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Resource policies and small-scale gold mining in Zimbabwe

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ABSTRACT

This article examines the policy framework in place for small-scale gold mining in Zimbabwe. Through an analysis of stakeholder interviews and industry performance, the paper argues that the main government initiatives to manage gold mining in recent years have proved counterproductive, as economic returns from minerals have hemorrhaged due to increased illegal activity. The failure of authorities to adopt an all-stakeholder approach for designing appropriate resource policies has weakened the sector's productivity and created new problems. A drastic policy overhaul that emphasizes improved access to fair gold prices, the delivery of technical assistance to vulnerable workers, and streamlining of regulatory institutions is urgently needed.

Introduction

In Zimbabwe, artisanal and small-scale mining (ASM)[1] has long been an important economic sector and a contentious arena for policymaking. The sector involves rudimentary forms of mineral extraction, and extensive research has discussed its environmental risks (Zwane et al., 2006). Research has also shown that it provides economic revenues that rural communities depend on for sustenance (Dreschler, 2001; ECA, 2002; Shoko, 2002; ILO, 1999). Various policy analysts have noted that actively regulating, rather than banning, Zimbabwe's ASM operators is the most appropriate development strategy (Hilson and Potter, 2005; Hinton, 2006; Mwaipopo et al., 2004). In the early 1990s, the Zimbabwean Government's resource policies were often widely regarded as proactive in addressing ASM within a poverty-alleviation framework. However, the sector's policies have since become increasingly plagued with problems in recent years, and the challenges of promoting improved environmental management, fair mineral marketing, and proactive government monitoring have grown evermore difficult. This article examines how the country's gold mining sector has come under serious scrutiny as an area of conflict, highlighting problems at the national level policy that threaten both the livelihoods of vulnerable workers and the government's own ability to generate revenue from minerals.

Zimbabwe experienced an upsurge in artisanal gold mining in the 1990s, largely as a result of a deteriorating agricultural sector and the layoff of public sector workers following implementation of a series of Structural Adjustment Programs (Shoko, 2002; Dreschler, 2001). The country's poor economic performance in recent years has also been associated with a variety of controversial policies: namely the seizure of farmlands under its land redistribution program, which commenced in 2001, and excessive printing of currency. These policies have led to further inflation and unemployment (Lee, 2007). Today, only 5% of the workforce is engaged in formal (legal) mining activities, with minerals "officially" accounting for only 4.5% of national GDP (Dreschler, 2001). However, "informal" (unlicensed or illegal) ASM activities provide a source of livelihood to at least 500,000 people directly, and indirectly, as much as two million people depend on its existence (Shoko, 2002). It is widely believed that these numbers increased substantially between 2005 and 2008, during which period the country's deepening economic crisis has further limited livelihood options for its rural and urban populations alike.

According to government figures, inflation was roughly 60,000% at the end of 2007, although the International Monetary Fund rejects this estimate, placing the figure in the range of 150,000% (Mugari, 2008). The country's deteriorating economic situation led officers at UNIDO to conclude that ASM directly employs as many as two million labourers in the country (UNIDO, 2007). Once considered the "Breadbasket of Africa", Zimbabwe suffers from a shortage of foreign exchange, which has led to insufficient imports of critical supplies of fuel, medicine and many other necessities; the lack of fertilizer and farming equipment—along with frequent droughts—are sometimes said to have further exacerbated economic strife (Richardson, 2007). While ASM is

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[1] Throughout this paper, the terms "artisanal mining" and "small-scale mining" are used interchangeably to describe rudimentary forms of mineral extraction using low-cost technology.

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now often the only viable livelihood option in numerous regions throughout the country, many media reports have stressed that mining is "out of control" (IRIN, 2007). Some environmental groups have urged for more government control over miners to combat pollution, emphasizing the need for greater enforcement of regulations and higher penalties for violations, and even discouraging mining altogether; other reports have stressed the need to legalize and assist miners as a national priority (UNIDO, 2007).

The present article was written during what has clearly been one of the most difficult periods in Zimbabwe's recorded history of mining. Although the sector has become increasingly important as a source of foreign currency in the country, policy prospects for supporting miners are dire, as the government requires that all gold mined be sold to the Federal Reserve Bank, despite government-imposed prices being inconsistent with those on the international market; this has fuelled smuggling and contributed to poor industry performance. Indeed, a variety of other problems such as bureaucratic delays and conflict have damaged the relationship between authorities and miners, causing Zimbabwe's official gold production to decline 37% in 2007, from 11 tonnes in 2006 to just over 7 tonnes, the lowest level of output in over a hundred years (Central Statistics Office of Zimbabwe, 2008). As the Minister of Mines articulated in late 2007:

> The mining sector has, for several years now, been unable to perform up to its maximum potential owing to various challenges, which have been exacerbated by the macro-economic situation currently prevailing in the country…[It] continues to meet setbacks in the form of shortage of foreign currency, incessant power outages, brain drain and the hyper inflationary business environment has caused a lot of harm to the sector. (Herald, 2007a)

Examining the policy position statements of the Ministry of Mines in particular, the analysis reviews some of the major concerns about Zimbabwe's ASM policies. Unsound policies and poor coordination between the Ministry of Mines, the Federal Reserve Bank, the Police Squads and the Ministry of Environment have resulted in inadequate financial support for assistance-orientated government functions; instead, reactive policies such as the arresting of workers and increasing penalties for violations have characterized the government's relationship with miners in recent years. This study draws upon fieldwork conducted between 2005 and 2007 in various mining regions across Zimbabwe (in all provinces), sharing local views about mining policies as expressed in interviews, stakeholder meetings and reports.[2] While scholars have stressed the need to resolve major problems in fiscal policymaking and address political problems at the national level in Zimbabwe (Lee, 2007; Raftopoulos and Phimister. 2004), this article's chief goal is to examine how reforms are urgently needed in order to improve the economic performance of, and labour conditions within, ASM.

Policy climate for ASM

Mining has long been recognized as an important component of Zimbabwe's national development. It is often said that one of the key enduring legacies of colonization was the prioritization of mining as a pillar in the national economy (Hollaway, 1997). Zwane et al. (2006) observe that "the Mines and Minerals Act…remains the most powerful legislation" such that mining laws continue to override policies for other resource sectors and in other institutions (e.g. agriculture, tourism, etc.). They note how, historically, mining development interests have been given priority status in land disputes. Structural Adjustment Programs implemented by the Government of Zimbabwe under the auspices of the World Bank were largely intended to provide a favorable climate for foreign mining investment in order to boost economic growth. However, as Chifamba (2000) observes, the "liberalized" structure of Zimbabwe's mining industry manifested as an "oligopolistic mining industry" that favored foreign companies instead of indigenous workers. Dreschler (2001) has likewise noted that the country's mineral industry "is dominated by large mining companies", even though ASM involves a much larger labour force.

While most of the country's mineral titles are owned by large companies and not local indigenous workers, it is still widely recognized that in the early 1990s, a series of proactive measures were taken by the government to support indigenous small-scale mining. The 1993 "Harare Guidelines on Small-Scale Mining" provided new commitments for poverty-reduction-orientated development assistance for ASM and has since been frequently referenced as a good model for numerous other countries (Dreschler, 2001; Hilson and Van Der Vorst, 2002; Hinton, 2006). Policy frameworks promoted by the Ministry of Mines throughout the 1990s generally emphasized the need for recognizing and promoting ASM as a poverty-alleviation activity; donors such as the Canadian International Development Agency (CIDA) and various German and Swedish agencies worked with the government to encourage more sustainable ASM activities (Shoko, 2002; Hollaway, 2000; Spiegel and Veiga, 2005). In 1991, the Central Government legalized riverbed panning and established a system whereby local governments and district Ministry of Mines offices monitored field operations and coordinated mining training centers, which also served as gold-marketing centers for panners (Zimbabwe Local Government Office, 1995). Supporting panners in this way was widely understood as the best means of controlling smuggling, and to regulate and reduce environmental risks (Maponga and Ngorima, 2003). Rural District Councils were empowered to train local riverbed gold panners to protect water-bodies, with research suggesting that the government's education services for panners in Insiza District had been particularly promising early on (Maponga and Ngorima, 2003).

Donors and government engineers also worked with small-scale reef miners to create community mineral processing centers such as the Shamva Mining Centre, viewed initially as a proactive step towards improving environmental management and economic potential through technology-sharing (Svotwa and Bugnosen, 1993; Hilson and Van Der Vorst, 2002). In 2002, UNIDO worked with the government and the University of Zimbabwe to begin developing a "Train-the-Trainer" program in mining communities in the Kadoma–Chakari area as well, encouraging educational services on issues ranging from pollution-reduction technologies to business and organizational training (Spiegel and Veiga, 2005). The UN's main effort on ASM—the "Global Mercury Project"—sought to reduce small-scale miners' dependency on, and excessive use of, mercury, which has proved to be one of the most severe environmental concerns in the sector (Spiegel et al., 2006a; Swain et al., 2007). Some Zimbabwean trainers traveled to nearby regions of Mozambique to share positive lessons from the country's capacity-building experiences with other miners, demonstrating improvements in mining technology (Spiegel et al., 2006b). Also noteworthy is that at various "high" points in Zimbabwe's mining history since the early 1990s, gold prices for small-scale miners were deliberately kept at favorable rates to minimize smuggling and create incentives for registration. In fact,

[2] The study used structured and unstructured interview methods and group workshops, primarily based on fieldwork between October 2006 and April 2007. Particular focus was given to miners in the Kadoma area.

the government even had a special ''support price'' for gold that small-scale miners sold to the Reserve Bank in the late-1990s, which was often higher than international market prices in order to encourage industry growth (Dreschler, 2001).

If the above policy prospects present cause for optimism, however, the situation in 2007 and 2008 unfortunately reflects a drastically different scenario. Among other notable problems in 2007, Zimbabwean gold miners often received a tiny fraction of the actual gold price when selling their product to the government—sometimes even as little as one-thirtieth (1/30) of the international price when calculated at parallel market rates. Riverbed panning was made illegal in late-2006, as the Central Government repealed the law that allowed Rural District Councils to issue permits for such mining activities. Furthermore, the government launched a crackdown operation against miners in 2007 that left thousands of people jobless. In the public media, Zimbabwe's mining sector governance has thus become increasingly characterized as part of a ''brutal regime'' of ''pillage and patronage'', with injustices abounding when it comes to controlling resources.

In seeking to understand Zimbabwe's potential as far as gold mining is concerned—and what needs to be done to realize the sector's potential—all evidence seems to indicate that establishing gold prices that are consistent with international market prices should be a priority in order to reduce smuggling and inequitable trade. However, this harmonization has not occurred; in fact, the government's gold prices were not altered over an entire 12-month period despite growing inflation between 2006 and 2007. Instead, the authorities largely focused on a series of other top-down policy measures, including the proposed Mines and Minerals Amendment Bill on Indigenous Empowerment, which was contentiously debated in Parliament in 2007 as President Mugabe announced intentions to mandate that over 51% of all mines be immediately subsumed under national control (as opposed to foreign control). Officials in the Ministry of Mines and Reserve Bank, among other agencies, have publicly debated over the issue of whether this system would facilitate increased developmental activities or worsen the country's economic situation. There is the view that the Empowerment Bill *could* be beneficial for local miners if it were to allow them to gain legal access to key mined areas with appropriate infrastructure support. Currently, the situation is similar to what Dreschler (2001) noted several years ago: that ''Exclusive Prospecting Orders'' (EPOs) allow mining companies to hold most of the mineral-rich lands for a long period of time without developing them, in turn, preventing ASM operators from securing land legitimately. Some critics (who chose to remain anonymous during interviews), however, noted that the ''empowerment'' idea in the draft Empowerment Bill is nothing more than ''populist election politics'' and a rhetorical diversion from the real challenges of mining. It has been widely suggested that the ''indigenization'' of minerals is a euphemism for elite government control. Regardless of one's view, the Empowerment Bill has not been implemented; it has, in fact, been delayed in Parliament indefinitely as of February 2008.

Measures for addressing ASM technology and capitalization

Most small-scale miners interviewed expressed strong dissatisfaction over the way that the Ministry of Mines has addressed their most basic concerns. There are few signs that government offices have helped local small-scale workers access licensing systems in recent years, despite the rhetoric on empowerment. Nonetheless, despite the deteriorating situation, the government has highlighted a number of other achievements. The Minister of Mines announced that ''Women's participation in the mining sector has improved…This has had positive impact towards empowering of women, and also we have come to realise increased participation from indigenous citizens, which is a well commendable step'' (Herald, 2007a). According to most interviewees, though, many women feel forced to do mining because there is no other option to generate earnings: it is not a matter of choice. As one woman noted at a stakeholder meeting that ''I mine only because I have to…and it is so hard to survive when the government treats us like criminals''.

The Ministry of Mines did extend loans to some women miners, amounting collectively to over 50 billion Zimbabwe dollars in 2007; and, while approaches to extend loans can be commended insofar as they seek to economically empower *some* people, interviews with some of those very miners confirmed that the loans have been poorly disseminated, with severe delays in disbursement, causing the actual value of such assistance to be miniscule. By far, most workers who need assistance have never had any access to, nor have knowledge of, such programs. As Hilson (2002) and others have emphasized, excessive amounts of centralized government bureaucratic requirements and institutional delays in licensing systems have contributed significantly to the illegality of ASM workers throughout sub-Saharan African. This sentiment certainly holds true for Zimbabwe's current struggles, and the complex array of legal and policy measures that apply to ASM have engendered a system where government information itself has been highly concentrated, accessible only to the more elite members of society. As such problems are largely unacknowledged by the Ministry of Mines, the Minister has often deflected attention elsewhere. For example, when asked whether enough is being done by institutions to assist ''the emerging 'new miner''', his response emphasized the failure of other financial institutions outside of his own Ministry:

> No, the local financial institutions have not been living up to expectations. The major drawback facing emerging miners has been the lack of adequate financial backup. The absence of institutions like a mining bank—specifically for financing miners, analogous to Agribank which offers financial backup to farmers, has dealt a huge blow to local miners, who continue to be financially incapacitated to participate in the production sectors.

The Minister's comments ring true insofar as most of the mining equipment for both underground and surface mining is not available locally. There is need to implement a financial package for indigenous entrants that would enable them to secure loans for capitalization and expanding projects, and which would also put them in a position to purchase equipment, spare parts, chemicals and other consumables. Yet, what sort of policy for assisting in capital investment is appropriate for ASM, and is this a priority concern in terms of promoting equitable resource policy for ASM workers under the status quo, and how can the Ministry be of real assistance?

The Ministry, for its part, has made recommendations for the exemption of duty on capital mining equipment, projects at exploration phase, mine development phase and those undergoing project expansion programs. Financial loans used to be awarded through the Mining Industry Loan Fund (MILF), mainly to small-scale miners and millers. Moreover, the Ministry of Mines used to provide advisory services on geological and mining engineering issues, prospecting and mining title acquisition, and appropriate mining methods and metallurgical services. However, the Ministry of Mines has been saddled with increasing responsibilities. The Reserve Bank, which also commands special police squads, has been given a much greater role in mining monitoring and development, although armed with less expertise in mining issues.

Even under more stable financial structures, questions about the appropriate path towards the ''formalization of informal mining''—as the World Bank frequently advocates under its ''Communities and Small-Scale Mining program'' (Hinton, 2006)—certainly has the possibility to lead to ambiguous resource policy dilemmas. During one planning meeting in Kadoma, a stakeholder asked: ''is microfinance a good strategy at all?...Is it appropriate to expect that a few micro-credit pay-outs here and there can actually be said to advance any kind of formalization?'' The tension can be seen in the nuanced and changing views of UNIDO workers, some of whom initially sought to work with the Zimbabwe Government to expand microfinance facilities. However, an evaluation by UNIDO in 2006 suggested that formal micro-credit loans programs are not necessarily the best way forward in many cases because of exceptionally high interests and inflationary economics in Zimbabwe (UNIDO, 2007), though there is certainly a need to use skills and talents within relevant stakeholder institutions to ensure that sustainable growth/development of the sector is achieved. The Minister's comment here may thus be suitable: ''For if there is to be targeted financial interventions from the Central Bank it is only reasonable if the Ministry of Mines and Mining Development is relevantly utilised to ensure success in that development agenda otherwise it will be a futile exercise, wastage of tax payers' money'' (Herald, 2007b). Micro-loans for ASM, which have also been promoted by the Economic Commission for Africa (ECA, 2002), run the risk of impoverishing miners further if unpaid packages lead to accumulation of excessive debt and if careful planning in mine development is not appropriately encouraged during the lending process. Ad hoc moves to dispense microfinance payments might provide some benefits for *legal* miners, and it is a conclusion of this study that microfinance for ASM *should* be developed further but only if monitored carefully, as most miners could benefit greatly from investment assistance under the individually appropriate conditions. Findings from research also suggest that such approaches are futile if a fair price for gold is not in place and if miners are at risk of being invaded by police and losing their livelihoods (after Hilson, 2008).

Problems of resource control, management and marketing

Numerous governments in sub-Saharan Africa have often claimed to be safeguarding the environment from destructive ASM practices, yet do so in ways that actually undermine their stated cause. With this in mind, it was conjectured at the outset of this study that police enforcement may be counterproductive. This seems to be the case in Zimbabwe, where in late 2006, ASM workers and millers were subjected to a highly controversial police crackdown dubbed *Operation Chikorokosa Chapera* (''finished with illegal gold mining''). This initiative emerged as the government attempted to manage the environmental effects of mining activities, control the diamond rush in the Eastern Highlands, and put an end to the illegal activities associated with gold mining, especially trading in gold and foreign currency on the black market. During the beginning of the operation, the Governor of the Reserve Bank announced that about US$50–60 million of gold was being smuggled out of the country per month. In early January, a new Environmental Management Act (EMA) began requiring miners and millers to have approved Environmental Impact Assessments (EIA) and Environmental Management Plans (EMP), effectively making ASM illegal because most small-scale operations had not applied for certification. Miners reported that the lack of an EIA and EMP was often used to confiscate gold, ore and equipment as police bulldozed what were deemed substandard workers' housing, destroying or confiscating their meager household possessions. *Chikorakoza Chapera* is ongoing, and at least 31,500 miners have been arrested, most in the first few months of 2007 (Herald, 2007b).

Without any notice, *Operation Chikorokoza Chapera* soon became a force that caused deep impacts on miners' livelihoods nationwide. As explained by the Minister of Mines

> The operation restored the sanity to the destruction craze that was prevailing…The operation managed to stop further proliferation of environment degradation, which was its sole focus. (Herald, 2007b)

This statement deserves serious criticism; the ''sole focus'' was—quite clearly—*not* environmental degradation, as smuggling undeniably was the government's chief motivation. The operation forced not only illegal miners but also legal miners to cease operations, and entire villages that depended on mining became stripped of earnings. Stories of human rights abuses ran rampant, and various media outlets (e.g. Sokwanele, 2007) emphasized horrors of ruthless police invasion. While numerous conclusions can be drawn about smuggling and environmental rationales for police intervention, a policy that clearly was not well suited to ASM was the EIA, which had been excessively expensive and bureaucratic, causing delays of numerous months between the time that miners submitted all EMP forms and the time that inspectors gave approval to resume operations. Owing to a lack of resources, officers have been incapacitated to assist workers in complying with safety, health and environment protocols. While the destruction of livelihoods in ASM may entail different perspectives and stories, a central theme that emerged from stakeholder interviews and discussion workshops was that the operation was neither successful in creating better long-term environmental practices nor establishing a gold-marketing system that was more fair and helpful to the government itself. As one report indicated, the crackdown cost the *government* dearly: ''The Reserve Bank of Zimbabwe (RBZ) could be losing billions of dollars through the funding of Operation Chuma/Igolide and Chikorokoza Chapera amidst allegations that police are submitting falsified gold recovery returns to justify maintaining the operations in which officers are reportedly pocketing millions dollars in allowances'' (Zimbabwe Independent, 2007).

All evidence suggests that the ministry has been operating under severe constraints, inadequately resourced both financially and in terms of personnel. Police squads and Reserve Bank have clearly been given far greater resources to do gold collection and police intervention missions, as evidenced by their greater presence in ASM regions. For the Ministry of Mines, the situation has been compounded by lack of relevant resources, such as vehicles, to carry out monitoring and inspection audits. Moreover, the ''brain drain'' phenomenon has been particularly potent in the resources sector, and government measures to help mining companies retain key experienced personnel—and assist miners to improve techniques—have been scarce and inadequate. ''I would like to believe,'' explained the Minister of Mines, ''that a retention package has been put in place for all technical professions, but judging by the rate at which people from my ministry are resigning we feel that it is too little to raise interest'' (Herald, 2007a). In addition to affecting personnel in the Ministry of Mines, the Chamber of Mines estimates that 40,000 skilled mining workers have exited the sector, most fleeing the country. Many could have assisted with training miners and served as EIA and EMP consultants, who were in severely short supply.

As the police operation proceeded, local governments, too, protested to the Central Government that they were unrightfully being stripped of their ability to issue mining permits and provide assistance to miners. Given that the Reserve Bank has become increasingly involved in the mining sector in terms of gold collection and guiding the police squads, miners became increasingly skeptical over its role. Many small-scale miners feel that the Reserve Bank is not qualified or equipped to deal with mining issues. Certainly, the failures of the Gold Reserve Bank can be seen in its astounding inability to establish fair gold prices or provide assistance on mining production. Key production and delivery of gold to the government continues to decline despite the product currently fetching world record highs. As the Minister of Mines emphasized, critiquing the Reserve Bank:

> Gold Mines are prejudiced by the lack of or late payment for gold lodged with the RBZ. Currently most mines have revenue outstanding from the RBZ from March to April 2007…The fact that the RBZ already takes 35 percent of foreign earning at a highly discounted rate, and fails to pay the remainder in time is a double burden that severely militates against increased gold production. Without sufficient foreign currency revenue mines cannot maintain targeted levels of production, let alone increase production.

While the Minister is right, what he still conspicuously failed to mention here was that small-scale miners do not have the option of even retaining 65% of gold payments in foreign currency, as large mining companies do; thus, ASM production costs far exceed the gold price they were offered by the government. It is therefore not surprising that many mines have ceased production because of their inability to access basic requirements, such as cyanide and spare parts, mainly due to foreign currency shortage.

To resolve the local gold pricing problems, all relevant stakeholders must be involved in the pricing mechanism instead of just the Reserve Bank alone dictating unanimously the local gold price, which, in most cases, is not cost effective. The Ministry of Mines, the Chamber of Mines and various small-scale miner federations—as well as UNIDO—had submitted advocacies to the Reserve Bank to demonstrate that the cots of gold production far outweighed the gold price being offered by the Central Reserve Bank. Finally, in May 2007, after over a year of not changing the gold price, a Special Parliamentary Committee to deal with the mining controversies released its findings and the Reserve Bank began to increase in the gold price, even to levels that were comparable to international market prices—that is, until inflation increased again. Meanwhile, numerous reports emerged in late 2007 that Zimbabwe could lose exclusive rights to sell gold directly on the international market after failing to produce a benchmark output of 10 tonnes of gold for the year of 2007, a requirement for maintaining membership within the influential London Bullion Market Association (LBMA).

A loss of the LBMA membership would mean Zimbabwe would be forced to sell gold through intermediaries who may charge exorbitant fees to facilitate trade. Reports released by the Ministry of Mines and Mining Development permanent secretary said in December that "the country needed to produce an additional 3.5 tonnes of gold to meet the minimum target…[that] that the government is concerned about the decline in amounts of gold being remitted to Fidelity Printers" (Makoshori, 2008). In addition to the massive inequities for ASM gold marketing (again, gold prices were often 1/30th of the true international value), the Chamber of Mines estimated that the industry was owed US$20 million by Fidelity Refiners in December 2007 for gold deliveries made over the previous year. Erratic payments to large-scale gold producers began in September 2006 but intensified in 2007. The plunge in gold output could deal a further blow to an economy that is already struggling, and as Matangi (2006) has shown, the decline in mining conditions and social services for miners has been correlated directly with a worsening problem of HIV-AIDS and other major, widespread health concerns.

Future hopes: a positive policy environment?

This article has analyzed some of the major problems in Zimbabwe's ASM sector and how resource policies concerning trade, capital investment, environmental management and livelihood promotion are inter-linked in a highly contentious policy-making atmosphere. There have been suggestions that mining should be accorded national priority status as a means to transform the economy, particularly since Zimbabwe's mining sector out-performed all foreign currency generating sectors in revenue. But whether to prioritize mining or other sectors may hinge on the volatile context for fiscal policymaking and the marketing arrangements that may serve political interests. While future actions are needed urgently, the Minister of Mines has lamented over the lack of budget for research: "It is Government's duty to come up with policies that enforce benefits from mining to accrue in local communities but this requires continuous research and development on the policy and legal frameworks and you need to be adequately funded to achieve all these" (Herald, 2007a). A lack of research may in part explain the persistence of confusion and failure of key institutions to implement sound policy. Reactive policies such as arresting miners are not nearly as effective at improving gold production as assisting miners; policies to support small-scale miners, rather than antagonize them, should be the government's priority. Moreover, little additional research needs to be done in order to address some of the most urgent needs.

Analysts have widely predicted that Zimbabwe's economic crisis is likely to deepen despite government efforts to address food shortages and a foreign currency crunch that has crippled farmers and business. Clearly, the government's priority must be to stop or at least slow down inflation. With international prices of gold reaching unprecedented heights in 2008, it is widely believed that Zimbabwe's ASM sector can contribute significantly to the economy considerably if fully tapped and appropriately managed. Beneficiation of minerals through value-adding before exporting the gold would lead to even higher economic returns in terms of both revenue generation and creation of sustainable employment. The government, however, needs to re-embrace the types of assistance-oriented policies that it championed in the 1990s to support ASM workers. The Indigenization Bill would not need to be passed in Parliament for the Reserve Bank to establish a policy that ensures gold prices are constantly in line with international prices. The government does not need to wait for an act of parliament before re-funding the Ministry of Mines to be able to do its job in providing assistance to vulnerable workers. It can be concluded that the government has failed in its responsibility to implement policy and legal frameworks that ensure the flow of mutual benefits to the miners, government and the community at large. Government, therefore, needs to recognize that to ensure that its own goals are achieved—including maximum revenue generation from minerals—local workers need to be appropriately supported.

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