbabwean students here at WUR, my former university colleagues and by sharing my research topic with relatives and friends based in Zimbabwe. Together, this formed part of the snowball sampling strategy which gave a diverse list of participants as shown in table 2.

3.3 Data Collection

In the period between 12 November 2020 and 20 March 2021, I conducted in-depth interviews with 32 participants (table 2). Participants were divided into two main groups: the key stakeholders and the artisanal and small-scale miners. The key stakeholders interviewed include regulatory authorities and local policy implementers in the mining sector, NGOs focusing on the governance of natural resources and the protection of environment in mining areas. Among the key stakeholders interviewed were also mining experts (a metallurgist and mining consultants) and key informants including a local journalist. These key stakeholders were interviewed based on their intimate knowledge and/or involvement in the governance of the ASGM sector at the local level.

Out of the total 32 participants, 16 were miners (both registered and unregistered) and their representatives (leaders of mining associations). The miners' cohort form a wide spectrum in terms of their experiences in mining and the way they organise their mining operations. The experience of the participants (miners) ranges from a year to 29 years of being involved in the gold mining sector. Some of the participants are licensed and have their own claims while others have neither licences nor mining claims. As it would become apparent in the findings chapter, this strengthens the findings of this research. Firstly, it gave deeper insights into the key characteristics of this sector. Secondly, despite this diversity of mining experiences, participants had shared experiences in their accounts of how this sector is governed.

Table 2. A summary of interview participants.

Participant category	Level / position (s)	Total participants
Environmental Management Agency (EMA)	Provincial level- [2] District level- [2]	4
Rural District Councils	District	3
NGOs	National [2] District /local- [2]	4
Experts: Mining/Environmental Consultants & Agric Ext Officer	National – [1] District – [2]	3
Key informant (s)	Provincial	1
Service Company (mining equipment)	National	1
ASGM Representatives	Zimbabwe Miners Federation (ZMF) Provincial & District	2
	Mining Association District & Local	2
ASGM miners	Local	12
Total		32

Due to the COVID-19 pandemic, it became unfeasible to travel to Zimbabwe for fieldwork research. During the study period, there was a series of national lockdowns and travel restrictions in Zimbabwe which made physical access to the mines and participants practically impossible. However, the mining sector was listed under essential work and exempted from these COVID-19 restrictive measures for “national economic interest.” This allowed mining companies and miners to continue working “under the COVID-19 guidelines” (Herald, 2020). With such measures which limited physical access to the mining fields for research, I conducted interviews remotely through information and communication technologies like WhatsApp, Zoom, and direct cell phone calls.

Participants were approached mainly via WhatsApp chats, and emails where possible before calling them directly using mobile phone. This was to ensure that they received the consent form (appendix, B). For cases where this was not practical, a voice note was sent in the local language (isiNdebele) explaining the study and the contents of the consent form. During the interview call, the researcher again summarised the study objectives and expressly requested

for consent to record the interviews. Out of the 32 interviews, only 3 were not recorded as the participants feared being recorded and asked the researcher to send someone to interview them in person. I was assisted by a local contact to do these 3 interviews in agreement with the participants. The recorded interviews were fully transcribed, verbatim as much as possible. On average, each interview record was an hour, although some went for more than that depending on how informative the participants were. For the 3 unrecorded interviews, the interviewer sent interview notes after which I asked further questions for clarity.

For the first two months, I mainly used WhatsApp calls, audios, and chats for the interviews while a very handful of participants, mainly the key stakeholders were reached via email for Zoom video conferencing interviews. It was difficult to reach out to ordinary miners using these online platforms, since many either lacked time, or had no access to reliable internet connection. It also seemed miners were suspicious of being contacted by a foreign (Dutch) WhatsApp number as some ignored my messages as soon as I informed them of my location. To avert these challenges, I then moved to use direct mobile cell phone calls, using a mobile application called Airtime Sharing. This App had two main advantages: it offered relatively lower rates for calls and generated a local (Zimbabwean) number. This increased the response rate, perhaps because of the less effort that was required from the miners and having a local number for calls. However, where possible, appointments and informed consent procedures were arranged via WhatsApp chats prior to the direct calls.

The interviews were semi-structured to allow participants to explain and describe their understanding of the key features of the ASGM sector and its governance. Moreover, the semi-structured interviews allowed the researcher to probe responses and develop a better understanding of this topic. Using information gathered from the literature, I drafted an interview guide with open-ended questions which worked as a 'standard script' that was used in all the interviews. Questions were divided into two parts. The first set of questions was for key stakeholders including mining regulating authorities, non-state actors like NGOs and lobby groups involved in mining and environmental advocacy work, as well as experts and consultants in the mining industry. The second set of questions was for the miners themselves. As shown in the interview guide (appendix C), in both sets of questions, there were standard questions that allowed for systematic processing and analysis of the data. Overall, the interview sought to understand the most typical characteristics (practices and organisation) of the ASGM sector in the study areas, the licensing processes, the governing actors, the role of licences, and the experiences and perceptions of the miners of the governance of this sector. Additionally,

the questions also probed the regulating authorities' governing tools and strategies, exploring the policy as practised at the local level and how formality interacts with informality in mining policy implementation.

3.4 Additional information from Participants

During the interviews participants (key stakeholders) were asked to refer the researcher to their reference policies, tools, or guidelines they used in governing the ASM sector, especially in cases where the policies were not clear. Some sent documents while some requested for a follow-up call to verbally clarify information they needed to verify from their documents, for example on issues related to license fees and categorisation of miners. In the case of miners, when they realised that they could not fully describe or explain some things to me, they sent pictures and videos using WhatsApp. This data complemented the interviews that had already been conducted with the participants concerned.

3.5 Netnography: An Ethical Dilemma

While doing pilot interviews, I got contacts who were administrators of two WhatsApp groups for miners. They added me to these groups as they said it included miners and different stakeholders involved in mining. One of the groups had 257 participants while the other one had 97 participants. I was informed that the groups consisted of a variety of actors, including mining engineers, mining service providers, licensed miners as well as unlicensed miners seeking information on how to formalize their activities. I asked a key informant how members were added to these groups, and he said it was through networks in the mining sector that miners referred each other to these groups.

I had intended to observe and follow the interactions in these groups using a netnographic research method to collect data to complement interviews. According to Whitmer (2017), netnography is a term which was coined by Robert Kozinets in 1997 and describes a method of studying human interactions in new communication technologies and social media. It is a form of ethnography but is adapted for online research to understand human interactions in real time and natural communication situations which occur through technologically mediated contexts (Whitmer, 2017). However, these groups proved to be less active, except for advertisements for mining equipment or products and a few mining jobs offers or requests. The groups seemed too formal for a natural social media interaction platform as participants mainly used English instead of local languages. The manner of interactions seemed very mechanical and superficial.

Sometime in mid-February 2021, an announcement with a link for a new WhatsApp group “to discuss mining issues” with the Minister of Mines and the executive of the ZMF was sent to the two groups that I was already in. It was announced that this was going to be the platform through which the miners will regularly interact with the Minister. However, the new group was created by a new administrator unknown to the researcher. I followed the link and joined the new group. This group was lively, and miners were already asking questions and submitting their complaints about the challenges they were facing. After reflecting on the ethics of professional research, I consulted a lecturer about this issue. He advised that unless explicitly given permission and obtaining informed consent from participants in the group, it was unethical to collect and use the data from these WhatsApp groups. So, I immediately left the groups.

Efforts to get express and official permission to re-join the new WhatsApp group failed as the group administrator kept postponing the appointment for the call to discuss this issue. Therefore, the data of this attempted netnographic research is not included in this thesis report. The existence of these informal communication structures that directly link miners with senior governing authorities suggests that miners are expanding their negotiation platforms outside the local level authorities. Follow-up research could explore the dynamics of these informal networks in the analysis of the local-level organisation and governance of the ASGM sector.

3.6 Data Processing and Analysis

Towards the end of the data collection period, I realised that some names were recommended by multiple participants, mainly due to their supposedly key role or importance in the mining sector. I had already interviewed the said participants and noted that there was no longer any new information coming from the interviews. I saw this as a sign of data saturation and concluded the data collection stage. Despite reaching out to many potential participants, about half still did not respond. Some regulating authorities cited COVID-19 and working from home as a hindrance for obtaining authorisation from their superiors for interviews, and therefore were not able to participate in the interviews. Some preferred face to face interviews, which the researcher was not able to conduct.

During the interview, I wrote notes of the key issues raised by the participant. These were revisited during the transcription process in which I made preliminary themes (codes). All the transcripts were uploaded and then processed using ATLAS.ti, a qualitative data analysis software. The handwritten notes were used for creating the initial codes, and a few were added

as the data was being processed. I re-read all the transcripts to confirm if no other themes emerged. The key advantage of using ATLAS.ti was that it helped organise data in such a way that findings could be easily grouped to ensure that instead of cherry-picking transcripts for analysis, all the transcripts were rather processed systematically. Furthermore, the data from the transcripts was complemented by handwritten notes on the pictures and videos sent by the participants as additional information. Participants were given pseudo initials to protect their identity. The positions or job titles of regulatory authority participants were also not included in this report to keep participants anonymous.

In the upcoming chapter, I contextualise the governance of the ASGM sector in Zimbabwe by discussing the complex mining regulation environment, the precarious position of the miners and the political economy of the gold mining sector.

4. Background: Regulation of Mining in Zimbabwe

This chapter gives a background to contextualise the regulation of the ASGM sector in Zimbabwe. The chapter starts by showing the importance of gold mining and the role played by artisanal and small-scale gold miners (ASGM) in the country's economy. This is followed by a discussion of the key regulations and state departments responsible for governing this sector. The chapter then discusses the complex policy making environment illustrated by examples from recent controversies in the ASGM sector as reported by the press.

4.1 Gold Mining and the ASM sector

Like many African countries, Zimbabwe is also endowed with a diversity of natural resources which are key to its economy. The main metals and minerals found in Zimbabwe are, coal, gold, diamonds, ferroalloys, nickel, asbestos, iron and steel, copper, tin and graphite. Gold remains the most important mineral produced in Zimbabwe (IBP, 2015: 90). In 2018, Zimbabwe's revenues mainly came from gold (40%), Platinum (17%), Palladium (11%), Chrome (10%), Diamond (9%), Nickel (5%) and coal (5%) while other minerals contributed 3% (Chamber of Mines, 2019: 10). Data from the World Bank shows that between 1970 and 2017, Zimbabwe's mineral rents as a percentage of GDP fluctuated between less than 1% to 7%. In 2017, mineral rents made up to 3.5% of Zimbabwe's GDP (World Bank, 2018). It is estimated that mineral resources account for 40% of Zimbabwe's annual exports (IBP, 2015). Overall, the mining industry showed a steady growth from 8.5% in 2017 to 13% in 2018 despite the underperformance of other economic sectors in the country (Chamber of Mines, 2019).

As indicated above, gold contributes the highest percentage of the country's annual revenues. Moreover, it is estimated that the artisanal and Small-scale gold mining (ASGM) sector contributes 60% of the country's gold revenues. For instance, gold output increased from 26.5 tons in 2017 to 35.1 tons in 2018 with registered gold buyers from the ASGM sector contributing 62% of this output. Large-scale mining companies output during the same period was only 33% of the total gold produced (Chamber of Mines, 2019: 11). Most activities in gold mining are informal, and therefore it is highly possible that large amounts of gold production in the ASGM sector are unaccounted for or massively underestimated (UNIDO, 2018). The International Crisis Group (2020: 6) estimates that the country loses US\$ 1.5 million worth of gold each year mainly due to gold smuggling in the ASGM sector. Furthermore, due to its informal nature, it is difficult to know the exact number of miners involved in the ASGM sector. Thus, estimates of the numbers of gold miners involved in Zimbabwe's ASGM sector vary,

ranging from 25.000 to 500.000 (Mamowa, 2013), whereas other scholars put the number above a million (Malinga, 2018). Nonetheless, Mawowa (2013: 927) argues that Zimbabwe has one of the world's largest artisanal and small-scale miners. Indeed, other studies of gold mining in Zimbabwe have confirmed the exponential growth of gold production which is now dominated by artisanal and small-scale miners (Mamowa, 2013; Malinga, 2018; UNIDO, 2018).

The country's leadership has placed gold mining as a crucial sector in its ambitious goal of reaching a US\$ 12 billion mining sector by 2023. Gold mining is projected to contribute a third of that US\$ 12 billion target which is envisioned to eventually propel a rapid economic growth to take Zimbabwe to a middle-income economy by 2030 (Machivenyika, 2019). The implicit message of this vision is that the ASGM sector is going to be crucial in propelling the country towards an ambitious economic revival given the key role of the ASGM sector in Zimbabwe's economy. It is therefore important to contextualise the regulatory environment and the political economy of governing the ASGM sector.

4.2 Regulation of the mining (ASGM) sector in Zimbabwe

Mining in Zimbabwe is directly and indirectly regulated by a number of laws and government agencies depending on the type of land tenure in which mining operations occur and the governance issues that arise. The following sections discuss a few that directly affect the ASGM sector and are most relevant for this study. Appendix D gives an overview of the broader government agencies and policies that, although not directly governing the ASGM sector, might directly impact their mining operations.

(a) Acquisition of Mining Rights: The Mines and Minerals Act (chapter 21:05)

The principal legislation governing mining in Zimbabwe is the Mines and Minerals Act (chapter 21:05, hereafter the Mines Act) which is administered by the Ministry of Mines and Mining Development. The Mines Act came into effect in 1961 and stipulates procedures and requirements for acquiring mining rights, the types of lands that are open for mining, and the authority of designating licensing fees among other issues. The Mines Act also places all minerals and land under the authority of the President, who holds the final say on issuing of licenses for special land areas including private lands and protected areas, as well as the approval of exclusive prospective orders (discussed later). According to the Mines Act any person aged 18 and above provided that they are a "permanent resident of Zimbabwe or any

duly appointed agent of such a person” qualifies to be given mining rights by the Ministry of Mines (Mines Act 1961, s. 20 & 24).

Before carrying out mining activities, miners should have a prospecting license which allows them to search and identify the mineral they wish to mine. The prospecting license is valid for two years and specifies the area in which the license holder can prospect. Once the prospecting license holder has identified a mineral deposit, they have to appoint an agent/approved pegger to physically peg and mark the identified area by inserting a public notice to alert other prospectors. Miners have to pay the services of the peggers as these are mostly private engineers. A maximum of 10 claims (10 Hectares) can be pegged per prospecting license.

After pegging, an application to register the claim is submitted to the Provincial offices of the Ministry of Mines for assessment by the Provincial Mining director who may grant or refuse to approve the application. Upon a successful decision, a mining claim certificate, renewable every year, is issued allowing the miner to start operations (Ministry of Mines, n.d.). The Mines Act gives priority to mining rights over other land rights in resolution of claim disputes (e.g., section 177). For this reason, the prospective miner does not require the consent of the landowner, unless when prospecting on a farm smaller than 100 hectares. Even then, the prospective miner is only required to inform the landowner in writing (Ministry of Mines, n.d.). Some scholars have argued that the Mines Act “is the most powerful law” in Zimbabwe as it gives priority to mining interests over any other land use rights. This way, mining rights take precedence over property rights of landowners and override other institutions governing natural resources in the country (Spiegel, 2009; Dube et, al. 2016).

During the operational stages, miners are also subject to inspections by the Ministry of Mines based on production and capital expenditure of their projects. Failure to fulfil inspection requirements and obtain an inspection certificate may result in cancellation of the mining certificate. Fees for all these mining certificates are periodically revised and gazetted through statutory instruments by the Minister of Mines. A major critique against the Mines Act is that it refers to miners in general and does not provide for a distinction between large-scale and small-scale operators (Spiegel, 2009, Murombo, 2013). It is also deemed as too complicated for the understanding of ASGM operators, most of whom are illiterate and not well educated to comprehend the law (Dube, et al, 2016).

(b) Environmental Certificates: The Environmental Management Act (chapter 20:27)

Another key legal instrument that directly governs the ASGM sector is the Environmental Management Act (chapter 20: 27) which is administered by the Environmental Management Agency (EMA). The Act was promulgated in 2002 while EMA was established in 2007. The first schedule of this Act designates mining projects as requiring environmental impact assessments (EIAs) before commencing operation due to the potential environmental hazards that arise from mining activities. Therefore, the law requires miners to obtain an environmental clearance certificate which is valid for two years, subject to fulfilment of certain environmental protection standards and payment of annual fees. According to the Act, miners are also supposed to rehabilitate the environment after their operations and also fence their claims if they are within grazing lands to protect livestock. Just like the Mines Act, the environmental Act also does not distinguish large-scale from small-scale operations. However, during interviews, it emerged that EMA has since relaxed the environmental assessment requirements for the ASGM operators by requiring them to only do Environmental Management Plans (EMPs) which are simple and less costly compared to the laborious and expensive EIA processes. Some scholars have observed that EMA faces several hurdles in implementing the law. The major challenge emanates from being under-funded, understaffed, as well as lacking key resources like vehicles which limit mobility of inspectors and therefore limit the organisation's ability to efficiently implement its mandate at the local level (Mapira 2017).

(c) Land user fees: The Rural District Councils

The mining areas selected for this study fall under the jurisdiction of local authorities (Town Councils and Rural District Councils (RDCs)). Only two of the interview participants were working in 'special grant' areas regulated by the Parks and Wildlife Act (20: 14) which is administered by the Parks and Wildlife Management Authority. According to the Mines Act (sections 35, 291 and 301), special grant areas are special licenses issued for mining in areas that are ordinarily reserved against prospection or pegging. The president has the final authority to grant or refuse these applications. Special grant areas include mining activities in protected areas like national parks and designated areas reserved according to the Mines Act. For analytical purpose and relevance, this section discusses the role of RDCs as local governing authorities and administrators of town and community lands.

The Mines Act regulates the involvement of the local authorities in the governance of mining, especially where mining activities occur within town and community lands. Section 309 of the

Act gives local authorities “full power and authority to make and enforce regulations and by-laws” to efficiently address sanitary issues, prevent land degradation and mitigate any harm that mining activities may cause within the local jurisdiction. For these purposes, the local authorities are also allowed to carry out inspections of the mining activities within their jurisdictions. Ironically, the same section curtails the powers of local authorities to enact and enforce by-laws by stating that, “provided that no such regulation or by-law shall be of any force or effect until approved by the Minister (of Mines) and duly published in statutory instrument”.

Similarly, section 255 of the Mines Act provides for payment of fees to local authorities as may be gazetted through a Statutory Instrument by the Minister of Mines, in consultation with the Ministers of Finance and Local Governance and any other organisations which the Minister (of Mines) “considers as representing the interests of miners”. The local authorities are also important as the law requires their consent for pegging of mining claims on town and community lands (villages). Besides the provisions from the Mines Act, the local authorities also have a separate legal instrument in the form of the Rural District Councils Act (29: 13) from which they derive their key authority over town and community lands. However, in practice, as Spiegel (2015) has noted, the role of the RDCs in mining is determined by the Ministry of Mines. Consequently, when it suits the central government, the RDCs are given room to be involved in mining, whereas when the government decides to re-centralise power as happened in 2006, the RDCs are stripped of any meaningful authority over governing the mining sector (Spiegel, 2015).

Nonetheless, a study by Dube, et al., (2016: 1090) notes that despite their limited powers, local authorities still extract fees from miners (ASGM operators) while they “turn a blind eye on their (‘illegal’) mining operations.” Given this complicated set up, there must be ways in which local authorities legitimise their fees and, in this study, I argue that this is partially through negotiating with the miners and other government departments.

(d) Trading in Gold: The key role of the Reserve Bank of Zimbabwe

Trading in gold, whether by large-scale or ASGM operators is governed by the Gold Act (21: 03) which restricts the possession of gold (be it natural or refined) to only authorised persons. Thus, the Act provides for legal possession and trade of gold through three licenses: a gold dealing license, a gold recovery works license and a gold assaying license (Dube, et al., 2016). However, prohibitive costs and inadequate information about the procedures of obtaining these

licences prevent many ASGM miners from obtaining these licenses. The Reserve Bank of Zimbabwe (RBZ) is a key institution in governing the trade in gold as it is the sole gold buyer through its subsidiary entity, the Fidelity Printers and Refiners (FPR). The FPR has gold buying agencies across the country. According to the International Crisis Group (2020), the RBZ controls the purchase of gold as it sets the local gold buying prices and provides the money for paying miners. The miners are partially paid in foreign currency (US Dollars) and local Zimbabwean quasi-currency. Meanwhile, the major challenges are that the RBZ often delays processing payments and pays prices that are way below the world prices (International Crisis Group, 2020). Due to inflation, the value of the local currency in exchange of the US dollar is unstable and its true value gets eroded before the miners get paid. Together with difficulties in accessing mining and gold dealing licenses, miners in the ASGM sector face immense barriers which may encourage illicit gold trade and smuggling, resulting in reduced gold revenue for the government (Dube, et al 2016; International Crisis Group, 2020).

(e) Other government agencies (indirectly) governing the ASGM sector

There are other government agencies which may be involved in governing the ASGM sector based on specific issues that are governed by separate legislations. For instance, the police may be involved in maintaining order and security and even implementing operations against “illegal” miners (Dube, et al., 2016). Meanwhile, if mining activities affect forest conservation, the governance jurisdiction then falls under the Forestry Commission (established in 1954), whose role is mandated by the Forest Act (19: 05) of 1996 which first came into law in 1949 (Mapira, 2017). The operations of the ASGM sector may be affected by other government departments addressing a variety of issues ranging from water pollution, health and safety of miners, veld fires, the use of dangerous chemicals and mining in special grant zones. These issues may either be regulated independently or jointly by several departments in line with the relevant legislations as summarised in appendix D.

4.3 A complex regulatory and governance environment

The governance of the ASGM sector in Zimbabwe remains guided by colonial legal frameworks which were designed for governing extraction of minerals by large-scale companies. Consequently, there is no law that provides for artisanal and small-scale (gold) mining as a stand-alone sector as the current laws do not distinguish large-scale from small-scale mining. At best, regulations for the ASGM sector are pronounced now and then, through statutory instruments (which can be easily annulled) by relevant government Ministries. Even

so, the current policies are silent on artisanal and small-scale miners (Dube, et al., 2016). In fact, scholars observe that Zimbabwean mining policies are still entrenched on the exploitative colonial laws which were designed to maximise extraction of resources, built on a history of political conquest over ownership and control of resources (Murombo, 2013; Spiegel, 2009; Hollaway, 1997). Moreover, formal mining during the colonial era largely excluded black natives from the economy as it favoured settler-owned or foreign mining companies. Although informal mining existed in the colonial era, it was not as widespread as it is today. The reason for this pattern is that colonial policies forced Africans into wage labour in other economic sectors (e.g., manufacturing and agriculture) and restricted small-scale mining to white settlers. Thus, there was minimal mining by a few Africans who still engaged in traditional riverbank gold panning (Mawowa, 2013).

In the post-independence era, African governments face immense pressure from different actors: local, regional, and international non-state actors; to implement mining policy reforms that incorporate principles of good governance, transparency, and accountability. Along these principles, there is a growing emphasis on local participation in economic development from mining activities as well as environmental and health protection in the governance of the mining sector (Nalule, 2020). Meanwhile, African states continue to seek foreign investments in the mining sector, and want to extract revenues from mining (taxes etc. This may sometimes limit local participation in mining activities. It is argued that in the process of transforming colonial mining laws and incorporating new issues into the governance of mining, the post-colonial African states have sometimes created complicated mining policies (Murombo, 2016; Nalule, 2020). It is in such a context of presumably outdated laws and diverse governance expectations that the theories of negotiated statehood and street-level bureaucracy become more relevant for the present study since it may help us to understand the dilemmas faced by local-level policy implementers and how they negotiate governance with the miners at the local level.

Despite a strong colonial influence, scholars note that the post-colonial government in Zimbabwe has tried to accommodate and encourage mining activities of the ASGM sector, albeit with ad hoc and inconsistent policies. According to Spiegel (2009), in the early 1990s crucial and 'progressive' steps were taken by the Zimbabwean government to recognise and support the indigenous small-scale miners. During that period, several guidelines (e.g., the 1993 'Harare Guidelines on Small-scale mining') supported by international donors were geared towards addressing poverty and livelihoods through empowering small-scale miners.

Another key policy concerning the ASGM sector was the legalisation and regulation of alluvial mining in 1991 which allowed gold panning along streams and thereby included ASGM operators in national development planning (Zvarivadza, 2018). A key element of these regulations was the decentralisation of the governance of the ASGM sector as the local authorities had the powers to regulate and issue licenses for alluvial gold panning. These regulations have since been outlawed as from 2014 due to environmental hazards arising from such mining operations. Although the current laws ban alluvial gold mining, artisanal miners reportedly continue to find their ways of illegally mining along rivers and streams (Zvarivadza, 2018).

Similar objectives of ‘empowering’ indigenous miners could be attributed to partial ‘nationalisation’ of mineral resources through the Indigenisation and Empowerment Act of 2008. The implementation of the Act was controversial as it tended to be implemented along patrimonial and political lines favouring the ruling political party elites or those connected to them (Kabonga & Marime, 2017). Despite its flaws, the indigenisation policy arguably encouraged more local citizens to venture into the mining industry as it required foreign companies to cede 51% of their shares to the ‘indigenous’ citizens (Murombo, 2013). However, the ‘progressive’ ASGM empowerment policies of the early 1990s were drastically reversed between 2006 and 2008 when the government criminalised artisanal mining and therefore launched a violent crackdown on miners leaving many, including licensed small-scale miners jobless (Spiegel, 2015).

The crackdown on ASGM operators continues to resurface whenever the central government faces threats to its power, especially during economic downturns and election periods when the government rigidly controls mining (Spiegel, 2015). Often dubbed *Chikorokoza Ngachipere* (‘End illegal mining’), such operations occurred as recent as in 2020. The last operation was carried out in the pretext of “restoring sanity” in the ASGM sector by “weeding out ‘illegal’ gold miners and machete wielding ‘criminal’ gangs who had become a menace” in the mining sector (Musiiwa, 2020). In the name of creating law and order, the state occasionally blames miners for environmental and economic problems and targets them through arrests. In this regard, in times of economic instability, political elites can use ‘formalization’ policies as an excuse to “consolidate their power rather than to distribute ‘development’ opportunities in rural districts” (Spiegel, 2015: 544). By resorting to coercive measures of controlling the ASGM sector, the state is accused of failing to address the regulatory gaps and tactics that inhibit

formalisation. This arguably aggravates the economic and environmental problems associated with small-scale mining activities (Spiegel, 2015).

Kabonga and Marime (2017) emphasise that between 2000 and 2015, Zimbabwe's development policies have largely been reactionary as they were formulated to address (perceived) political threats rather than genuinely seeking to improve people's living conditions. National policies, including the fast-track land redistribution programs, the quasi-fiscal policies and promises of creating million jobs have largely been populist "political gimmicks and grand electioneering strategies" drawn from ZANU-PF, the ruling party's election manifestos. As a result, Zimbabwe's policy environment has been negatively tainted with "contradictions, ambivalence and contestations" (Kabonga & Marime, 2017: 7). In 2017, the current President of Zimbabwe, Mnangagwa, came into power promising that "Zimbabwe is Open for Business" in a bid to attract foreign direct investment and seek good relations with Western countries. He has also promised to reverse the land reform policy of 2000 by promising to give back land to former white farmers as well as to compensate them for the losses they suffered under the land reform program (BBC News, 2020).

Meanwhile, the mining sector is earmarked as a crucial catalyst for economic recovery with the government targeting a 12 billion USD mining industry by 2023 (Herald, 2019). It is not yet clear how the ASGM sector will be affected by these new policy pronouncements. According to Mugauri (2019), Zimbabwe still ranks poorly in the protection of property rights indicators and suffers from an unstable regulatory environment making it difficult for potential investors to trust the government. Ultimately, the ASGM miners operate under within a precarious, insecure, and highly contentious policy environment where they lack requisite protection under the present laws. It is therefore crucial to revisit the governance of the ASGM sector in Zimbabwe in the context of high hopes that the mining sector will save the country by rapidly reviving its economy and propelling it to a middle-income country by 2030.

Overall, given the complicated policy environment at the national level, the present study argues that negotiated governance and street-level bureaucracy frameworks provide a fresh lens of looking at how miners and local governing authorities 'negotiate' their way out at the local/policy implementation level.

4.4 Economic Challenges and the Rise of an Informal Economy

The exponential growth of the ASM sector should be contextualised within the broader economic developments which are interconnected to the historical and prevailing political and

social conditions in Zimbabwe. To begin with, Hollaway (1997) observes that prior to Zimbabwe's independence (April 1980), few black Zimbabweans were involved in mining. This was largely due to lack of opportunities to acquire mining skills and capital. More importantly, during the early years after independence black Zimbabweans generally shunned mining, hence it was mostly done by (poor) immigrants from Mozambique and Malawi. Nonetheless, mining in Zimbabwe was largely influenced by colonial laws that aimed at massive extraction of "whatever was economic to mine" (Hollaway, 1997:28). While Hollaway (1997) insists that little has changed in the laws governing the country's mining sector, it can also be argued that there are new economic developments which have further shaped the ASGM sector. Factors such as climate change-induced droughts and poor macro-economic policies have resulted in continuous economic decline and massive job losses leading to an unprecedented increase of artisanal and small-scale gold miners (Malinga, 2018).

Since the early 2000s, Zimbabwe has been experiencing a continuous economic decline which resulted in the 2006-2008 hyperinflation period. During this period, the annual inflation rate which had been previously around 100%, dramatically rose to 1500% (McIndoe-Calder, et al. 2019:1). Moreover, Zimbabwe's development indicators were all negative due to hyperinflation (Mawowa, 2013). Hyperinflation had adverse knock-on effects on individuals, household incomes, businesses, and national level economic structure. Individuals and households were driven into poverty and food insecurity, due to massive loss of jobs and crumbling agricultural sector. At the national level, there were high levels of economic inefficiencies and drastic declines in public services, especially health and education (McIndoe-Calder, et al. 2019).

The economy of Zimbabwe is still in shambles due to several factors. These factors include an increasingly autocratic leadership, controversial land redistribution policies which dispossessed commercial farmers, populist indigenisation policies which gave 51% of shares in foreign owned companies to black Zimbabweans (even in the mining sector) and lack of foreign investment (Malinga, 2018; Jones, 2010). Although the country has recovered from the hyperinflation period, it is yet to record any significant economic development. Recent figures show that inflation and extreme poverty are on the rise again. The World Bank (2021) reports that almost half of Zimbabweans (7.9 million), majority who are based in rural areas, live in extreme poverty as their income is less than US\$1.90 per day.

Climate change is believed to have worsened the country's economy as severe droughts and Cyclone Idai (of 2019) have led to a major decline in the performance of the agricultural sector which most people rely on. Furthermore, it is estimated that the COVID-19 pandemic itself increased the number of people living in extreme poverty in Zimbabwe by 1.3 million (World Bank, 2021). Meanwhile, annual inflation rose from 5.4 % in 2018 to 230% in July 2019, characterised by 319% increase in food prices and 194% inflation in non-consumables (World Bank, 2019). Moreover, due to persistent poor rainfall, the country has been hit by a drought which has left half of Zimbabwe's population (8 million people) in dire need of food (WFP, 2019).

For the past two decades, Zimbabwe has experienced deterioration which has pushed many people to the margins. Consequently, many have turned to the informal economy (including informal gold mining) to make a living. Informal economic activities have become so pervasive that some scholars have mockingly termed Zimbabwe a "nation of vendors" (Mlambo, 2017), or a "survivalist nation" where people use all available means to sustain themselves (Jones, 2010). Jones's paper argues that everyday livelihood practices of Zimbabweans, largely characterised by taking shortcuts to dodge formalities and exploitation of available resources, has led to a radically new culture. These practices have reoriented the economy culminating into a "generalised culture of evasion of social institutions (cultural norms and hierarchies), state institutions, bureaucracy, and the law (Jones, 2010: 287)." Although Jones (2010) applied his analysis to the general economic activities like selling second-hand clothes, dealing in foreign currency, selling tomatoes in the streets and taking bribes, the same logic can be applied as background information to guide my research on challenges of formalising the ASGM sector in Zimbabwe.

It is not surprising that many have resorted to informal mining for livelihood. Despite the economic turbulent that Zimbabwe has faced, the mining sector remains resilient and provides revenues for both the state and ordinary citizens (Murombo, 2016; Malinga, 2018). According to Malinga (2018), Zimbabwe has over the years shifted from depending on agriculture (which has always been its main source of economic growth) to concentrate on extracting mineral resources in the hope of reviving the economy. As a result, the mining industry has been flooded by informal operators including unregistered artisanal miners (*makorokozas*) and gold buyers. As the formal sources of income (e.g., formal employment) and the agricultural sector continue to decline, the mining sector has become the most viable source of income, especially for poor people in rural areas. This development brings challenges of formally governing the

mining sector, given the general informal economic practices in the country. As Jones (2010: 285) observes, Zimbabwe's economic disaster is an "opportunity boom" for a few people who have access to powerful political actors. It has resulted in "widespread corruption and patrimonialism" whereby one has to be connected to the centres of power, especially "the various arms of government" in order to survive (Ibid.).

Similarly, Maringira and Masiya (2016) introduce a concept of the "goat mentality" to analyse the culture of looting diamonds which were discovered in Chiadzwa mines in Eastern parts of Zimbabwe in 2006. The metaphorical use of the "goat mentality" emanates from a local saying in Zimbabwe which loosely translates to mean that when a goat is tied to a certain place, it eats whatever is around as much as the rope allows it to stretch. In this case, those in the security sector (especially the police and the military) who were tasked with 'protecting' diamond fields from being depleted by informal or illegal miners, ended up facilitating the looting themselves. The authors thus argue it was due to a mentality (culture) of greediness, that the security agencies and those in proximity to power together with company executives deprived the state of the much-needed revenues by engaging in "opaque alluvial diamond mining" and in the process "amassing huge personal wealth" (Maringira & Masiya, 2016: 369). Part of these opaque activities included abuse of power by state security agents to organise illegal artisanal mining activities as well as influencing the allocation of mining licenses to facilitate personal wealth (Ibid.).

It is clear from this brief review that the Weberian state (unitary state) approach is limited in the understanding of the mining sector in Zimbabwe. This is because there seems to be diverging interest groups within the 'state' and its bureaucracy which further challenges the formalisation of the ASGM sector. It seems informality serves some state personnel (e.g., the security sector) in pursuing their individual interests. Thus, a combination of factors, including matters of livelihood (poverty) and competition for power and wealth shape the ASGM sector. Indeed, literature identifies the ASGM sector as mainly characterised by a "protection" economy which encompasses "violence, greed, corruption, looting, smuggling, illegal trading, and politics of securing illicit personal gains" (UNIDO, 2018: 1; Malinga, 2018). These are informal or the unwritten rules that supposedly characterise the ASGM sector. Yet, in a context where there are also formal rules supposed to govern mining, it is important to try and understand how actors at the local level negotiate formal rules in a largely informal sector. It is within this complicated picture of the ASGM sector that perspectives of negotiated governance and street-level bureaucracy may be helpful in exploring the governance of this

sector at a local level. This should bring some insights that we miss if we concentrate on explaining this sector from a state-centric lens.

4.5 Recent Controversies in the mining (ASGM) sector

The ASGM sector in Zimbabwe has recently been making headlines for various controversies including high-profile gold smuggling and violence. In October 2020 Ms Henrietta Rushwaya, the president of the Zimbabwe Miners Federation (ZMF), an association that represents the ASGM sector, was intercepted at an airport in Harare while allegedly trying to smuggle 6kg of gold (worth £280,000) to Dubai. News reports claim that she is related to the ruling first family and warn that this could indicate a systematic, and state-run smuggling syndicate used to raise illicit funds for the governing regime (The Times, 2020). Ordinarily illegal possession of gold is heavily punished in Zimbabwe. In this case however, Rushwaya continues to preside over the ASGM sector promising to “restore faith and confidence” in the sector “which is the beacon of the country” (Zimlive, 2021). This case raises concerns about the country’s governing institutions and makes the use of formal rules in the mining sector questionable.

Another controversial issue in the ASGM sector is the violence by machete wielding gangs who have been troublesome since 2018, especially in mineral rich areas in Mashonaland Central province. These gangs, popularly known as *Mashurugwi* are accused of committing various crimes including violence, robberies targeting cash, gold and ore holders in the process terrorizing mining communities (Mkodzongi, 2020). The root causes of the rise of these violent gangs are not yet fully known although some are speculating that they could be fighting proxy wars on behalf of elite politicians over access to mines (Tinh, 2020). The government has been reluctant or slow in tackling these gangs, further raising questions as to whether they are pawn of state elites.

From a scholarly view, Mkodzongi (2020) argues that the rise of *Mashurugwi* should not be viewed merely as lawlessness, but an indication of “protest against elite capture of resources”. Using ethnographic data gathered from artisanal miners across five different mining areas in the Mashonaland Central Province, the author argues that the violent gangs are a symbol of “an ongoing struggle between artisanal miners and politically connected individuals” over access to mineral resources. As the macro-economic conditions in the country continue to deteriorate, most unemployed youths are being pushed into informal mining, which increases competition over scarce mineral resources, thereby triggering violent clashes. The state interventions of evicting unregistered miners using the police and other security organs has apparently

worsened the situation as in some cases the security authorities just replaced the evicted groups with their own syndicates. In this context, miners denied access to mines are actively organising and fighting against police brutality and elite capture of resources (Mkodzongi, 2020).

A non-governmental organisation working to promote the rights of ASGM miners, PACT also argues that the chief causes of mining-related violence is the continuous difficulties of accessing mineral rights and lack of clear policies to define mining boundaries or legitimate claims to mining land ownership. These loopholes in regulating access to mining rights have caused conflicts not only among miners, but also between miners and other land users like farmers (PACT, 2020). Some newspapers report growing conflicts between farmers and miners mainly due to the outdated legislations and legal frameworks guiding mining activities. For instance, Zimbabwe regulates ASGM mining activities using the Mines and Minerals Act, which was enacted in 1961, before the independence (1980) era. This colonial Act prescribes that mining supersedes all other land uses (including farming). Consequently, issues of environmental degradation, eviction of farmers or destruction of their grazing lands by miners, including illegal miners, becomes secondary as long as mining interests are protected (Nyoni, 2020; Moyo & Chinembiri, 2019).

Farmers complain about the environmental and land degradation caused by miners. Meanwhile licensed miners remain adamant that their operations are within the prescriptions of the mining Act and accuse farmers of trespassing into “their land” (Nyoni, 2020). Similar disputes emanating from inconsistent regulations were witnessed in September 2020 when the government issued mining licenses to Chinese mining companies to mine in wildlife national parks (BBC News, 2020). Although this was in violation of the environmental regulations, the licenses were reportedly issued by the mining ministry on the pretext that the mining regulations set mining as a priority over other sectors. However, following litigation and campaigns by environmentalists against this move, the government was forced to issue a statement ‘banning’ all mining in national parks and riverbeds (BBC News, 2020). Chinese investors have reportedly called for legislative clarity in licensing and regulation of mining activities (Samaita, 2020). Indeed, there are growing calls for amendment of the Mines and Minerals Act to align with international standards of protecting the environment and to bring harmony between miners and other land users.

4.6 Chapter Summary and Reflection

This chapter shows that the ASGM sector in Zimbabwe is governed by mining policies which were enacted during the colonial era and were designed for large-scale mining companies. New legislations were added in the mid-2000s to cater for environmental degradation in the mining sector. However, the major problem is that the current mining regulations are administered by different ministries and governing agencies. Results from the interviews in chapter 6 show the impact of this approach. As each governing authority seems to be working in silos, this results in a fragmented and poorly coordinated regulatory regime which negatively affects the miners (see chapter 6). Overall, as this chapter has shown, the ASGM sector operates in a complex regulatory environment worsened by the country's poor economic performance. Firstly, for the past two decades Zimbabwe's economy has become predominantly informal characterised by survivalist strategies like street vending (Mlambo, 2017; Jones, 2010). Artisanal and small-scale mining has expanded largely due to the economic decline of other productive economic sectors. The country's economy is underpinned by a general culture of normalising bribes as a way of cutting costs and taking shortcuts to avoid formal procedures (Jones, 2010). A widespread culture of corruption may disincentivise the effective implementation of formal rules.

Secondly, as Maringira and Masiya (2016) have observed, the country's elite, especially the securocrats have previously interfered in the governance of diamond mining where they developed mechanisms to loot as much diamonds as they could. Therefore, outside the formal governance structures, the state elites like the securocrats must be considered as key actors indirectly governing natural resources in Zimbabwe. Finally, an analysis of Zimbabwe's general policy approach to natural resources shows lack of consistency as the government tends to pursue populist and short-term policies resulting in unpredictable change of policies. As Kabonga and Marime (2017:7) have argued, Zimbabwe's policies are characterised by "contradictions, ambivalence and contestations." In such a context, it becomes crucial to understand the "negotiation, contestation and bricolage" (Hagmann & Peclard, 2010: 543) that occurs at the local level as key actors attempt to govern the ASGM sector.

5. The ASGM sector at the local level: Miners' Perspectives and Experiences

To understand how Zimbabwe's artisanal and small-scale gold mining (ASGM) sector is organised, all the interview participants were asked to describe the typical mining practices (arrangements/organisation) in their mining areas. This question was also aimed at understanding the role of mining licenses, and the interaction between formal and informal mining arrangements. This chapter discusses these mining arrangements together with key determinants of formalising mining operations. In this context, the chapter further discusses the challenges of accessing mining licences and the increasing operational costs that are driving miners out of formal operations. Lastly, the chapter discusses the perspectives of miners on the implementation of formal rules and how they negotiate these rules with governing authorities.

5.1 The ASGM Organisational Hierarchy

There seems to be various mining arrangements, which are often dynamic and fluid as miners can be simultaneously involved in various categories or move in between formal and informal arrangements over time. Nonetheless, for analytical purposes, the main categories of the organisational hierarchy can be described as comprising claim owners, tributary agreements, claim managers, pit holders, sponsors, and the gold panners (diggers). A summary of this hierarchy is given in Fig. 2.

Claim Owners

A single mining claim is typically a one-hectare piece of land whose license is obtainable from the Ministry of Mines. A claim can be legally owned by individuals or a group of miners (cooperatives) upon being issued a licence by the ministry of mines. Claim owners may have a maximum of 10 claims (Ministry of Mines, 2021). Large-scale mining companies like Falcon Gold Private Limited and Blanket Gold Mines reportedly own large areas of land across the districts under study which they have owned since the colonial times. All the 32 participants interviewed cited this as a challenge indicating that these companies were not utilising the land but hoarding it for "speculative" purposes.

Another aspect linked to large-scale mining companies relates to the issue of Exclusive Prospecting Orders (EPOs), the licences granted to large-scale mining companies for large-scale mineral exploration. These are special licences which can only be approved by the President (Sec 90 (2), of the Mines Act). According to newspaper reports, each EPO covers 65,000 hectares and this year alone, the government has issued 25 EPOs across the country

(Mhlanga, 2021). When these EPOs are granted, large areas of land are reserved, and no claims can be pegged in those areas. As a result, the ASGM miners are forced to enter into tributary agreements with large mining companies in order to mine in those reserved areas. Although, large mining companies own huge areas of land (larger than an ordinary claim), for analytical purposes I have categorised them as claim owners alongside licensed individuals and cooperatives.

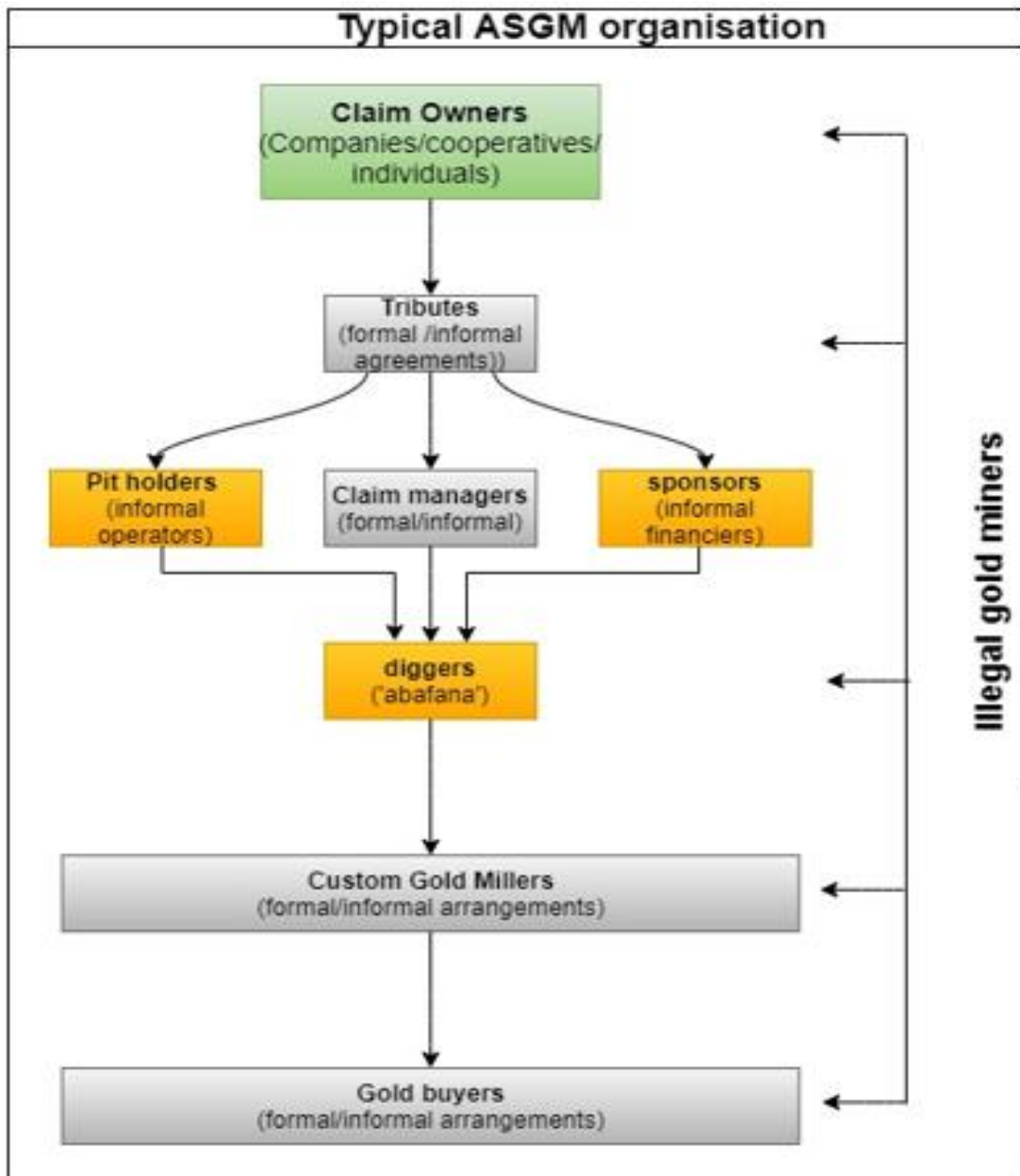


Figure 2. Typical ASGM organisation at the local level (compiled by the author from information gathered during interviews).

Tributes

For various reasons, including operational costs, risk aversion and lack of financial capital, claim owners lease their claims in the form of tribute agreements. All interview participants cited these as the most common practices in their areas. The law requires tribute agreements to be registered with the Ministry of Mines (Sec 278 (5)). A standard tribute agreement is valid for three years, renewable subject to the request of the tributer and the consent of the grantor. Depending on the terms and conditions of the agreement, the grantor reserves the right to evict tributers and refuse to renew the agreement. However, in practice these agreements can be either formal (written), especially with large mining companies or informal (gentleman's agreements). Miners cited informal tribute agreements as the most common practice, although they felt disadvantaged by these arrangements. One miner indicated that, "most tributes are controlled by an unseen hand because the claim owners are never on the ground. As a result, you do not even know who you have entered into an agreement with, all the mining arrangements are fishy (miner **MNG**, 2021)."

This statement was corroborated by a regulating officer who explained that especially in unwritten tributary arrangements, there is usually a chain of sub-tenants such that it becomes difficult to know who is entitled to mine in such a claim. Third party tributes maybe sub-rent a claim to illegal miners who in turn may sub-rent the claim to other smaller groups as well. The situation becomes more complicated by the fact that the gold diggers hired by tributes are unregistered workers and may even include some of the nomadic illegal miners. In the end, the claim owner may end up losing control of the claim when there is an influx of illegal miners who come through these unwritten agreements (regulator **ND**, 2021). The informal nature of many tribute agreements complicates the governance of the ASGM sector. As an expert indicated, "legally, as a tributary party you cannot enter into an agreement with a third party again. So, there we see another form of pseudo-formalisation within the broader formalisation arrangements" (NGO, **RM**, 2020). Effectively, while the claim remains registered (formal), the people who are sub renting it have not registered their agreement as required by the law. Yet, it is a blurry line if they should be considered illegal as they are working in a registered claim. From these semi-formal arrangements emerges informal networks of extracting, processing and illicitly trading gold. As one participant noted, "all gold leakages emanate from these fishy tribute agreements. In such an environment, you try by all means to avoid complicated processes to remain profitable- everything becomes fishy" (miner, **MNG**, 2021).

Exploitation under tributes

The key challenges faced by miners under tribute agreements included uncertainty, lack of investment security and precarious working conditions. Miners said the claim owners could easily evict them from their claims, especially when they discover large gold deposits. One miner narrated with sadness, how a group of 200 miners which he was part of, were evicted without notice from an informal tribute agreement. Formal agreements are not safe either as it is never certain whether the claim owner would renew the agreements when they expire. Moreover, the unequal power relations between the claim owners and the tributer may also result in agreements that favour the claim owner. This is more so in cases where miners are not well-educated to understand the legalities of contracts. In any case, they may be desperate for access to mining land. As a participant indicated, “you lose anytime; if you strike a rich gold stone, you are pushed out of the claim, sometimes you are threatened with unspecified actions.” Moreover, participants complained that they were unable to access bank loans as they had no title deeds or mining certificates in their names.

Lack of mining titles also means the miners have to rely on the claim owners’ certificates to process and sell gold legally. The miners also indicated that they were being cheated in sharing of proceeds as they sometimes had to pay 40% of the shares to the claim owners. This leaves the miners with little profits as they have to also pay for other operational costs like drilling, hiring compressors, paying for blasting equipment, transporting ore, buying food, lights, and so on. Alternatively, miners had to process and sell their gold through middlemen and that means they lose through paying bribes throughout the entire process. Mining association representatives indicated that they are now encouraging miners to enter into written agreements and engage lawyers to negotiate better terms and conditions in the agreements. They also said that some NGOs are helping them to negotiate better agreement terms with large mining companies, although it was not always easy as the mining companies sometimes prefer to grant tributes to politicians or politically connected groups in fear of victimisation.

Claim managers

Both claim owners and tributers can employ managers to oversee operations in their claims. These can be either formal or informal arrangements, for instance, a mining company formally employs someone, but informal arrangements are common since these managers do not necessarily need to be formally employed. They are not formally employed because they are not registered for a salary, social security or any other employment benefits. Participants

indicated that claim managers were the front runners of many claims whose owners remain unknown as they never, or rarely come to the mining areas. The managers can hire the diggers, supply them with food and make other logistical and/or operational arrangements. The managers are also responsible for payment of license fees, interacting with inspection authorities and processing the renewal of licences.

Pit holders

Claim owners and tributers may informally subdivide their claims into pits especially in cases where they have limited capital or capacity to carry out mining activities themselves. Sometimes it is also a way of avoiding high operational costs and managing investment risks in mining sites with low gold outputs. In turn, pit holders may hire their own diggers and sponsor them with the requisite equipment or logistical support to extract gold. The claim owner gets a certain percentage of the proceeds from the processed gold as agreed between the parties. These pit operations are largely an informal arrangement although some participants indicated that the security officials now required claim owners to keep a register of all the diggers working in their claims.

Sponsors

Sponsors are people with financial resources, who become indirectly involved in mining by being financiers of certain mining operations. One participant, a former artisanal miner who is now a sponsor, said he decided to become a sponsor as it was less risky and was more profitable for him. Other than that, the participants did not specify what type of people sponsor their mining operations. According to a report by the International Crisis Group (2020: 7), some politicians in Zimbabwe extract resources through exploiting cheap labour of artisanal miners by covering their operating costs in exchange for shares of production proceeds. In a review of the general characteristics of the ASM sector in Africa, Jonsson and Fold (2011) indicate that financiers may include claim owners themselves, pit operators, and local investors from within or outside this sector who sponsor different mining operations and offer informal short-term credits.

Custom Gold Millers

According to the regulatory authorities interviewed, the ASGM category involves miners who are only doing gold extraction and have no equipment of processing it by themselves. There is however no written policy stipulating this position. It was cited by authorities as a way of

differentiating small-scale miners from medium-scale miners when processing miners for environmental certificates and other local user fees. Once miners go into gold processing, they are viewed as medium-scale miners and therefore have to comply with further (stricter) licensing requirements. Following this logic, the hierarchy of the ASGM sector ends with gold digging. However, they do have informal arrangements with custom millers who process their gold ore. A worker at a milling site indicated that miners needed to bring either a license from the claim where they work, or the claim manager just needed to introduce them once to the miller and thereafter their gold would be processed. “When they come, we know they are so and so’s boys, so their ore gets processed” (mine worker SN, 2021).

Gold Buyers

Officially, Zimbabwe has a centralised the gold-buying system through Fidelity Printers and Refiners (FPR), a subsidiary company of the Reserve Bank of Zimbabwe (International Crisis Group, 2020). However, my interviews with miners and one gold buyer indicate that at the local level there are many unofficial gold buyers. One gold buyer interviewed said that he bought gold from anyone who came, and he confidently said the authorities did not have a problem with that because “they need gold”. However, five participants also indicated that unlicensed miners had difficulties taking their gold to towns or cities where they could get better prices for gold as they risked being arrested for illegally possessing precious minerals. They were therefore forced to sell to “people who come to buy gold in the bushes (in the mines).”

“Illegal” gold miners

Not all miners work within the structure I have described above. There seems to be a group that is termed “illegal” miners as they form a parallel structure. They were often described as the nomadic and disorganised group of unregistered gold panners who encroach into any land whether it is owned by companies, cooperatives, individuals, or the community. Most participants sought to disassociate themselves from this group as they viewed them as rowdy and causing havoc in terms of environmental degradation, violence, and criminality. However, further questioning indicated that sometimes these were the same people who could be employed as diggers in the registered claims as they already had considerable experience in digging gold and identifying a rich gold belt. Another problem of defining this group as illegal is that participants also indicated that they may include local farmers who go into mining

seasonally, hence it becomes difficult to call them illegal miners in their “own” community land.

5.2 The most essential (basic) mining licenses and fees

The most essential licenses, including entry level and operational permits for the ASGM operators are provided by the Ministry of Mines, the Environmental Management Agency (EMA) and recently the Rural District Council (RDC). However, as discussed in chapter 4.2 beyond these entry license providers, there are several other authorities governing the ASGM sector. These include the Forestry Commission, the Zimbabwe National Water Authority, the RBZ through the Fidelity Printers and Refiners (official gold buyer) and the local law enforcement agencies. These different state departments are administered according to their respective legislations as already discussed (chapter 4.2) and might have their own specific permits and compliance requirements (table 3 & appendix D). For analytical purposes, this section focuses on the licenses from the Ministry of Mines, EMA and the RDC departments.

The Ministry of Mines issues the first stage of mining licenses including a prospecting license, mine/site registration, and continuous inspection certificates. In addition to these licenses, the Ministry of Mines has a long list (7 pages) of permits, penalties, and miscellaneous fees that miners (including the ASGM sector) must pay for various processes and services (e.g., detailed list in S.I. 185 of 2021). These include license renewal fees, change or transfer of mine ownership, technical and geological services, and other licenses for transportation and storage of chemicals used in the extraction or processing of gold. The EMA department is responsible for environmental compliance permits while the RDC charges land user levies and other fees for municipal services. Miners also pay affiliation fees to the district and national mining associations. Using the information gathered during the interviews, and the relevant statutory instruments, a short list of basic ASGM licenses and their costs is provided in table 3.

The challenge one would observe is that while the size of an ordinary claim is 200 by 500 metres, the licensing fees listed by the Ministry of Mines refer to a block of claims (i.e 10 hectares) or mining sites in line with specific provisions of the Mines Act. In practice, this means that an individual miner unable to afford registering a block, may need to join hands with other miners in a cooperative to pull resources together. Another challenge is that because of inflation and an unstable local currency, the licensing fees are usually pegged in US dollars or constantly have to be revised if charged in local currency. For instance, in February 2021, the government was forced to reverse its 800% mining fee increase pegged in US dollars after

miners rejected the fees for being exorbitant (The Chronicle, 2021). Even then, some departments may still charge fees in US dollars. Thus, the licensing costs may become unaffordable for ordinary individual miners.

Table 3. Mining Licenses and Fees applicable to the ASGM sector

Issuing Authority and license / fee description	Amount /fee
Ministry of Mines and Mining Development	
Ordinary prospecting licence (10ha/valid for 2 years)	ZW\$ 6,375-00 (approx. US\$80-00)
Special prospecting licence (25 ha/valid for 2 years)	ZW\$ 47,855-00 (approx.US\$570-00)
Pegging fee (private peggers)	US\$ 400-00
Surveying and Sampling	ZW\$12,750-00 (approx. US\$150-00)
Application for registration of Precious Metal Block	ZW\$ 12,750-00 (approx. US\$ 150-00)
Application for a mining lease (non-refundable)	ZW\$ 127,500-00 (approx.US\$ 1,520-00)
Registration of a mining lease	ZW\$ 3,750-00 (approx. US\$45-00)
Registration fee for a site	ZW\$ 3,230-00 (approx. US\$ 40-00)
Permit for transporting explosives	US\$ 1000-00
Permit to transport ore (3 months)	ZW\$ 1,275-00 (approx. US\$15-00)
Application for protection against forfeiture	ZW\$ 6,375-00 (approx. US\$80)
Application for revocation of forfeiture	ZW\$ 63,750-00 (approx. US\$ 800-00)
Environmental Management Agency	
EMA (EIA/EMP) certificate	US\$ 253-00
EMA (EIA/EMP) review fees per year	US\$210-00
Rural District Council Fees	
Mining levy per claim (200 x 500m ²)	US\$200-00
Prospecting fee	US\$200-00
Land fees per unit (5-100 mine workers)	US\$ 500-00
RDC Admin fee for Ministry of Mines license renewal	US\$ 20-00
Mining Association Fees	
Mining association individual joining fee (district)	US\$ 100-00
Mining association individual annual subscription (district)	US\$ 10-00
ZMF joining fee (per association).	US\$ 500-00
ZMF annual subscriptions (per association)	US\$100-00

Source: interviews, S.I. 185 of 2021, Ministry of Mines <http://www.mines.gov.zw/?q=licences>

5.3 Access to mining licences: Challenges of EPOs and bureaucratic inefficiencies

In addition to the financial costs and a chain of licensing requirements, there are several hurdles that miners face in trying to be own claims and after that to remain operational in those claims. First, participants cited the challenge of the Exclusive Prospecting Orders (EPOs) which has resulted in many mining areas being closed off from pegging. This means that it has become more difficult for miners to apply for licenses as the EPOs close off vast lands leaving almost no free claims available for pegging. As stated by one of the district regulators,

But now the problem is that they are doing what they call EPOs [Exclusive Prospecting Orders] whereby you find that large number of areas have been put under these EPOs. So, no one can peg those areas. But people know that those areas are rich, but they cannot peg them. For instance, the last time I checked, I think 95% of Matabeleland South is now under these EPOs.¹ So, in a situation whereby you know that this area is rich and has mineral value, but it's not allowed to peg, then I think that's why some opt for illegal operations (regulator, XM, 2021).

One miner acknowledged the intention behind the EPOs as they are supposed to attract large mining investments. However, he disapproved “the way it is being done” as it pushes them out of formal mining:

In reality, the EPOs are crucial for the improvement of mineral extraction and development of the country's economy as they bring huge investment. For example, we have new companies exploring other minerals for batteries- lithium. So, unlike us small-scale miners who may not have the capacity to explore several minerals, large mining companies are bigger players crucial to our economy. I would like to clearly state that we need EPOs. However, the way they are designed is the problem. They cover vast areas of land when prospecting- 44 or even 100 square kilometres whereas we only cover small areas usually 200 by 500 metres. I think they should have been designed in a way that allows us to prospect while they are doing their things (miner, MNG, 2021)

The second challenge that participants alluded to were bureaucratic inefficiencies associated with licensing processes. Miners are required to renew their licences every year and also pay some user fees quarterly to various regulatory departments. Meanwhile, the mining offices are centralised at the provincial level since there is no office at the local or district level for the

¹ While this figure has also been cited in the press (<https://www.chronicle.co.zw/govt-to-resize-exclusive-prospecting-orders/>), it could not be verified as there is no official list of EPOs publicly available. However, some press reports also claim that “almost the whole country” is under EPOs. e.g., <https://www.newsday.co.zw/2021/03/govt-grants-new-epos/>

Ministry of Mines. Literature also confirms the top-down licensing processes in Zimbabwe where decisions are centralised at the national offices while provincial offices only do administration work of processing applications (Spiegel, 2015; Dube et al., 2016). This means that miners have to invest a significant amount of money and time travelling over long distances to process their applications and to renew their licences.

On top of this challenge, the ministry is slow to process new applications as there is reportedly a backlog dating back to 2017. Miners indicated that in the end they were forced to pay bribes to speed up processing of their licenses. As stated by a miner, “but you find that if you go to the [mining] offices, there will be too many piles. If you don't push them, they sit on top of your papers. You have to push (bribe) them for you to get the papers (miner **KD**, 2021). The strict adherence to provincial borders also means that even those miners who may be located closer to a different province unnecessarily have to travel long distances. For instance, some Matobo District miners are operating 20km away from Bulawayo Provincial offices, but because they fall under Matabeleland South Province, they have to go to offices that are more than 100km away (association leader, **MM**, 2021).

Although the Environmental Management Agency (EMA) has decentralised offices to district levels, they only have one officer in charge of processing applications for the whole district. Miners felt that this caused delays in terms of inspections and the time the officer took to process applications as he still needed to send them to the provincial offices for further processing. The regulators also acknowledged that manpower in terms of human resources was a challenge. As one of the EMA regulators admitted,

*Currently, we have one officer per district and personally I think they get overwhelmed in some districts which have got lots of mining activities, for instance Gwanda, Insiza, Mzingwane and Matobo districts. But we have some districts that do not have a lot of mining activities like Beitbridge and Plumtree. In that case one officer can manage. But that is not the case for the other districts which are busy, it becomes too much for one officer. Nonetheless, we have got a way of counter-acting that. We as Provincial officers we step in to help them deal with their workloads (regulator **GN**, 2021).*

Overall, as a mining association leader put it, while the laid down rules are supposedly simplified, the implementation is marred by bureaucracy and corruption which makes the process costly and difficult,

The process itself is quite fluent [easy]. But unfortunately, we're living in an environment and a country where things are not easy, and the elements of

corruption here and there which eventually lead to some of the fees that are required though officially very low, in practice end up becoming exorbitant. The people that assist you become the people that complicate the whole process because they demand to be paid [bribed] in order to process certain things for you (association leader, MM, 2021).

According to other stakeholders, there seems to be endemic corruption in the processing of licenses and access to mining areas. Apparently, top-level mining licensing authorities withhold information about rich gold areas and then sell it to “the highest bidders”. Alternatively, when a prospective miner brings applications indicating areas where they have discovered gold, licensing authorities may deliberately delay licensing that particular applicant and tip illegal miners to go and pounce in that area (journalist LJ, 2021 & NGO participant TJ, 2020).

5.4 The key determinants of seeking a mining license

As part of understanding the organisation of the ASGM sector at a local level, participants were also asked about factors that motivate miners to formalise their activities. Regulators cited financial resources, mining equipment, availability of mining land, as well as access to information and literacy levels as key factors that determine whether a miner would seek a license before carrying out mining activities. To put this into context, a miner who has been in mining since 1994 indicated that although she now holds several licensed claims, she only managed to buy a compressor recently. It took her more than a decade to raise enough capital to be able to operate as a licensed miner (NM, 2021).

The decision to apply for a mining license seems to be strongly motivated by the prospects of permanence and long-term profitability that a miner expects or envisions in the mining sector, as explained by one expert,

I would say if one has found a good area, a good piece of land with a substantial amount of minerals which might be extracted and processed over a certain period of time. And also, if they have mobilised enough resources to actually buy the mining equipment and invest in a proper set up, then they might decide to move into formal mining (expert, AN, 2021).

However, from the perspectives of other key stakeholders and the miners, it seems trust and networks that one already has in mining are more crucial than formal licenses as a decisive factor for getting into mining. For instance, for most rural communities in the mining areas, mining could be a livelihood activity passed on from generation to generation. Others are seasonal miners who go into mining during droughts and hard economic situations, yet they

are expected to go through the same licensing processes with permanent miners in order to formally access mining rights (regulators **FC, XM** & expert, **AN**, 2021). Other miners are just chancers looking for quick money. One participant described his entrance into the mining field as follows:

Ok, this is what happened. In my community, there are a lot of miners. Some of them are my friends, some are my relatives. As time went on while I was still searching for a job, I realised that they were doing far much better than many people who had normal or formal jobs. So, I thought of also asking around about mining. My first contact was my aunt. She was in the mining sector.

*After getting information from my aunt, I did not really want to go and work under her mine because I was not very familiar with the people she was working with. I was a bit scared at first since I didn't know anyone there. Although she was telling me all the good stuff about mining, I didn't have that kind of connection or networks that I could readily trust. So, it took me some time to finally decide to go into mining (miner, **BRN**, 2020).*

The importance of personal networks was also emphasized by another participant who viewed recognition by the local communities as the most important factor in accessing mining areas. He said if it was not for the assistance from the local people, he would not have survived long as he started as an unregistered miner,

*it is important to be known by the locals. They are very helpful as they can help you to find a team to work with, they also help you to pick profitable mining places as they know the rich gold belts (miner, **MTB**, 2021).*

From these descriptions, it seems starting off as an unregistered miner (informality) is somehow viewed as a transitional phase towards getting licenses (formality). As a representative of a mining association stated, becoming a small-scale miner is a process:

*Zimbabwe is full of artisanal miners- most of them are operating without any registration. Usually, these people upgrade themselves after finding a place where they do their panning. If it's open, they go for registration that would give a person an avenue to be a small-scale miner (miner **QM**, 2021).*

5.5 “Everyone is milking us”: How miners experience formalisation

Most of the miners expressed feeling overburdened by “hefty fees” charged by multiple regulatory authorities who they viewed as having overlapping duties. The miners feel that the fees and levies charged by each department together with the cumbersome operational costs, are making legal mining very costly. As a leader of the mining associations explained,

*There's quite a number of departments which are milking the small-scale miners, so we are just trying to lobby as associations. We're still negotiating with the government and the parliamentary portfolio (of mines). Because this is becoming a challenge to small scale miners, and it is also making some of our miners fail to comply with some of these licences and taxes resulting in them being moved out of the game (association leader **SG**, 2021).*

Another participant felt that the government was “double dipping” in the way it is trying to get money out of miners through various departments,

*It seems as if everyone wants to have a finger on that cake. So, we feel it's a bit unfair for us because some of these levies, the government will be actually double dipping. Because we expect the ministry of mines to collect all the levies then distribute them to different departments but that's currently not the case (association leader **QM**, 2021).*

Another miner felt that the government had become “a criminal” stealing from the miners,

*So, a small-scale miner is surrounded by ‘criminals’ hahaha (laughs mockingly). Sorry to say that, but all these ‘criminals’ want money from the small-scale miner (miner **TN**, 2020).²*

To begin with, the miners indicated that they were already operating in a difficult environment where they had to struggle to get the entry level financial capital. And then once they entered the mining field, they had to bear many other operational costs without any support from the government. Some mentioned additional licenses like blasting licenses, permits for transporting explosives (from the ministry of mines) and miscellaneous environmental penalties from EMA as burdensome costs. As the leader of a mining association explained,

*And even when you are done with the EIAs, you need a blasting licence, but before you do your mining drills and blasting, you need to be a registered blaster. To get those blasting chemicals, you need a permit for transporting explosives. So, there are several permits needed before you start operations. Considering the harsh economic conditions of this country, these requirements make things difficult for miners (association leader **SG**, 2021).*

As a result, miners feel that it is unfair for the government to be demanding fees through its different departments without first capacitating them with equipment and financial loans. Another association leader emphasised that the nature of risks associated with gold mining require substantial financial resources that most ASGM miners do not have.

² The participant applied a popular phrase which was used by Zimbabwe’s military to justify a coup in 2017 as they claimed to be “targeting the criminals around the president.”

*So, some people venture into mining by selling a few cows, maybe one or two. But mining itself is highly demanding in terms of labour, and financial resources needed to expand. So, it's not just the peak and shovels to begin with. Also, it depends on the area that you are mining; the type of rock, how demanding it is, the risks that come with the grounds that you're mining as well. So, all that is financially demanding to the extent that whatever levy is supposed to be paid by a small-scale miner becomes very huge, because you don't have the financial capacity (association leader **MM**, 2021).*

Moreover, in the case that one does not get a profitable mining area, complying with formal mining requirements becomes a challenge. Some miners felt that it was becoming a challenge to remain operational in the mining sector,

*Getting a mining license actually becomes cumbersome. In mining, sometimes you can go for some periods without getting gold. So, if you have a license, you have to pay taxes and fees even when you are not making money. It also means the government gets to follow your activities (miner **BRN**, 2020).*

This view was supported by a mining association leader who said due to the operational costs and the licensing requirements, many miners were losing their claims as they could no longer keep up with the costs,

*The main challenge is that even though you may struggle your way through and get registered, to continue operating and maintain claims is increasingly becoming difficult. We are seeing so many claims being forfeited. They are being taken back by the government. For instance, in Matabeleland South alone, in the last two years, more than 2,000 claims have been forfeited to the government, even though they were registered by the small-scale miners. They had done all the processes and managed to register, but starting operations proved difficult as there are annual payments and inspections by the ministry of mines which has tight requirements for those inspections. For example, annual inspections require submission of monthly gold returns, gold production registers and so on to the Ministry of Mines. So, if you have not been producing anything, you are not able to fulfil those requirements. You also need to pay taxes to the RDC and so on. So, it is difficult to start operations and maintain a claim even though you may get a license (association leader **SG** 2021).*

Another miner felt betrayed by the government for not promoting 'indigenous' miners.

The most difficult part of mining in Zimbabwe is that small-scale miners are not assisted. The government does not even put a finger to assist miners. They just want licences, taxes, this and that.... there is no longer indigenisation, forget about formalisation! Just call those conglomerate companies.... We are struggling to mobilise our own resources without loans or any much assistance.

It's very pathetic to say the least. Mining in Zimbabwe is being affected by policy makers- all the policies are skewed against ordinary small-scale miners (miner TN, 2020).

Another participant felt that the criteria used by regulatory authorities for licensing purposes was sometimes unclear and unfair, specifically by not considering the individual capacities and challenges of miners,

I think sometimes they just mix us and charge uniform prices without looking at our differential capacities and equipment. For me that is the most painful thing because sometimes they just say you are a miner then tell you to pay a certain fee- we are being treated like big mining companies- I think we pay the same fees (miner NM, 2021).

Despite feeling frustrated over the formal mining requirements, miners generally recognise the importance of licenses as they all expressed knowledge of the benefits that come with having a mine claim, including access to investments, security to invest and protection from being cheated along the process of gold production when one does not own a claim. As one of the miners said,

The licenses are important because we need to formalise our operations. But the way the government is doing the processes is actually harassing us as miners. But the licenses are quite important because we have many abandoned (disused) mines where people are mining illegally and being exposed to fatal accidents. Lots of people are falling into the pits. So, the licenses are very important. But of course, the government should gazette a reasonable licensing fee so that we can afford (miner KD, 2021).

The participant further explained that some of these challenges could be avoided if the government uses its internal experts for pegging claims, instead of outsourcing services to private consultants who charge 'exorbitant' fees.

.....you look for a private pegger, you pay more than 400 USD. It's a private guy but if it's a government thing, we should have a government pegger on the ground and they charge you nothing, because that's a government thing. But in our case, we have to hire a private pegger to process some papers and those papers, if you don't push them or you don't give them money you won't get a certificate (miner KD, 2021).

From the interviews with all the participants (including regulatory authorities), I compiled a list of the various mining fees the miners are required to pay (table 3). From a surface level, the fees do not seem to be as 'exorbitant' as claimed by the miners. As the regulators also indicated, the ASGM sector licensing fees and requirements are much lower and less stringent

than those of large mining companies. However, it seems the circumstances in which most of the miners are operating, with lack of mining equipment and financial resources, in addition to other operational costs, any licensing fee becomes burdensome. One of the association leaders acknowledged this as he noted that,

But often when I look at the fees that are charged, versus the mineral that we are mining, and the values that come out of a mineral. For example assuming you are mining gold, which I am, the government is charging using the local currency, which compares to the US dollar or the SA Rand that you get from selling your gold, the fees are almost nothing. But if you already don't have enough finances to sustain your activities, then it's going to sound like it's a mountain for you to climb, but (in reality) it's not the case (association leader MM, 2021).

5.6 Corruption and Selective (ad hoc) application of regulations

Some participants felt that rules were selectively applied along political connections or being linked to groups that have connections with law enforcement agencies. As a result, it seems the extent to which local regulators implement or enforce rules has to be negotiated depending on how powerfully connected the miner is. One miner narrated how at one time an EMA officer “decided to act smart” by trying to stop activities of a mining company which had not followed the local administrative procedures. “You know how they responded to him? They simply said, ‘are you brave enough to take this number (referring to a higher authority) and introduce yourself and what you are here for?’ That’s how the issue ended” (miner MNG, 2021). It seems as long as the miner has made deals with a higher-level authority, the local policy implementers have little power, as the participant said, “these people pay bribes to officers that are above the officers on the ground. So, those on the ground cannot do anything- he cannot stop mining activities or issue fines, that would be useless” (miner MNG, 2021).

According to some participants, one’s success in mining strongly depends on how connected you are to the governing political party. As one participant from an NGO said,

For me one thing that I have observed is that people who are successful in the ASGM sector are linked to the ruling party. Anywhere you go in the mining field, if you see a successful small-scale miner with all equipment and everything, check their record- they donate t-shirts to the party, they attend party meetings, etc- so they are almost covered from a lot of things. But go and try it, register a mining claim and not be connected to the ruling party, you are guaranteed to fail! (NGO participant RM, 2020).

It seems once one is connected to the governing party; they have some protection from strictly adhering to all the bureaucratic processes and licensing fees. For instance, one can be protected from quarterly inspections, non-compliance penalties, and even from complying with requirements from other departments, like the environmental regulating authorities. This creates feelings of unfair treatment in other miners as one expressed it as follows,

The painful part is that some of these guys who own claims are not complying with mining laws- they do not have mining returns, environmental compliance certificates, and some of them don't even pay inspection fees. Some claims go for 8 years without complying (miner MNG, 2021).

At the same time, some participants think political connections do not completely replace mining licenses. Instead, they can help in facilitating ease of access to licensing authorities and 'exemption' from certain steps required for obtaining and maintaining licenses. As one participant eloquently stated,

In fact, what actually happens in these offices since these mining licences and requirements are too many for small scale-miners, for those who are politically connected they can skip some of these requirements. But you definitely need to register because if you don't register the artisanal miners can also invade your place.... But if you're just a worker in the government if you victimise a senior political person in your area, you can risk being transferred from your area, you can risk so many things.... So, if you just approach those big guys disturbing them from making their money by asking for so many papers and things like that, you might risk losing your job. So, this is what is practically happening not that you must be politically connected to do your mining properly. No. In some areas I have seen that these powerful guys do as they like. By law, you are supposed to do proper fencing of your mine and cut trees in a proper manner. But you see these guys don't follow all those things. If you as just an ordinary miner do the same, going around cutting trees randomly, you will be heavily penalised (association leader SG, 2021).

There is also a view that local law enforcement agencies protect from regular police raids. A local regulator expressed mistrust of the police saying the community members had tried in vain to report some illegal miners that have become problematic,

I am suspicious of the police. I tend to believe that they are corrupt. They are also involved in arresting those who are not connected to them and replacing them with groups that they control. So, the police are also looking for gold. They are just the same as these miners. It doesn't help to report to the police (local authority KC, 2021).

Put together, the challenges brought by bureaucratic inefficiencies and corruption, may provide little incentives for unregistered miners to formalise their activities thereby complicating prospects of formally governing the ASGM sector. As one participant sums it up, in a context where there are high levels of poverty and corruption, the formal route becomes cumbersome,

The first issue is about high levels of corruption. They (miners) don't see the benefits of registering because they say you can always find your way out through the informal system. You see. Secondly, what drives them into mining is poverty- they want money to fend for their families. The legal route is just too slow for them. Time is important for them. And also, one of the issues is that the allocation of mining claims is skewed and not favourable to an ordinary miner who is not connected to authorities. If you are a nobody and you approach the ministry (of mines) for a licence, the likelihood of getting a good mine claim with large deposits of minerals is very slim. Whereas if you are doing it through your political connections, you are directed to a mineral rich area (NGO participant, TJ, 2020).

5.7 Negotiating with regulatory authorities and other stakeholders

Miners indicated that they subscribed to local mining associations which were helping them to raise their concerns to authorities and other stakeholders like large mining companies for tribute agreements and NGOs who support with advocacy and capacity building. A local mining association leader confirmed that by being affiliated to the mother body of all small-scale mining associations, the Zimbabwe Miners Federation (ZMF), it had become easy to access and engage governing authorities.

we are an affiliate of another body called the Zimbabwe Miners Federation to which all small-scale miners' associations affiliate. And through them it's very easy to get to the government when you want to pass on a message or to get action of some sort (association leader, MM, 2021).

The representatives of the ZMF, insisted that they were the only recognised association that represents the interest of the miners,

the Ministry of Mines recognizes only two organisations in the country that is the Chamber of Mines (for large mining companies) and the ZMF (for small-scale miners). It only recognizes these as representative of miners in this country, so we engage them on daily basis (association leader QM, 2021).

According to the association leaders, through the ZMF engagements with stakeholders, the reputation of miners has improved. They noted that although in the past, the society, the governing authorities and even commercial miners used to shun them, all these stakeholders

were now understanding and engaging the small-scale miners. They no longer view registered miners as ‘hooligans.’ For this reason, ZMF continues to engage the government and other stakeholders to recognise the miners as important economic players.

*In the first place, when people shifted from artisanal to small-scale mining, most stakeholders didn’t understand us, perhaps because some of the artisanal miners behave in a rough and hooliganism way.... So, in our engagements, we try to explain that these two are different and emphasise that small-scale miners are properly registered miners who wish to do things right. Even the commercial miners had challenges accepting us, even though some of them are coming to understand us now.... So, in the beginning many stakeholders used to shun us. But nowadays, they are understanding, that we are different, we are eager to learn and follow the law. We are eager to contribute to the national economy with gold deposits (association leader **SG**, 2021).*

The participant also cited other examples of the success of their engagements with the government. For instance, after a long time of lobbying the government about exorbitant charges and bureaucratic processes, the government exempted the ASGM sector from stringent environmental compliance licensing processes of Environmental Impact Assessments (EIAs) which have since been replaced with a simplified process of Environmental Management Plans (EMPs). Moreover, miners said they had been assisted by NGOs with interest in small-scale mining like the Zimbabwe Environmental Law Association (ZELA), and PACT Washington DC to lobby authorities.

*These organisations use some of their forums, like the Zimbabwe Alternative Mining Indabas whereby they call all interested stakeholders for dialogues. That is where we managed to achieve the EIA exemption deal where EMA introduced EMPs (association leader **SG**, 2021).*

However, despite some successes in engaging governing authorities, especially the Ministry of Mines, a leader of the mining association said miners still face challenges in some provinces where local authorities are not willing to engage them.

*We have since managed to engage different ministries and departments involved in regulating mining activities. At first, it was a big challenge because we could invite these departments to our meetings, and they would not attend. In some provinces, we are still facing such challenges where authorities do not want to engage associations, especially where there are no provincial structures of the mining association (association leader **SG**, 2021).*

According to an NGO participant, miners want the governing authorities to recognise their specialised needs and to develop policies that treat them separately from large-scale miners.

Imagine treating a two-year old in the same way you treat a 20-year-old. It's unfair... small-scale miners, they have their own special needs as opposed to large-scale miners. For example, they do not have access to finance systems. There are lots of nitty gritty things that are associated with access to finance, e.g geological reports, which the small-scale miner does not have the capacity to produce. So, they are saying that 'we are babies and we have our own special needs that should be addressed by policy and we should be included in the ACT (Mines Act) by definition to indicate that there are two entities in the mining sector, one being small and the other one being large-scale.' (NGO participant **PM**, 2020).

5.8 Reasons for negotiating: the repertoires

Asked what their basis for negotiating with governing authorities and other stakeholders were, the miners pointed to several reasons mainly to do with the ASGM sector as the backbone of the economy which is currently in crisis. Therefore, they view themselves as a key economic stakeholder that is currently creating jobs for many unemployed people and bringing in foreign currency which the government desperately needs,

Everyone is flooding the mining industry. People have nothing to do, they are stuck in the mining industry that's the only viable area that is bringing forex for people (miner **MNG**, 2021).

Another miner emphasised the role of the ASGM sector in the economy as follows,

But remember 60% of our country's foreign currency comes from these small-scale miners. If the economy was right, I'm sure 70% of the people would not be here. On average I would say a miner makes more money than a teacher (miner **XN**, 2020).

A leader of the mining associations also emphasised that the governing authorities had realised that the number of small-scale gold miners had increased so much that authorities had no option but to engage them in order to get more revenues,

There is a strong motivation for authorities to negotiate with miners because they have now discovered that there are so many small-scale miners in this country.... Having such a big number of registered small-scale miners, if all the small-scale miners manage to pay their tax to the RDC, that is a good source of revenue. Although the country is using a local currency, the small-scale miners are being charged in US Dollars- it is not that difficult for us to pay in forex as our gold is being bought in USD by the Fidelity Printers. So, they are getting millions from small-scale miners, hence they need to engage us (association leader **SG**, 2021).

It seems due to the awareness that the government depends on them for foreign currency, miners have realised they have some leverage in negotiating with the government. One miner insisted that the government was supposed to strike a delicate balance in governing the miners to protect the economy,

*My guy, this government depends heavily on miners. If they over-formalise, they might lose foreign currency. Mugabe tried it in 2007 and the economy landed on its belly. The need for formalising is definitely there because of accidents etc. But it's a delicate issue (miner **XN**, 2020).*

An expert indicated that considering the ongoing economic crisis and the increasing number of miners, it has increasingly become dangerous for local policy implementers to confront illegal miners as they risk violent confrontations. Hence, they had to approach the miners carefully without risking their own lives,

*EMA is there but I think it's also failing to control what is happening on the ground... I think the number of people going into the bushes for mining is now too high; there are too many people going into chikorokoza [illegal mining] Now, they are acting like unruly criminals to such an extent that even if EMA officials try to go into the mines without security personnel, they would be risking their lives. They may be killed, so I think most EMA officials are now scared for their lives (agricultural officer **FC**, 2021).*

A leader of the mining associations also indicated that the miners were negotiating for long-term goals by lobbying authorities to secure property rights by providing long-term access to mining rights for small-scale miners. The policy makers therefore should create a conducive environment for miners to thrive and 'create generational wealth' for their children. He made this comment in relation to the exploitative nature of tribute agreements and policies that still allow commercial mining companies to hold large land areas. He also indicated that while negotiating with these commercial mining companies for tributes, they are strongly lobbying the parliamentary portfolio (of mines governance) to implement a "use or lose it" policy so that the mining companies must be given a timeframe in which if they do not utilize the mining land, they lose it.

So, for us small-scale miners, black people, we don't have a chance to create wealth for our kids unlike these commercial miners. They created wealth whereby their mines are inherited by their children, grand-children and the like. We also want a scenario whereby we can have those claims that can be inherited by our children and the next generation. We are lobbying the parliamentary portfolio (on mines) "for use it or lose it policy" so that these guys must be given timeframe in which if they do not utilize the land, they lose it. For example, if you spend 10-15

*years without utilizing the land it must be taken away and given to the government so that it can be given to people who can produce. We are pushing very hard for that policy (association leader **SG**, 2021).*

Some miners also blame the government for the lack of development in the ASGM sector. They want the government to first ‘play its role’ by capacitating miners to grow to become commercial miners before demanding fees from them,

*As I have mentioned, even now I am not well-developed. I need inputs rather than the government saying they want this and that. The government must assist small-scale miners until they are commercial miners then after that they can make these tax demands. This is why we still have small-scale miners since independence, instead of commercial mining. If they had been assisted, by now we would be having big companies and a mature mining industry. We wouldn't be struggling with unemployment. But now it's a chorus- no employment, no money in Zimbabwe when the country is so richly endowed with minerals (miner **TN**, 2020).*

While acknowledging the legitimacy of the local authority's oversight duty and ownership of communal lands, miners feel that the local authorities should be accountable and deliver services in return of the fees they are charging miners. First of all, miners want to be consulted before local authorities gazette any fees,

*You find them charging a very big figure without consulting us. So, that's why we are using the ZMF, the body of miners who have come up with their own structure so that we can engage the government (miner **KD**, 2021).*

Secondly, the miners demand accountability for the fees they pay and this has made the RDC to engage the miners and start delivering some services like grading roads.

*The RDC are saying they are the owners of the land, so we must pay taxes to them. They own the land. We have been having challenges as small-scale miners and we ask the RDC- what are you doing for us as miners? Why should we pay tax to you when you are not doing anything for us? This has forced the RDC to be willing to engage us..... We now see the RDC grading, repairing and maintaining some roads and bridges that we use for our mining operations. In turn, small-scale miners cannot renew their licences without paying RDC taxes. The RDC nowadays always invites small-scale miners to their annual budget consultative meetings where we also put our inputs (association leader **SG**, 2021).*

5.9 Chapter Summary and Reflection

The result of this chapter shows that the ASGM sector has an organised hierarchical structure which has emerged as a way of managing financial costs of formalisation as well as the risks

and operational costs of gold extraction. The context of the ASGM sector in Zimbabwe is complicated by poverty, harsh economic conditions, and high levels of corruption. As most miners indicated, after struggling through the first stages of, one still has to face cumbersome requirements and costs of starting mining operations. The legal route therefore becomes too slow and costly for poverty driven miners. The fragmented ASGM regulatory approach where various departments seem to be working in silos and independently extracting revenues from miners worsens the plight of the miners. Thus, miners, are forced to take a shorter route of bribing their way through the inefficient bureaucratic systems. Political connections, especially allegiance to the ruling party provides another route to cut costs and be shielded from complying to mining rules during the mining operations. Another strategy that miners have adopted is negotiating with the governing authorities, both at the local and national level through mining associations. The key repertoires used by miners in their negotiations include references to indigenous empowerment and the state's responsibility to create economic growth and address poverty. The miners also demand to be engaged as key stakeholders in the economy since they generate significant gold revenues that the state needs.

The prevalence of Exclusive Prospective Orders (EPOs) coupled with corruption further complicates access to mining licenses. Consequently, this leaves only a handful claim owners (companies, cooperatives, and individuals) at the top of the hierarchy. The most common way through which unlicensed miners in this study get involved in mining is through (informal) tribute agreements with claim owners. These tribute agreements open doors to various informal arrangements. It is through these informal arrangements that it becomes difficult to trace who is involved and who is accountable as some of the claim owners run their claims through third parties who may in turn illegally sub-rent the claims. According to Lahiri-Dutt (2018: 2), "informal arrangements are at the heart of the small-scale mining economy" even where the ASGM operators are registered or legal. This is due to the informal labour and production structures, as well as the rules and norms behind the organisation of small-scale mining practices.

The hierarchical structure of the Zimbabwean ASGM sector resembles what other studies have found in East and Western African countries including Tanzania, Ghana, Sierra Leone, and Liberia (Jonsson & Fold, 2011; Bryceson & Jonsson, 2010; and Bockstael, 2014). These studies also emphasise that complicated licensing systems, a wide range of extractive practices in the ASGM sector as well as the high capital investment needed for mining operations result in hybrid mining arrangements. Bryceson and Jonsson (2010) argue that the hierarchical

organisation of the ASGM sector contrasts the common myth about small-scale mining as a disorganised and chaotic sector. In response to the challenges of formalised mining, miners have organised themselves into a hierarchical division of labour within which they occupy distinct positions according to the resources they have, and the nature of mining activities they engage in (eg., seasonal vs long-term).

6. Experiences and Challenges of formally governing the ASGM sector

“In my view, we need to be honest to ourselves about what we want to do in mining. Are we still saying there are illegal miners?.....the paradox is that the so called ‘illegal miners’ are the mainstream sector- arguably the largest youth employer in the country...it has been given blessings by certain sections of the society to continue operating. It is not in writing, but it is there” (regulatory officer XM, 2021).

Regulatory authorities who interact with miners at the local level (district and local governance authorities) were interviewed to understand their experiences of governing the ASGM sector. The participants included officials from the Environment Management Agency (EMA), and the Natural Resources Officers (NROs) from the Rural District Councils. Additionally, other key stakeholders (experts and NGO representatives) and miners themselves also provided their inputs on this question based on their knowledge and experiences of local mining governance practices. The quotation above precisely captures the complicated nature of governing the ASGM sector, especially considering the pseudo-formalisation of mining activities at the local level, and the dilemma this presents for the local-level policy implementers.

Several perspectives on experiences and challenges of governing this sector emerged from the interviews. These include lack of clarity and/or poor definitions from the relevant laws and policies and multiple regulating authorities which are poorly coordinated and sometimes have duplicated roles. The main issues seem to be related to the nature of this sector- especially in relation to how it is organised in practice, and the evolving ways in which miners organise themselves within and outside licensing processes to gain access to mining sites. Other challenges are related to bureaucratic inefficiencies in the processing of licences and carrying out inspections. As one participant indicated, “The small-scale sector is a new sector, so we are still trying to find the best way of governing it (regulator, XM, 2021).” While it is not true that the ASGM sector is new, perhaps what is new is trying to formally govern it. The following sections present the interview results discussing the challenges raised by the participants.

6.1 The blurry boundaries of (in)formality in the ASGM Sector

As evident from the ASGM organisational hierarchy, licenses provide avenues for semi-formal or even pseudo-formal mining arrangements whereby unregistered miners can still work under licensed claims through unwritten tributary agreements. Throughout the organizational structure, it can be observed that most of the times the line between legal (formal) and illegal (informal) arrangements becomes skewed, especially when it comes to labour arrangements

and access to mining areas. This makes it a challenge to ascertain whether the view of informal mining as a transition to formal mining holds true for most unregistered miners. A leader of a mining association stated that because unregistered miners can extract, process, and sell gold using other miners' licenses, if the law had to be strictly followed, most mining activities would be deemed illegal,

You find out that most of the mining activities right now in Zimbabwe are illegal. If we go by book (law), 95% of the mining operations of this country are illegal because most people are using other miners' documents (licences and permits). That miner will then negotiate how much percent he needs from the production (miner, QM, 2021).

This was supported by another miner who precisely pointed to the blurry lines between formality and informality in pseudo-formal mining arrangements. He noted that, “in reality, illegal miners don't exist anymore. We have a lot of registered mines who cover all illegal operations” (miner MNG, 2021).

An expert participant observed that miners in the ASGM sector “have their own community”, a distinct category with different rules from large-scale miners. According to the participant, governing authorities have realised the unique nature of this mining community and are gradually accommodating them by allowing them to establish their own structures through the mining associations where they can raise their issues.

the Ministry of Mines has accommodated small-scale miners by allowing them to have their own places where they report to or authorities which handle their issues. You find that now we have small-scale miners' associations. They get into groups depending on how formal they are or how much they are interested in joining a certain association. One might be a drifting makorokoza (illegal miner) but he has stayed in one area for a long time. In the end they end up knowing someone who is a registered small-scale miner and if this small-scale miner is a member of a certain association within that part of the country, then the informal miner may through his relationship with the registered small-scale miner become formal. They may realise that “yah, I can do this for the rest of my career”, then they turn formal, and they actually understand the long-run benefits (expert AN, 2021).

If this view is true, then it seems authorities are trying to formalise the ASGM sector through associations under the umbrella of the Zimbabwe Miners Federation (ZMF). The representatives of this body confirmed that they were negotiating with the government and other key stakeholders to improve operational conditions for small-scale miners while at the same time educating and helping unregistered miners to formalise their activities. The

challenge is that while this approach may be aimed at encouraging formalisation through peer influence among miners to be licensed, there is also a possibility that these arrangements may create a parallel governance structure.

Other stakeholders are less optimistic about endorsing the informal networks of the ASGM sector as they indicated that most of the operations in the sector are run like “organised-crime” or “cabal” networks. As a local journalist narrated about corruption in accessing mining licences,

You see what happens with these people, it's more like an organised crime thing. It's like the whole system is full of corruption. They work with people in higher offices, people with authority to grant licenses (journalist, LJ 2020).

Another participant from an NGO that carries out educational programs for unregistered miners described the high-level (political) corruption in details. He argued that there is a web of politicians and security forces (including the military) controlling the ASGM sector outside the formal governing authorities at the local level. According to the participant, the high-level powerful actors have local “runner boys” through whom they control the ASGM sector:

Ok, firstly, the best way to describe this is a cabal. In a cabal, you don't see the godfather, or the sponsor being involved on the ground. They have runner boys. These are young, unemployed people who are connected to politicians. These young boys, despite being unemployed they have money. Where do they get it from? They are known in the mining communities as gold buyers.

When they are connected, they have access to every mining area and office in the country. So, who forms the cabal? You have your security services, especially the military. I recall in March 2020 when we started working on our Access to Information Project. The boys reported me to their superiors. I was mistaken to be a white guy trying to destabilise the mining network. So, after we had finished our meeting with the miners, and I was back home I received calls from the Ministry of Mines and a Brigadier asking what I was doing in the mines. He asked what information I was giving to the miners and who had sent me there.

The informant had apparently told his superiors that we had gone there to destabilise the informal network as we were encouraging miners to register. That way, we were viewed as threatening the power of the superiors to abuse the unregistered miners. They threatened me and my team. So, you see how they are connected to high offices? (NGO, participant, TJ, 2020).

The participant's account corroborates what other studies have observed on the clandestine involvement of securocrats in the extraction of natural resources in Zimbabwe. A study by Maringira and Masiya (2016) notes that the security forces, led by the military, played a huge

role in the looting of diamonds in Eastern parts of the country, between 2006 and 2012. The military is accused of seizing control of the in Chiadzwa diamond fields, in the process killing 200 people. After that, they continued to clandestinely loot diamonds through Chinese mining companies. A report by the Global Witness (2017) claims that Zimbabwe's security forces have covert interests in the extractive industries through some mining companies linked to the military. The report identifies two diamond mining companies strongly linked to the military, namely, Anjin and Jinan mining companies fronted by Chinese investors and indirectly owned by the Zimbabwe Defence Industries, a military company (Global Witness, 2017).

Other scholars have also observed a strong conflation of the state, the ruling party, and the military in the governance structures of Zimbabwe (Rupiya, 2013; Ndlovu-Gatsheni & Ruhanya, 2020). The ruling party officials have occasionally openly stated that "ZANU-PF and the military have an 'inseparable' bond due to their historical ties dating back to the liberation struggle" (Mhlanga, 2021). It is therefore not strange to find state elite interests in the gold mining sector. This context further complicates the formal governance of the ASGM sector as it expands the actors involved and may also limit the powers of street-level bureaucrats. It would be therefore expected that the miners and local regulators have to negotiate with multiple actors in their day-to-day mining operations.

6.2 Multiple regulatory authorities and poor (or lack of) coordination

The common theme that emerged from the interviews was that of multiple regulatory authorities, which are poorly coordinated and sometimes have duplicated roles. There were also some cases of poor coordination even within the same regulatory body, for example there is no uniformity in the fees charged by the district councils under study, even though they are administered by the same ministry. Some regulatory authorities indeed admitted that this was a challenge. As one regulating officer openly stated.

There is no coordination at all because you find a situation where someone gets a mining certificate, and other departments are not informed. For me, the ideal situation is that a mining certificate should not be issued before compliance to these other regulators. But we have cases where we have thousands of small-scale miners who get mining certificates and start operating before doing the environmental impact assessments and getting permits from EMA (regulator, GN 2021).

A rural district council officer explained that lack of coordination was due to the loopholes created by the current mining policies which bypass the local authorities in crucial decision-

making processes of allocating mining rights. He gave an example of a requirement that before pegging a claim, a prospective miner only needs to “notify” the local authority by writing to the District Administrator (DA). In practice, people just go to the Post Office to get a stamp on their letter and a receipt to prove that they have sent the letter (‘notification’) to the local authorities. That is sufficient for the miner to be given a mining license. Effectively, the local authority is supposed to just rubber stamp decisions on which they have had no input as the participant further explains,

*when miners are prospecting, they do not consult the Council or the DA. Then when it comes to the actual site plans when they have already been given mining certificates and want to start operating, the Ministry of Mines requires them to seek approval from us... That is too late because the claim has already been issued to the miner. So, we are powerless there as we are confined to work within the place that the person has been licensed to mine at, whether it is suitable or not, our role becomes only to limit the environmental damages. You cannot suggest any alternative area at that stage because the person has already been allocated a license (regulator **XM**, 2021).*

Other participants explained this disparity as a result of segmented laws that give specific mandates to each regulatory department, and they recommended that there should be measures to harmonise operations of governing the mining industry. But one participant said this was not an easy task and required the intervention of the central government.

*I think that is bigger than one organisation. It somehow has to come from the upper levels, I guess. I would not say there is anything that I know of, that is being done because you have your regulating Acts, statutory instruments, and regulations that you need to enforce- specific to each department. That is what you are mandated to do- you can't afford not to do some of these things. I think it will require the government to think about how to do some sort of one-stop or well-coordinated process (regulator, **SE**, 2021).*

Another regulator viewed the regulatory arrangements as a multi-stakeholder approach rather than a case of poor coordination. He said,

*it's a multi-stakeholder approach where EMA cannot regulate on its own since the environment is broad and requires all stakeholders to be involved. You will notice there is no overlapping (of duties) as the Forestry Commission is specifically for forests, ZINWA is for water, Parks and Wildlife is for wildlife animals, while local authorities are for local governance (regulator **ND**, 2021).*

It is possible that this participant emphasized on how things ought to be than how they are in practice because other regulators and the miners themselves cited poor coordination between regulatory departments as a major challenge.

6.3 Lack of clarity in policies

During the interviews, regulatory participants were asked to describe the policy tools and criteria they use in governing the ASGM sector. Throughout the interviews, all participants cited lack of clarity of the law and relevant policies as a major challenge. A provincial regulatory authority indicated that, “we don’t have a specific policy that we use for defining these mining categories. In terms of our Act, all of them are just referred to as miners. But now, for operational guidelines and to ensure that they all comply, we then categorise them into those groups (differentiating small-scale from large-scale miners)” (regulator **GN**, 2021).

Currently, there is no law that provides for artisanal and small-scale (gold) mining as a stand-alone sector in Zimbabwe. The principal legislation governing mining in Zimbabwe is the Mines and Minerals Act (chapter 21:05, the Mines Act) which came into effect in 1961. The Mines Act gives mining rights to any person aged 18 and above if they are a “permanent resident of Zimbabwe or any duly appointed agent of such a person” (Mines Act 1961, s. 20 & 24). The only policy that goes closer to defining the artisanal miners is a statutory instrument from EMA which says, “an artisanal miner is a miner who carries out mining activities *using approved tools and employs up to 50 people*, these include government registered groups, syndicates or cooperatives” (EMA, SI 92 of 2014). Participants indicated that this was a problematic definition since it still did not clarify the “approved” mining tools. Miners use a range of tools, from picks and shovels to equipment like compressors and other mining machines. Hence, without a law specifying the “approved” tools, the law becomes vague and difficult to implement.

Moreover, the use of gold detectors and the proliferation of hammer mills in mining sites has emerged as problematic governance issue for local policy implementers. Gold detectors are magnetic metal equipment that miners use to locate surface gold deposits. In the process of searching for gold using detectors, miners burn bushes to clear the land for digging. Despite the environmental damages caused by such practices, there is no law yet regulating the use this equipment. So, local authorities felt that policies are unclear and too slow to address challenges on the ground (e.g. as emphasized by regulators, **VT**, **ND** & **SE**). One participant said, “we

need a policy on the use of detectors as soon as yesterday! For now, there is no policy on use of detectors and that makes it difficult to regulate this issue” (regulator, **SE**, 2021).

The lack of clarity in mining policies results in each regulating authority coming up with their own definitions and criteria for governing the ASGM sector (discussed in 6.4). Although the regulators insisted that they were able to apply these self-made guidelines consistently on the ground, some miners interviewed indicated that there was confusion and lack of transparency on how they were processed by local officers.

6.4 Evolving governing tools: quasi-references to policies

The nature of the poorly coordinated regulatory environment together with poorly defined policies of categorizing and governing the ASGM sector further complicates the role of the local-level policy implementers. Regulatory officers from EMA indicated that their main defining criteria for issuing environmental permits to miners is the permanence of the mining activities and a low capital, that is, investment not more than US\$25,000. Furthermore, the miners need to be only involved in gold ore-extraction, using rudimentary and light machines like compressors. These miners are then processed through a less stringent environmental assessments of just filling forms of an Environmental Management Plans (EMPs). Once they get into gold processing and having machines like Bo mills, drillers, and stamp mills, then they now become medium-scale miners who need to adhere to stricter license processes under the Environmental Impact Assessments (EIAs). For EMA regulators, this is a way meant to make compliance and licensing processes easier for the ASGM sector to discourage illegal mining.

When asked if this was easy to implement, one regulator indicated that all along it had been easy as long as there was no gold processing equipment on the mining site. However, nowadays more miners are buying cheap equipment from China further complicating how to process the miners. For instance, using the US\$25,000 limit, the miner falls under the ASGM category, but the presence of gold processing equipment throws them into medium-scale category. Besides, the regulators do not have sufficient information about the investment made by miners, they have to negotiate with the miners in doing the calculations. For some miners these definitions are just meant to make money out of them, “You know with EMA, they define in order for them to make money. They are not defining in terms of Mines and Minerals Act. So, they just categorise miners so that they make money out of us” (miner, **KD**, 2021).

The Rural District Council (RDC) officials also have their own definition of the small-scale miners. They make a quasi-reference to section 96 of the RDC Act of 1988 which uses

employment figures as defining categories for charging land levies to mine owners. The RDC Act dictates that claim owners should be charged land user fees according to “units”, whereby one unit is a mine owner who employs between 5 to 100 workers. The RDC has thus adopted this definition for purposes of charging levies for small-scale miners. However, the key challenge the authorities cited was that employment figures were not always applicable especially where miners employ less than 5 people because they have mining machinery. One participant explained it as follows:

Yes, we use the unit (5-100 workers) as our definition of small-scale miners. But just to take this further, that definition is also problematic because we have operators of hammer mills. These people can employ just three people to operate 3 hammer mills. Automatically, that person is out of the band (5-100 workers). So, the person might be very profitable and even become a good player in the mining economy but is outside the legislated band that is supposed to be levied (regulator, XM, 2021).

It is in such an environment that regulators “always have ways of navigating these loopholes” (regulator, XM, 2021). The loopholes created by ambiguous laws create a conducive environment for negotiated discretions between street-level bureaucrats and miners, but also promote informality through bribes and other corrupt activities like nepotism.

6.5 Unequal Powers between regulating line ministries

Another reason for lack of coordination was cited as the domineering mandate of the Ministry of mines. “The law [for the RDC to be involved in governing the ASGM sector] is there. But the problem is that the Mines and Minerals Act seems to have a dominant role- it supersedes all other land use laws (regulator, VT, 2021). The local authorities felt that they were disempowered by these power imbalances, and they also observed that miners were taking advantage of this loophole by sometimes categorically refusing to pay fees to the RDC. “The miners seem to respect the Ministry of Mines and EMA more than the local authority- they resist to be controlled by the RDC” (regulator, VT, 2021).

According to the local authorities, until as recent as 2019, when a new statutory instrument was announced to involve the RDC in licensing the miners, the RDC was largely side-lined.

The miners were doing as they liked, going to the bushes and taking gold. As the local authority, we were getting nothing! They blatantly refused to pay any fees. It's just a few who did, otherwise the rest were defiant (Regulator, VT, 2021).

Asked what he thought motivated miners to behave this way, the participant cited power imbalances between regulatory departments and lack of coordination,

I suspect that it's an issue of them realising that even if they do not pay, there is nothing the local authorities can do. On the other hand, there could be genuine reasons. I think there is a need for collaboration between the different regulating authorities and stakeholders involved in mining. For now, the Ministry of Mines, EMA, the RDC, we are all operating as stand-alone entities whilst we are trying to address one issue. In the end, there will be power issues, the less powerful department will be disrespected and disregarded by the miners, and we will lose out (Regulator, VT, 2021).

A miner observed that “EMA is just an instrument which has no power. The only thing possible is for them to collect a bribe and go (miner MNG, 2021). The miner indicated that most of the times, once miners get a license from the Ministry of Mines, they do not wait for EMA processes as required by the law, they just go ahead and start mining. While regulators attributed this to lack of coordination, some miners suggested that they knew EMA would be slow to process their environmental permits and that as long as they had licenses from the Ministry of Mines, they faced less troubles from law enforcement agencies.

Another regulator blamed the ignorance of miners and their misunderstanding of licensing process as a cause for their incomplete compliance. Referring to situations where miners start mining as soon as they get mining licenses despite not having complied with EMA requirements, a participant said,

I think there is a misconception that's why I said in some cases you find miners getting to Ministry of Mines for registration then armed with that [registration /licence] they believe they have the right to start mining. Probably in some cases it's because of ignorance, but then for some it's because probably someone thinks now that I have a mining right, I have to go and mine (regulator, GN, 2021).

6.6 Negotiating governance between the regulatory departments

The regulatory authorities indicated that they were mapping way forward to improve coordination, especially through negotiating with the Ministry of Mines to reign over the miners to pay land levies to local authorities. Local authorities also want access to up-to-date information on the licenses being issued by the Ministry of Mines and to be involved in policy discussions.

We need capacitation to be able to regulate this sector. We also need information from the Ministry of Mines about the claim owners in our district. Currently there is no coordination, especially with the Mines offices and us. As it stands, things are difficult because as long as the Ministry of Mines remains working on its own,

the miners will never listen to us. They will be adamant that they are under the Ministry and not RDC. (Regulator VT, 2021).

The participant explained the basis of negotiating with other regulatory authorities as follows,

We are engaging with the resident ministers. Our argument is that if we have laws and other resolutions as the local authority empowering us to govern mining activities in our areas, then these laws should be followed. We are also approaching the Ministry of Mines to get all the necessary information for instance we want to know all the claim holders in our district so that we approach them and engage them. If we could get this information and get a good relationship with the Ministry of Mines, we can easily take the claim holders to task with our lawyers (Regulator VT, 2021).

There seemed to be positive sentiments towards the working relationship between EMA and the local governing authorities,

I think of late, to be honest if I may separate them, we have been working well with EMA. They've never given us any challenges in terms of information sharing. But we usually face challenges with the Ministry of Mines. But I think sometime last year, there was a meeting between the Ministers of Mines and Local Governance. From then I think a number of agreements were made. So, since then, you will find that the Ministry of Mines has increasingly become open to listen to our concerns (regulator XM, 2021).

It seems authorities realise the need for coordination, and it is only fair to assume that such desired coordination will occur after a negotiated process where regulators need to reach a compromise on the way forward. As one regulator emphasised,

I think the major thing that has to be done is to improve coordination between the different line ministries that are regulating the mining sector so that we have a data base of all the registered miners which is accessible across the different regulating authorities (regulator GN, 2021).

6.7 Negotiating with the ASGM miners

Besides negotiating between themselves as regulatory authorities, the nature of the organisation and governance of the ASGM sector at the local level has forced authorities to reach out to the miners for cordial relations. Regulators seem to be aware that it is unproductive to always play 'cat and mouse' games of raiding and chasing after illegal miners than engaging them. The regulators also acknowledged that a more accommodative approach was needed to facilitate working relations with miners who have for a long time experienced harsh reaction from authorities. Furthermore, given the stereotypes associated with artisanal and small-scale

mining, many of the miners were reportedly fearful of authorities. A regulating officer explained:

You know, when the small-scale mining sector emerged, it was already a labelled (as 'illegal') sector. Thus, most of them still have a certain phobia to anything that has to do with law or formalities to the extent that if you call a miner to say pass through the office, they tend to be evasive thinking maybe you want them arrested or something (regulator XM, 2021).

To address these fears, the participant indicated that local authorities had come up with an “open-dialogue” policy, to engage the miners. For the RDC authorities, this includes engaging miners during local Council’s annual budget meetings to deliberate on the annual land levies:

One of the strategies we have adopted is to maintain an open-dialogue policy. We have dialogues with miners at least twice a year outside the budget meetings where we meet them. So, on top of the budget meetings, we have two separate open discussions with them to understand their challenges and to explain ourselves to them. I think ever since we started that, things have improved. We encourage them to come forward, even to present their individual challenges (regulator XM, 2021).

Another local authority representative further explained that these ‘open-dialogues’ with miners were meant to “find a common ground” on operational issues and challenges,

But currently, what is being encouraged is that we should have dialogues with the miners through consultation meetings. We have already started these meetings locally with the miners where we discuss operational issues and challenges and get to know each other as we try to find a common ground. After that we will make it a point to find the best way forward and work out something together (regulator VT, 2021).

The local authorities also said they were trying to work with claim owners through whom they hope to better govern the rest of the miners. The local authorities are concerned about the rise of criminality, especially armed robberies in the local mining business centre, and burglaries in local villages. Furthermore, the authorities blame illegal miners for increased prostitution and child pregnancies being experienced in the villages where the men easily run away as they are difficult to trace due to their nomadic mining operations. Despite these challenges, authorities recognise the economic benefits that miners bring to the mining towns and therefore see it important to negotiate with the claim owners to assist local authorities to govern the sector. As one local authority officer explained, establishing friendly relations with claim owners is one of the key avenues through which authorities access the majority of the

(unregistered) miners. However, one regulator emphasised on the need to “package” messages well enough to avoid conflicts with the miners,

But knowing or having cordial relations with the claim owners is more helpful than a confrontational approach. Of late, we have been able to raise our concerns directly with claim owners and plead with them to reign over their miners. For example, in the context of the current pandemic we have managed to engage claim owners to help us meet the miners and plead with them to wear masks and give them information about the Covid-19 pandemic. You have to package your message in a way that makes them feel like you are with them; that you understand them. Because if you approach them as if you want them to stop their work, then you are up for a conflict (regulator, KC, 2021).

Authorities from EMA indicated that they also negotiate with miners, especially the illegal miners as they needed to convince them to come forward and regularise their activities so that they protect the environment. For this reason, EMA officials said they always try to engage the illegal miners every time they go to the field.

When we get there, they know that as EMA we are not the police, so they don't run away from us. So, we sometimes talk to them, and we educate them. We also carry out road shows where we get to areas where they operate, even if they run away, they move 100 metres away, we just talk to them from afar. They only run away when there are raids which we normally do jointly with the police. But we generally interact with them and talk to them whenever we go to the field (regulator GN, 2021).

Another regulator made similar sentiments emphasising that there was need to intensify these awareness campaigns if EMA authorities are to be successful in their mandate to steer miners towards sustainable mining (regulator MK, 2021).

Above engaging miners individually, the authorities indicated that they were also engaging the miners through the Zimbabwe Miners Federation and their local mining associations after realising that “we have had polarised relations for too long, I mean between the local authority, the miners and the communities. We need to work on that” (regulator VT, 2021).

Overall, as one expert also emphasised, negotiation remains a key component in the governance of the ASGM sector, and intervention programmes need to actively involve the miners in order to establish amicable ways of governing the ASGM sector’

We need to get closer to them, physically. We don't need to make programmes for them. We need to get them involved in making programmes so that they

understand what they want and what the state and the economy and the society wants (expert **XF**, 2020).

It is therefore, evident that local regulatory authorities view negotiation as central in the governance of the ASGM sector. The next section presents the views of the miners at the local level.

6.8 Chapter Summary and Reflection

The results of this chapter show that the formal governance of the ASGM sector in Zimbabwe is characterised by ambiguous policies administered by multiple authorities resulting in fragmented implementation. With each state department governing the ASGM sector largely working in silos, the formal institutions become instrumental in perpetuating a system that exploits miners. As the miners indicated in the previous chapter (5.5), each department has its own licensing requirements and fees, with some overlapping roles. This increases the cost of compliance, thereby decreasing the opportunities of formally governing this sector. The major challenge is the fragmented laws that empower these institutions to independently govern the ASGM sector. This creates poor coordination and power dynamics as each department seeks to fulfil its mandate. It could also be true that mining covers a wide range of governance issues that require the intervention of different authorities, as some regulators argued. However, the power hierarchies between these departments, where the Ministry of Mines remains the most powerful authority and does not share key information related to licenses issued, further complicates the formal governance of the ASGM sector. The less powerful departments are forced to negotiate their authority with the powerful departments to be able to govern the miners.

Another challenge emanates from lack of clarity in the mining policies on how to define and categorise ASGM operators. To begin with, this sector is not recognised in the main mining laws that govern mining in Zimbabwe. Secondly, even efforts to adapt the existing mining policies to the ASGM sector have not addressed the organisational practices of this sector at the local level. In the end, local-level policy implementers develop different strategies, including quasi-references to laws of their respective departments while negotiating with the miners to reach a common understanding on the need to formalise their activities. The challenges of lack of legal recognition and poor definitions of the ASGM sector as well as ill-adapted policies have been observed by other studies of artisanal and small-scale mining in Africa and other parts of the world (Lahiri-Dutt, 2018; Hilson & Maconachie, 2017; Jonsson

& Fold, 2009). For instance, Jonsson and Fold (2009) conducted a study of Tanzania's small-scale mining policies contrasting them with mining practices at the local level. The study found that the official prescriptions of the mining policies were detached from prevailing mining practices. As some examples given by regulators in my study indicate, the ASGM sector is dynamic, and its practices evolve much quicker than strategies devised by local authorities. In a context of fragmented policy approaches like in Zimbabwe, formally governing this sector will remain a bigger challenge.

It could also be possible that informality serves the interest of the state elites, and this might explain the lack of political will to improve the formal regulatory institutions. Participants raised the challenge of corruption and high-level influence of political elites and securocrats in covertly controlling the ASGM sector. Due to such political corruption, formal rules are applied selectively since some miners might be connected and protected by higher authorities. This type of high-level influence on the local ASGM sector further complicates and may even undermine the formal governance of this sector. Street-level bureaucrats therefore exercise limited discretion as they need to negotiate with the miners bearing in mind their political connectedness.

7.1 Discussion and Conclusion

This chapter provides an analytical overview of the findings of this thesis. It points out to the complex regulatory environment in which artisanal and small-scale gold miners operate. The current mining licensing regime in Zimbabwe retains colonial mining policies which are unfavourable for the artisanal and small-scale gold mining (ASGM) sector. Consequently, only a handful of the ASGM operators are able to obtain licenses for mining claims. Added to this challenge are difficulties associated with bureaucracy, corruption, and lack of financial capital to invest in both licensing processes and productive mining operations. In the end, most miners are left to operate under uncertain and exploitative tribute (largely informal) agreements in which they work on sub-rented land.

What emerges is an organisational hierarchy of quasi-formal arrangements in which miners negotiate their participation by occupying distinct roles, in various stages/processes of their mining activities. In turn, this organisational hierarchy with its complications, interacts with multiple regulatory authorities. Contrary to popular sentiments of the artisanal and small-scale mining sector being chaotic, disorganised, and ungoverned, in the case of Zimbabwe it seems to be an (informally) organised and overly regulated sector. This research argues that excessive and poorly coordinated regulation of this sector is breeding informality which perpetuates the precarious position of miners. It is within this context that this chapter critically reflects on the role of street-level bureaucrats in negotiated governance of the ASGM sector. The challenges of formally governing this sector (chapter 6) bring forth the role of informal institutions like clientelism and corruption as equally important regulatory institutions in the ASGM sector. This requires a reflection on the interaction between formal and informal institutions in governance of the ASGM sector.

7.1 Precarity, and the challenges of formally governing the ASGM sector

The findings of this study indicate that current mining policies and formal governance practices in Zimbabwe are ill-adapted to meet the realities of the artisanal and small-scale gold mining (ASGM) sector. The current mining policies still rely on colonial legislations which were designed mainly to govern mining by large-scale extractive industries. Interviews with regulatory authorities indicate that mining practices of the ASGM operators are constantly evolving and policies tend to be slow in addressing these dynamics. This creates a disconnection between policies and local mining practices thereby hindering the effective formal governance of this sector. Moreover, attempts to formalise the ASGM sector in the post-

2000 land reform period seem to have been more populist and political in nature, in the process facilitating the exploitation of the miners rather than genuinely empowering them. The miners in the ASGM sector in Zimbabwe are trapped in a dilemma. On one hand, in the context of perennial poverty, a general economic decline and shrinking investment in large-scale mining industry, ASGM has become the most crucial source of revenue for both the miners and the state. On the other hand, miners occupy a precarious position of perpetual informality as they lack recognition in the current mining laws and remain governed by the ever-changing statutory instruments.

As the country is still trying to mobilise the desperately needed foreign investment for a long-term economic growth, the gold revenues from the ASGM sector remain the most crucial source of foreign currency (International Crisis Group, 2020). The government, through the country's central bank, recently announced that it was drafting a statutory instrument to facilitate the biometric registration of an estimated 1.5 million illegal miners. The stated goal of the registration is to “formalise their (artisanal) operations, curb illegal gold dealing and protect the environment” (The Chronicle, 2021). With a strong emphasis on improving “traceability of the miners”, it seems the government is trying to find ways of extracting more revenues from the miners. As the findings of this study show, miners are already feeling overburdened by licensing processes and rules. If formal processes remain costly for miners, the miners will always devise informal ways of coping. Adding more formal rules and bureaucratic processes without genuinely addressing the challenges of mine claim ownership will further create new informal structures.

The miners occupy a precarious position because the state is reluctant to fully formalise their activities. Rather, the miners largely remain semi-formalised, perhaps a deliberate move by the state to keep doors open for future large-scale mining investors. This might also explain the prevalence of Exclusive Prospective Orders (EPOs) that all participants cited as the cause of challenges faced by the ASGM miners in trying to obtain licenses for mining claims. The EPOs are being used by large-scale mining companies to hoard land. At the same time, the government is also issuing more EPOs to lure new investors; further shrinking the prospects of ASGM miners to own obtain licenses for mining claims. Miners feel exploited as they are forced to enter into insecure tribute agreements with claim owners, who comprise large mining companies who use EPOs to hoard land. The prevalence of EPOs indicates that the government still prefers large-scale mining companies and the ASGM sector is just a fallback strategy in the absence of reliable industrial mining investment. Without any decisive and clear policy on

the ASGM sector, formal governance of this sector will remain a challenge at the local level. This also reflects the general “reactionary ‘developmental’ policy” embedded in the ruling ZANU-PF party’s populist strategy of using policy to strengthen its domestic legitimacy and power rather than adopting long-term developmental policies (Kabonga & Marime, 2017).

7.2 Revisiting Street-level Bureaucracy and Negotiated Governance

The frameworks of street-level bureaucracy (SLB) and negotiated governance have not been tested in the small-scale mining sector, hence this study provides an opportunity for a fresh critical reflection. The typical subjects of the theory of street-level bureaucracy are frontline public service employees in the education, policing, the judiciary, and public health sectors (Lipsky, 1980: 3). Moreover, the theory assumes that local public service workers are the generators of ‘real’ policy outside written policies since they presumably have a substantial discretion in their daily practices when interacting with the public. Johannessen (2019) has reviewed the ‘discretion’ element of the SLB theory noting that local policy implementers and clients negotiate access to public services and the enforcement of rules. As a result, street-level bureaucrats exercise a negotiated discretion, as they need to consider the expectations of their clients when making decisions. Accordingly, there are two key elements which need to be tested against the results of my study: discretion and negotiation between the local public officials and their clients.

Placing negotiation at the centre of SLB aligns well with Haggmann and Peclard’s (2010) theory of negotiated statehood (governance). The key argument of this theory is that state power is inherently contested and is a product of multiple powers. Moreover, like the SLB theory, everyday political processes at the grassroots level are central to the negotiated governance theory. This is because the theory argues that “state institutions are never distinctively formed” but are constantly formed through dynamic and complex processes of power contestations (p. 544). Another key element of negotiated governance is that by emphasising on multiple powers that constitute the “state,” it challenges the conventional notions of the state as a coherent and monopolistic authority with autonomous bureaucratic apparatus. Researchers therefore need to look at “by whom and how state power is being contested (actors, resources and repertoires); the places where the negotiations occur (negotiation arenas and tables) as well as the outcomes of the negotiation (objects of negotiation)” (Haggmann & Peclard, 2010: 544). However, the examples cited by the authors of this theory are typically from post-conflict settings and/or contexts where the state’s monopoly of violence is limited, especially in the margins of society

where the state has retreated from certain areas of governance. The results of my study indicate that the 'state' is heavily involved and maintains a strong interest in controlling the ASGM sector. It is therefore crucial to reflect on how under this context, negotiated governance plays out.

For governance scholarship, the ASGM sector occupies an interesting position to explore the power dynamics and politics of statehood mainly because this sector has become a central point of power contestation. For example, Spiegel (2015) has demonstrated how the Zimbabwean government has previously used environmental protection policies to violently crack down on informal miners, in the process usurping power from local governing authorities. This has helped the state to recentralise the governance of the ASGM sector as mining rights are granted by the national mining authorities. Given this top-down governance structure, the present study sought to explore how local authorities and miners perceive and experience formal governance of the ASGM sector.

As the findings of this study indicate, the Zimbabwean state is heavily involved in the control of the ASGM sector, albeit through multiple and often poorly coordinated regulatory ministries and/or departments. Perhaps, as other scholars have observed, due to the 'free' rents and wealth from natural resources, the extractive sectors in general, tend to be overly regulated and highly controlled by states (Chene & Hodess, 2007). This results in complicated regulations that increase bureaucratic processes and the transaction costs of legally (formerly) accessing mining rights for ordinary small-scale miners. This was further emphasised in this study in chapters 5 and 6 where participants pointed out that the regulatory environment was breeding a wide array of informal mining arrangements as miners sought to avert lengthy bureaucratic processes, minimise operational costs and share investment risks.

At the same time, sentiments from local governing actors indicate a challenge of ambiguous mining policies, lack of coordination and power contestations over the governance of the ASGM sector. While the Ministry of Mines and Mining Development is the primary regulatory authority overseeing mining in Zimbabwe, there are other state departments or governing agencies including the Environmental Management Agency (EMA) and the Rural District Councils (RDCs) amongst many, who are also legally mandated to regulate mining at the local levels. Thus, participants indicated that all these departments were competing to exercise their authority over the miners. In the end, it was the most powerful departments, in this case the Ministry of Mines and sometimes EMA, that successfully managed to control the miners. The

RDCs were mostly left to negotiate their authority with the other governing departments on one hand, and the miners on the other.

The overarching sentiment from the miners interviewed for this study was that “everyone is milking us”, as they felt that every government department was manipulating regulations to extract revenues out of the miners. Due to the semi-formal status of many miners and indeed, the largely informal arrangements within the ASGM organisational hierarchy, miners have to negotiate with different governing authorities and other informal ‘governing’ structures (e.g., powerful political figures) in order to carry out their mining operations. More importantly, however, the interviewed miners did not feel completely helpless. They indicated that through their mining associations at the local level and their federation at the national level (ZMF), they were continuously lobbying the government to improve regulations and operational conditions. They employed repertoires of indigenisation and black empowerment, together with imageries displaying the state as responsible for creating employment and citizen’s welfare, to demand the government to play its role. The miners also seem to be aware of their leverage as major gold producers and therefore a key source of the country’s foreign currency in the prevailing economic challenges in the country. Armed with this, miners in the ASGM sector view themselves as key stakeholders who should be engaged in the governance of the ASGM sector.

Overall, the findings of this study corroborate the pillars of the negotiated governance theory in two main ways. First, it affirms the observation that the ‘state’ is not a unitary or coherent autonomous bureaucratic apparatus (Hagmann & Peclard, 2010). As the results of this study show, there is a power hierarchy between the mining regulatory departments, with the Ministry of Mines being the most dominant. This results in regulatory departments negotiating and competing for authority to govern the ASGM sector. In addition to this, the influence of political elites and securocrats in the ASGM sector tends to undermine the official bureaucratic mining license processes as it creates more avenues for corruption and nepotism. In turn, this creates a loophole for the miners to have leverage in negotiating with the less powerful authorities. For instance, EMA and the RDCs (local authority) feel that miners tend to disregard requirements for operational permits as soon as they obtain mining licenses from the Ministry of Mines. This is partly due to poor coordination between regulatory authorities, but also because miners know who has more power to control them. To make their work easier, local authorities end up negotiating with the miners to cooperate.

Secondly, despite the Zimbabwean state being heavily involved in trying to control the ASGM sector, it does not have absolute power over the miners. This affirms Hagman and Peclard's argument that state power is inherently contested. To begin with, the miners hold the state accountable for the economic decline that has pushed many of the miners into the ASGM sector. Moreover, the miners know how to creatively use the state's rhetoric of indigenous empowerment to question mining rules that are disadvantaging the ASGM sector. Knowing that the state relies on populist rhetoric and the revenues from the ASGM miners for its legitimacy and power, the miners through their mining associations are challenging the state from unitarily implementing rules. For example, miners indicated that because of their lobbying, they now get consulted by higher authorities who have also created engagement structures for dialogues with them. However, it remains to be seen how far the miners can win in their negotiations with the state, as the reform of mining policies is still incredibly slow.

In relation to the theory of street-level bureaucracy, the findings of my study add a slightly different perspective. First, the discretion of the street-level bureaucrats is limited due to the strong interests of high-level state (elites) in the ASGM sector. This could be related to the instant wealth that can be generated from gold extraction and the fact that for one to access that wealth, they must get hold of the gold value chain from the local level. Johannessen (2019) has added the element of negotiation to indicate that street-level bureaucrats do not have absolute discretion as they have to convince public clients to accept their decisions. However, this revision only assumes that negotiation occurs between local public service workers and their clients. The results of my study show that the discretion of street-level bureaucrats can be limited if the public service clients are politically connected with higher-level authorities and therefore are able to jump local authority protocols to access public services. For instance, politically connected miners negotiate upwards directly with higher authorities before coming down to the local authorities. In the end, the discretion of the local authorities is negotiated with caution depending on how politically connected a miner is. This results in ad hoc enforcement of formal rules. So, in the context of Zimbabwe, it can be said that local public service officials have selective discretion since rules are applied based on one's political connections.

7.3 Revisiting the formal-informal institutional typology

A final theoretical reflection for this study is on Helmke and Levitsky's (2004) typology of different interactions between formal and informal institutions. As already discussed in chapter

2.5, the hypothesis of the typology is that informal institutions either substitute or compete with ineffective formal institutions. However, when formal institutions are effective, informal institutions either complement or accommodate formal institutions. Formal institutions differ from informal institutions because they “are (usually) written, created, communicated, and enforced through formal channels” (Helmke & Levitsky, 2004: 727). The results of my study indicate that in the ASGM sector, formal rules co-exist with informal ones. The state, through its various, albeit poorly coordinated regulatory departments, has put in place various legislations and structures to govern mining. However, there is still considerable ambiguity on the application of the policies for the ASGM sector, as the current policies were originally designed for large-scale mining companies. This results in discretionary interpretation through quasi-references to legislations by local authorities. In turn this allows for ad hoc implementation of formal rules which create opportunities for informal institutions like corruption and bribes.

In addition to the ambiguous formal rules, there are also challenges related to the bureaucratic ineffectiveness of the state departments due limited resources to enforce rules and rampant corruption within the public service. Due to these challenges, one may argue that formal mining institutions are ineffective in Zimbabwe as they are not able to fulfil the outcomes of the written rules. The interviewed regulatory authorities are aware of this and while they felt sympathetic to the ASGM operators, they also felt helpless to change the rules as that is the responsibility of the central government. On the other hand, formal rules, in this case mining licenses, remain somewhat effective as they are the pre-requisite for mining operations. The organisational hierarchy of the ASGM sector shows the importance of licenses as it shields all kinds of informal arrangements from governing authorities. According to participants, even those who are politically connected and are therefore ‘protected’ from inspections and other operational permit requirements, get licenses to create a semblance of abiding by the rules.

Corruption in the licensing processes and implementation of rules seems to be the most common informal institution governing the ASGM sector. More than half of the miners interviewed indicated that the licensing system was complicated and too slow, forcing them to pay bribes. In fact, as one participant stated, “you need to pay the mining officers to push your papers” (due to the backlog of applications). As discussed in chapter 4.4, corruption has become very pervasive in Zimbabwe’s society. The country’s economy in general, is largely informal as many poor citizens have turned into survivalist livelihood strategies (Mlambo, 2017). Amid poverty and widespread corruption, Zimbabweans have developed a culture of

using bribes as a way of taking shortcuts and avoiding institutions; whether social, state bureaucracy or the law (Jones, 2010: 287). Maringira and Masiya (2016) observe that in the public service sector, there is also a widespread culture of the “goat mentality”: looting whatever resources one has access to. Thus, corruption is a strong informal institution in the country in general, and inevitably prevalent in the ASGM sector.

Outside the formal state bureaucratic authority, there seems to be a strong influence of “a hidden hand” or a “cabal” as some participants called it, that controls access to mining lands/rights in the Zimbabwean ASGM sector. Four participants insinuated that state elites including political actors from the ruling party and securocrats (especially the military) have covert interests in the gold mining sector. Thus, they indirectly control the ASGM sector through proxy miners at the local level, for instance, by either facilitating easy access to mining licenses or shielding their proxy-miners from complying with formal mining standards and regulations. This should not be a surprise as other scholars have observed a strong conflation of the state, the ruling party and the securocrats in politics and governance structures of Zimbabwe (Rupiya, 2013; Maringira & Masiya, 2016; Ndlovu-Gatsheni & Ruhanya, 2020).

Helmke and Levitsky’s (2004) typology of institutional outcomes provides a useful framework to understand both the formal and informal institutions governing the ASGM sector in Zimbabwe. However, as this study has shown, despite being largely informal, the ASGM sector is organised in a hierarchical structure where informality is strongly embedded in formalities. Moreover, due to the ambiguity of the formal rules, it is not always clear what the written rule requires, especially if the enforcement is open to discretionary interpretation by local authorities. This is an area that the institutional typology does not fully address: how do we classify quasi-formal arrangements in this typology? Alternatively, what should be done with grey areas of formality and informality? For instance, licensed claim owners might let unregistered miners (pit diggers) operate in their claims resulting in a wide range of informal mining labour arrangements. Authorities have difficulties in regulating these arrangements. On one hand, they are deemed formal (legally authorised) since they are under an officially licensed claim. However, on the other hand, they may be deemed informal because they are not formally accepted as they are unregistered, making it difficult for authorities to extract revenues from the large number of the pit diggers. The authorities can only extract revenue from the registered claim owner, yet a chain of actors in the ASGM hierarchy are involved in the extraction of the gold.

Nonetheless, despite the shortfall of this typology, it seems accommodative informal institutions of negotiating a workable solution for both the miners and local authorities have become the norm. In a way, that strikes some balance to maintain some compliance to formal rules, while indirectly allowing informal mining operations to continue. Table 4 gives a summary of the typology of formal-informal institutional interactions of the ASGM sector in this study. It is important to note that this gives an idealistic picture, as the reality of these interactions is more complex due to the challenge of the grey areas of (in)formality as already discussed in this chapter (and chapter 6.1).

Table 4. Adapted typology of the ASGM formal-informal institutions

Outcomes	Effective formal institutions	Ineffective formal institutions
Convergent	<p><i>Complementary</i></p> <ul style="list-style-type: none"> • Bribes to jump backlogs, reduce transaction costs and time to obtain a mining license. 	<p><i>Substitutive</i></p> <ul style="list-style-type: none"> • Corruption and clientelism- affiliation to the ruling party and securocrats may substitute for inspection permits or compliance to local mining rules.
Divergent	<p><i>Accommodating</i></p> <ul style="list-style-type: none"> • Formal licensing rules remain a primary requirement for most operations: somehow effective • Both the local regulators and miners acknowledge the need to formalise and the importance of licenses. While they disagree with the centralised approach, they have no power to change the rules. • Regulators are also aware of the prevailing economic challenges and seem to be sympathetic to the miners' plight. • Miners say the state has a responsibility to either capacitate them or create alternative employment to help them to comply with the rules. 	<p><i>Competing</i></p> <ul style="list-style-type: none"> • In some cases, political and personal networks are more important than formal licenses. • Illegal mining operations outside the formal rules compete with formal licensing rules. • Corruption (bribes) and clientelism (affiliating with the ruling party and the securocrats), • bureaucratic inefficiencies.

7.4 Limitations and recommendations for future research

This study was conducted during an unprecedented global COVID-19 pandemic resulting in limited opportunities for fieldwork research. Ideally, researching informal communities like the ASGM sector requires ethnographic methods that combine interviews with observation. Observing miners in their day-to-day work could have yielded a more nuanced understanding of the informal rules that the miners themselves may not be aware of. In that sense, interviews are a limitation, since participants may not always be aware of their behavioural patterns. Besides, interview participants may intentionally withhold (sensitive) details or even give misleading information. Thus, the key advantage of ethnographic research, especially observation is the ability to make common-sense judgements about a certain phenomenon (Angrosino, 2007). Fortunately, the advances in technology and internet made it possible to do online research even under the COVID-19 pandemic. This could be viewed positively as it enabled me to reach to a wide range of geographically remote participants. It is possible that due to the sensitivity of the topic and heavy state control in the mining sector, physical access itself could have been difficult, even under normal circumstances.

Online research for informal and often secretive communities like miners, requires strong trust building and a good rapport between a researcher and the participants. This is often difficult to achieve through a one-time online interview. More so, in the context of Zimbabwe where there is repression of freedom of speech, surely participants would be expected to be more careful about the details they give to a stranger over telephone or other online platforms. I initially struggled with probing participants when they spoke in riddles about political connections, or securocrats and corruption. Reaching participants through their trusted networks and using direct calls with a local number helped to improve trust. In any case, some participants were more open than others, and this also helped me to improve the way I handled conversations during interviews. I also had an added advantage of interviewing participants in the local language, and that helped to ease the online interview environment. Overall, the snow-balling method together with a triangulation of information sources mitigated the limitation of remote interviews as it helped fill in gaps and enrich the quality of the data.

Future research could build on the results of my research with fieldwork to further narrow the focus and themes of the research. For instance, using the hierarchical organisation of the ASGM sector, other researchers may concentrate on certain actors within the hierarchy. Of interest, could be understanding the experiences of pit diggers (or operators), the various actors

they interact with and how they negotiate their mining operations. Pit diggers are always on the ground and might have finer details of what goes on, from extraction to the processing of gold. This may provide an interesting perspective on the network of actors, especially related to financing of ASGM operations. Another research area that needs to be investigated relates to labour conditions of mine workers in the ASGM sector considering the informality of the sector and lack of formal labour rights or protection for miners. Researchers may also consider investigating the impact of Zimbabwe's mining policies on land disputes, especially between ASGM miners and small-holder farmers who, just like the ASGM sector face land tenure insecurity.

Two of my interview participants were women (a metallurgist and a small-scale miner). Issues of gender and women's experiences in mining, a field that is historically male dominated, could be an interesting follow-up research topic. Finally, in the discussion of the implications of my study on the theory of SLB, I have hypothesised that the intensity of state interest in a sector/or issue determines the discretion of street-level bureaucrats. I have argued that where the state has a strong interest and seeks to centralise power, street-level bureaucrats have limited discretion. This could be tested further in other contexts using comparative studies or other research methods like surveys.

7.5 Ethical Considerations

Another limitation concerns applying ethnographic ethical research principles in the context of online research. As a way of triangulating data collection, I tried to use netnography by joining WhatsApp groups where miners engaged their representatives and other stakeholders (e.g., national mining authority). The intention of joining these groups was to gain a better understanding of the ASGM sector and challenges miners faced. However, there were three ethical issues related to confidentiality and informed consent, privacy, and my role as a researcher. Obtaining informed consent and being transparent are the standard of ethical research. Yet, covert observational research where the researcher does not reveal his/her identity and participants are unaware that they are being researched, is also a permissible and ethical research method (Angrosino, 2007; Fielding et.al., 2016). Covert observational research is done to reduce research biases like reactivity and the Hawthorne effect in cases where overt research would otherwise make participants adjust their natural behaviour thereby distort the data collected. It is more suitable for understanding social behaviour in natural settings, public places, and especially for closed (secretive) communities and sub-cultures (Angrosino, 2007).

Thus, it can be used for a range of topics from observing behavioural patterns related to public traffic rules, public smoking in restricted areas as well as sensitive topics related to violent gangs, gay communities, and public prostitution.

The informality of the ASGM sector has some elements that may require covert observational research or netnography. Some of the mining activities in this sector might be considered illegal by authorities or even include some clandestine practices that both miners and interested parties may not discuss openly. Hence, it would be expected that some participants would prefer discussing matters within their closed circles. However, the challenge of applying a covert research method in WhatsApp groups is that it may not be possible to completely hide the researcher's identity, especially when using a foreign number like I did. Thus, I feared raising suspicions or resentment from the participants. But what kind of consent was I to obtain? In face-to-face research sites, the consent of the gatekeepers (e.g., police and local authorities) is often enough to gain access to the larger community for observational research (Fielding et al., 2016). I struggled adapting this principle to the online research context. Was the consent of the group administrator(s) (the gatekeepers) enough for me to be in the groups? What about the consent of the rest of the participants in the group? Would it be ethical to use the data obtained from the chats in these groups? What about the privacy and confidentiality that participants are supposed to get through using WhatsApp? These are difficult considerations about doing online research. However, as Fielding et al (2016) observe, there are always trade-offs in trying to adapt ethical research principles to the advantages and constraints of online research. Hence, it was important for me to exercise caution and leave the groups to maintain an ethical research standard.

7.5 Conclusion

This research explored the governance of the ASGM sector in Zimbabwe within the ongoing literature debate on formalisation of this sector. Far from being a solution to the informal nature of the SGM sector, formalisation policies seem to be breeding and perpetuating informality. As this study has demonstrated, Zimbabwe's mining policies have been slow to adapt to the realities and dynamics of artisanal and small-scale mining. The country still relies on colonial mining legislations which were designed for large-scale mining. Although the post-colonial government has made efforts to adopt policies aimed at empowering indigenous people and protecting the environment, these policies have been poorly coordinated creating multiple authorities regulating the ASGM sector. Having multiple-governing authorities in the ASGM

sector increases transactional costs of formalised mining in addition to the pre-existing challenges of intensive capital and investment risks inherent in mining.

The major challenge with ASGM policies in Zimbabwe is that they remain ambiguous and have led to quasi-formalisation strategies at the local level. Essentially, every new policy creates a new space for an informal domain and field of informal bargaining. Thus, formalisation serves to facilitate a wide range of semi-formal and informal arrangements as miners seek ways of accessing mining rights, avoid risks and share costs. This phenomenon has also been observed by studies of artisanal and small-scale mining in Tanzania and other African countries (Bryceson & Jonsson, 2010; Jonsson & Fold, 2011). As shown in this study, formal institutions can be used to facilitate informal institutions especially when informal arrangements function to sustain the interests of the ruling elites. In Zimbabwe, the ASGM sector remains the most important source of employment and foreign currency flows in the face of an economic crisis that has driven many people into the margins. This means that artisanal and small-scale miners play a crucial role in the country's economy. Yet, this has also brought the miners to the spotlight. The state, through its various and poorly coordinated departments, has shown a strong hand to control the ASGM sector to get as much revenue as possible. Here, as predicted by Hagmann and Peclard (2010), the contestation for state power comes to the fore as different state departments compete to control the ASGM sector. On the other hand, the state seems to be using the artisanal and small-scale miners as a fall-back strategy for economic survival while seeking to lure large-scale foreign investors for sustained economic development. This might partly explain the state's reluctance to formalise the ASGM sector.

Outside the formal state structures, miners are a key source of bribes for licensing officials, while political elites also compete to covertly control the sector in order to maximise personal accumulation from gold extraction. Formal rules in the form of mining licenses and other operational permits are enforced or applicable only to the extent of one's political connections. It seems formal rules remain important for the purposes of maintaining some semblance of legality as all participants acknowledged the importance of mining licenses. It is also possible that the state uses multiple departments to "milk" the formalised ASGM miners to feed into the formal revenue collection system. At the same time, the informal miners might be used as an avenue to sponsor the informal revenue system of the ruling elites and the ruling party structures. Street-level bureaucrats have to exercise a delicate balance in implementing rules at the local level not to offend superiors and the miners at the same time.

The study indicates that formal rules work along some form of negotiated arrangements between the policy implementers and the miners, bearing the top-down policy pressures. By nature, policies serve different interest groups and therefore need to be negotiated. For Africa's international development partners advocating for more regulation of the ASGM sector, it is crucial to be aware of the possible reverse effects of formalisation. More formalisation might inadvertently create barriers for poor miners and in the process perpetuate new informal arrangements. This is more important as the scope of governance issues in the mining sector has expanded from transparency and good governance, to include different aspects of environmental protection and sustainability. Policy makers need to creatively integrate these aspects into mining laws in a well-coordinated manner that is feasible for implementation without disadvantaging the livelihood needs of the ASGM miners.

As Zimbabwe continues to face serious economic challenges and poverty, excessive formalisation creates barriers for many miners and leaves many either semi-formalised or informal. This allows the state and the ruling elites to manipulate regulations as a bait to exploit the precarious position of informal miners in massive extraction of gold revenues. Without being fully formalised, miners have limited options but to negotiate through bribes and seek political connections that may guarantee their protection.

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Appendix A: Interview participants Profile (and coded names)

Not available because of privacy protection. Data are stored in a protected environment.

Appendix B: Interview Consent Form

Dear Madam/Sir

My name is **Matthew NCUBE**, and I am enrolled in the master program of International Development Studies at Wageningen University & Research, The Netherlands. I am conducting research on: **Governing the Artisanal and Small-scale Mining (ASM) sector; Opportunities and Challenges**. I would like to interview you for your insights on this subject.

Your participation in this interview is **voluntary and requires your consent** (verbal / written). Therefore, before you decide whether you want to participate in this research, I wish to explain the guiding ethical conditions so that you make an informed decision.

1. Purpose of the Research

- To understand the governance of the artisanal and small-scale mining sector in Zimbabwe, and the opportunities and/or challenges this brings for the development of this sector.

2. What your participation involves

- An interview (conversation) of approximately 30 minutes.
- The researcher will record the interview **if you give permission**.
- The researcher will take minutes of the interview.
- After the interview, you may provide the researcher any extra information you think may help in this research (e.g pictures, policy documents, referral to other key stakeholders or participants)
- You may contact the researcher anytime if you have any questions regarding this research.

3. If you do not want to participate or you want to withdraw from the research

- Your participation in this research is voluntary. If you decide not to participate in this research, please inform the researcher. **You do not need to give reasons** for your decision.
- If you would like to withdraw your participation during the interviews, inform the researcher immediately and **you do not need to give reasons** for your decision.
- The data collected until the time of your withdrawal will still be used for the research, **unless you state otherwise**.

4. Confidentiality and Storage of your data

- None of your personal details collected during the research (e.g name, contact details) will be used in the research report.
- **If you give permission**, the name of your organisation may be mentioned in the research report.
- Your identity will be kept anonymous and the research report will omit any information that may directly identify you.
- The recording of the interview will be done only for purposes of the research, that is, to transcribe and analyse the content of the interview.

- The record will be stored safely using an encrypted and secure storage facility of Wageningen University until the end of the study period.

5. **Researcher's Contact details:** +31 64 740 8384 [/matthew.ncube@wur.nl](mailto:matthew.ncube@wur.nl)

Having read or verbally informed of these conditions, do you agree to participate in this research?

YES _____ **NO** _____

Date and Place _____

Signature _____

Appendix C: Interview Guide

Note: questions need to be tailored to the relevance portfolio of the participant (e.g stakeholder, key informant, miners). The main goal of the interview is to understand the organisation of the ASGM sector, and the role of mining licenses or other regulatory policies in governing mining operations in practice.

Questions for key Stakeholders or informants

1. How are you involved in the mining sector?
[**Follow up questions:** what is your role in the governance of the ASGM sector? What does your role entail (e.g inspections, licensing, consultancy, etc)? How long have you been working with the ASGM sector (or the mining industry in general)?]
2. In your work, which areas / districts do you provide services to?
3. In your work, which category of miners do you work with?
[**Probing clues:** large-scale, small-scale licensed miners, artisanal miners or you also work with both licensed and unlicensed miners?].
**Here, also ask the participant to explain or define their understanding of the terms artisanal and small-scale miner as practised in their mining areas.*
4. How would you describe the typical characteristics of the mining practices (arrangements / organisation) of the ASGM sector in your area?
[**Probing clues:** unregistered (illegal?), artisanal, small-scale miners; tribute arrangements, contracts etc].
**Probe further about how this impact on governance of the ASGM sector [or what type of governing arrangements emerge from the mining arrangements most common in that area]*
5. How important is it to have a license for one to be involved in mining in your area?
[**Probing clues:** practically speaking, how important are licences for mining operations in the field?]
6. In your understanding, what factors motivate miners to [or determine whether someone will] move from being an unlicensed to a licensed miner? [**Probe:** incentives for acquiring licences]
7. From your experience, how does the regulation of the ASM sector work?
 - a) Which regulatory authorities are involved and how do they define and categorise the miners?
 - b) In line with your day-to-day work, what tools (e.g definitions / policies/ guidelines) do you use to regulate the miners?

- c) Are these tools clear and easy to apply in practice for you?
 - d) What measures are there to ensure there is a uniform understanding and implementation of the policies governing the ASGM sector at the local level?
 - e) **How does the licensing process work?**
 - i. How easy is it to obtain a mining licence (s)?
 - ii. What are the key requirements?
 - iii. What are the key challenges of the licensing process?
 - f) In your opinion what are the key challenges of governing (regulating) the ASGM sector in your district?
 - g) Given the challenges you mentioned above, do licenses and formal processes provide useful tools for governing the ASGM sector?
8. How do miners deal with the regulatory challenges they face?
9. What role do local communities play in governing the ASGM sector?

Questions for the ASGM miners

1. What are the most common mining arrangements (categories /types of mining practices / organisation) in your area?

[**probe:** what is the nature of the ASGM sector in your area? What are the most common characteristics of mining practices there?]
2. How are you involved in the mining sector?
 - a) How long have you been in the mining sector?
 - b) In which area / district are you working in?
 - c) Under which mining category would you define yourself? [e.g unregistered, mine worker, artisanal, small-scale, medium scale miner]
 - d) Please explain why you define yourself in this category.
 - e) **If the person is unlicensed** [ask i-v, then move to Q4]:
 - i. what is the nature of your mining operations- e.g working under a tribute, a contract mine worker, just a gold panner, etc?
 - ii. Have you ever tried obtaining a mining license?
 - iii. What were the challenges you faced?
 - iv. In your view, how important is a mining license?
3. **If a person is licensed:** could you please share with me the processes you go through in order to operate as a miner?

- a) How was your experience of entering the field, did you already start by obtaining a mining license? [**probe**: at what level did you start mining?]
 - b) What motivated you to seek a license? And how was your experience of the processes of acquiring the license then?
 - c) What is your experience of the processes of renewing licenses- how easy or difficult is it?
 - d) What are the key authorities that provide services to you to carry out your mining operations (regulatory bodies)?
 - e) What has been your experience of interacting with these authorities? How do you feel about the services they offer you?
4. What would you say has helped you most to remain active in the mining sector? [**probing clues**: formal processes; informal networks? Other stakeholders- e.g NGOs?]
 5. In your opinion, which actors do you think are the most important in facilitating your success in mining?
 6. How practical and/or easy is it for you to comply with the mining regulatory requirements? Which ones do you find most challenging for you?
 7. In your work, how often do you interact with local communities? **Follow up**: and what role do you think they play in facilitating your mining operations?
 8. Overall, what do you think could be done to improve your mining experiences and operations?

Appendix D: ASGM Governing (monitoring) Agencies: Operational Guidelines

ISSUE	MITIGATION MEASURE	WHEN	MONITORING AGENCIES
Vegetation destruction	Confine vegetation clearance to mining areas Reforestation programmes to be undertaken by the miner (to have a plantation onsite)	During mining operations	EMA, Forestry Commission, RDC
Rehabilitation of mined areas	Progressive rehabilitation of mined areas Protection of the pits by either fencing or complete closure	During the project cycle	EMA/ Min of Mines and Mining Development
	Warning signs to be put in place Put in place danger warning signs at appropriate areas		
Livestock and wildlife entrapment	Fencing and or protection of shafts Fencing of the operational area	When the project commences	EMA/Min of Mines
Veld fires	Construction of standard fireguards around the claims Have adequate fire-fighting equipment Create and provide a register for trained fire fighters	Before the fire season	EMA, Forestry Commission, RDC, ZRP
Sanitation issues	Construction of proper and adequate toilets	Before the project commences	EMA/Ministry of Health
Waste management	Provision of waste receptacles and disposal facility	Before the project commences	EMA

ISSUE	MITIGATION MEASURE	WHEN	MONITORING AGENCIES
Decommissioning of the mines	Completely rehabilitate all mined areas Production of a decommissioning plan to relevant authorities	At decommissioning	EMA/Min of Mines, RDC
Exposure to Chemicals	No chemical usage is allowed	During operations	EMA/Ministry of Mines
Safety of workers	Provision of adequate PPE Provision of adequate and visible danger warning signs Systematic and timely blasting and use of noise producing equipment Provide pre-blasting warnings to nearby residents/communities	During operations	EMA/NSSA/Ministry of Mines
Water pollution	All water from old shafts to be tested before disposal. All underground water to meet the disposal parameter	During operations During operations	EMA/ZINWA/Ministry of Mines
Land disputes	All disputes to be resolved amicably Consultations to be done at the preliminary stages Continuous engagement required	Before and during project implementation Before and during project implementation During operations	EMA/Ministry of Mines/RDC/ZRP

Source: supplied by a regulatory authority from EMA