

Assessing the Implementation of the Key Tenets of the African Mining Vision with Zambia's Key Mining Policy on Artisanal and Small Scale Mining

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Abstract

The Africa Mining Vision (AMV) is a policy framework that was created by the African Union in 2009 to ensure that Africa utilizes its mineral resources strategically for broad-based, inclusive development. It is a blueprint tailored at addressing numerous challenges that has faced the sector in the past and at the core, improve the Livelihoods of local communities. This article, However, finds that 12 years after its inception, the AMV framework has not been fully implemented to address the critical constraints and leverage success factors in forging the creation of resilient communities around the ASM sub sector. There is generally a low level of awareness of the framework among key stakeholders and there is no clear policy direction, and or gap analysis to determine the obstacles to its implementation. This article derives its findings through accessing the Zambian Mining policy documents on ASM and mapping it with the key tenets of the AMV.

Keywords: Artisanal and small scale mining; Sustainability; Key Tenets of the African Mining Vision.

1. Introduction

This article is an assessment of the status of artisanal and small-scale mining in Zambia in view of the implementation of the African Mining Vision since its inception in 2009. The study focuses on governance and livelihoods in the context of the existing legal framework and government policy.

The African Mining Vision

The African Mining Vision (AMV) was adopted in 2009 at the African Union Summit and shows the commitment of African countries to exploit natural resources sustainably [1]. It seeks to integrate Africa's Natural resources sector into the continents social and economic development process. Unveiled officially at the February 2009 African Union Summit in Addis Ababa, the AMV is founded upon a series of core pillars or tenets (Table 1) and its architects believe will yield;

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Table 1: Key tenets of the African Mining Vision [1]

Tenet
Optimizing knowledge and benefits of finite mineral resources at all levels of mining and for all minerals
Harnessing the potential of small scale mining to improve livelihoods and integration into the rural and national economy
Fostering sustainable development principles based on environmentally and socially responsible mining, which is safe and includes communities and all other stakeholders
Building human and institutional capacities towards a knowledge economy that supports innovation, research and development
Developing a diversified and globally competitive African mineral industry which contributes to broad economic and social growth through the creation of economic linkages
Fostering a transparent and accountable mineral sector in which resource rents are optimized and utilized to promote broad economic and social development
Promoting good governance of the mineral sector in which communities and citizens participate in mineral assets and in which there is equity in the distribution of benefits

As a follow up to the formulation of the AMV in 2009, the African Union selected a technical committee to create an action and deliverables. This technical committee which was named the African Minerals Development Committee structured around nine program clusters set out in its action plan [2]. These clusters are a set of actions with objectives and expected outcomes;

Table 2: African Mining Vision action plan [3]

SNo	Description	Expectation
Cluster 1	Mining revenues and mineral rents management	A mining sector that generates adequate income to eradicate poverty and finance African growth and development
Cluster 2	Geological and mining information systems	Develop a comprehensive Knowledge of Africa's mineral endowment
Cluster 3	Building human and institutional capacities	Knowledge driven is the engine of an internationally competitive African industrial community
Cluster 4	Artisanal and Small scale mining (ASM)	Harness the potential of ASM to advance integrated and sustainable rural social economic development
Cluster 5	Mineral sector governance	An inclusive and well governed mining sector appreciated by all stakeholders including surrounding communities
Cluster 6	Research and Development	A knowledge driven sector that is key to a diversified and globally competitive African economy
Cluster 7	Environment and social issues	A mining sector that is environmentally sensitive and socially responsible and appreciated by key stakeholders and surrounding communities
Cluster 8	Linkages and diversification	Catalyze and contribute to broad-based growth and development through upstream, downstream, side stream and infrastructure Linkages
Cluster 9	Mobilizing mining and infrastructure development	Increase the level of investment into mining infrastructure to support broad social economic development

1.3 *The African Mining Vision on artisanal and small scale mining*

Africa's rich mineral endowment should have been one of the key drivers in economic development. To the contrary, however, mineral resource exploitation over the past century has not led to sustainable inclusive development as should have been expected. The 'natural resource curse' which continues to over shadow this sector has caused it to remain an enclave, disconnected from broader economies [4].

Artisanal and small scale mining (ASM) which is often tainted as the dark side of mining has equally failed to contribute to local economic development in its geographical foot print. ASM in sub-Saharan Africa is often believed to be a "rush-type" activity, characterized as chaotic and entrepreneurial-driven, where miners are "fortune-seekers" [5]. It is also often seen as a "distress-push" type of activity where miners are looking to alleviate their poverty and work in ASM to complement revenues from farming [5]. Despite ASM having the potential to improve the Livelihood of host communities, it is associated with challenges on productivity, environmental and social performance. Miners associated with this sector continue to live in a cycle of poverty with little or no improvement in their quality of life [6].

Key reforms have taken place that have focused on analyzing and suggesting dynamic policy change to avert the challenges outlined above in the extractives sector. This article focuses on one such reform, the African Mining vision and its key tenets and how the Zambian mining policy on ASM aligns with it.

One of the initiatives resulting from this common vision is the African Minerals Governance Framework developed in 2016 among the interventions proposed, one goal was to develop sustainable mining practices in a safe, environmentally and socially responsible way, and engage the mining community directly. The African Minerals Development Centre, an organization tasked with implementing the AMV in member countries, asks and supports governments to develop a "sustainable environmental, health and safety plan to reduce or eliminate the adverse effects of ASM" [7].

The fact that this initiative is defined by African nations themselves gives it country specificity. Making ASM one of its main work streams, the AMV recognizes the contribution of ASM to local economic development. The author in [7] describes it thusly "The AMV follows the 2002 Yaoundé Vision on ASM adopted by the Communities and Small- Scale Mining (CASM) Africa Initiative in 2005 to call for a participatory ASM development strategy that focuses on the formalization of the ASM sector and its integration into local and regional economic development and land-use plans and strategies, especially Poverty Reduction Strategies; and reviewing mining policies to incorporate a poverty reduction dimension to ASM strategies."

1.4 *The African Mining Vision Implementation*

The AMV [1] requires that laws, policies and regulations applicable to the mining sector and national development planning systems to be aligned to the AMV. It requires strong collaboration between key stake holders through partnerships of host governments, civil society, private sector and affected mining communities. To drive this, the AMV formulated the country mining vision (CMV) (Figure 1) as a tool to implement it. This tool required the formulation of coordinating bodies with oversight on its implementation. It also required gap

analyzes to be conducted and action plans formulated.

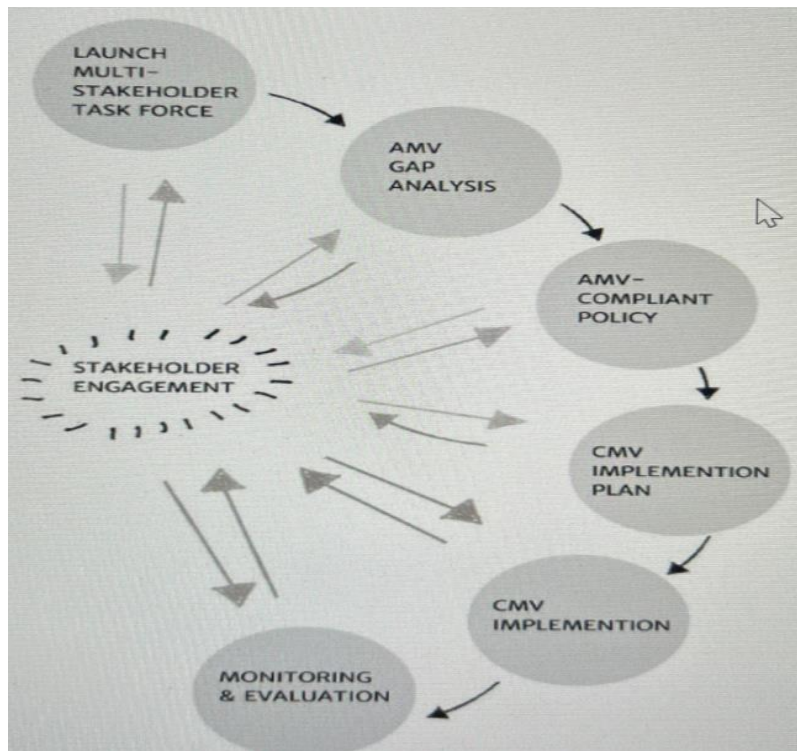


Figure 1: The CMV Process [2]

However, the implementation of AMV has proved to be slow and ineffective [8]. The AMV adoption in 2009 poses the toughest test of the minerals and metals extractive sector in Africa [9]. The author in [9] argues that one of the reasons for the challenge in adoption is the variations in Mineral prices. Over the past 20 years, commodity price variations have occurred (Figure 2) that in most cases shrink mineral resources development.

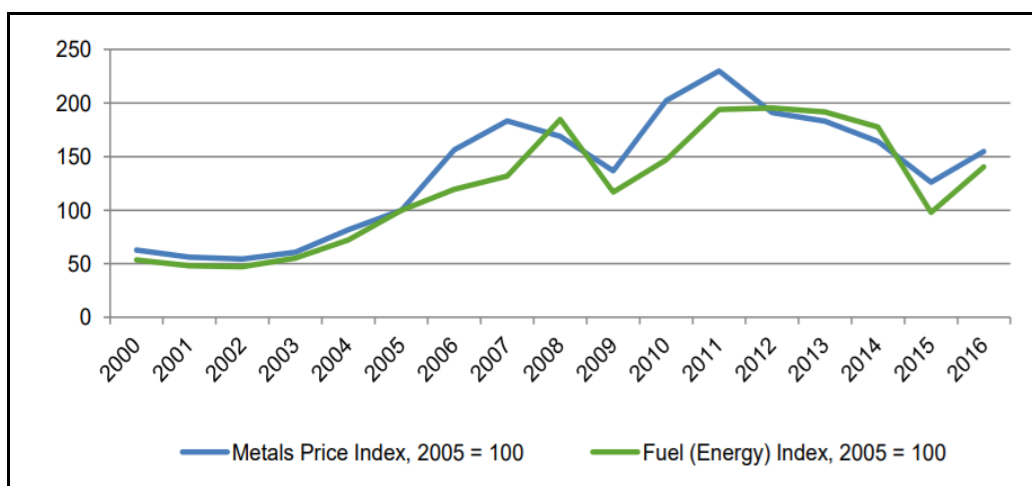


Figure 2: Metals Price Index includes copper, aluminum, iron ore, tin, nickel, zinc, lead and uranium price indices [10].

Apart from the challenges in the implementation of AMV due to fluctuations in commodity prices, there is not enough analysis from the body of research on the obstacles and short comings to its implementation [7]. The synergy of the Key Stakeholders to the Implementation of AMV which include government, Civil society and local communities are not fully engaged and coordinated for the cause. “The political will among the continent’s leaders to implement the AMV, in the wake of the global commodity price collapse and the resulting slide into economic recession, is also under threat as fiscal stress and public debt rise sharply” [7].

The author in [8] thus questions the recent silence surrounding the AMV and raises a number of questions which include;

1. Is the AMV still seen as a blueprint for development in mineral-rich Africa and if so, by whom?
2. What impact, developmentally, has the AMV had thus far?
3. Are individual countries still responding to the recommendations enshrined in the AMV, and if so, how?
4. What does the future hold for the AMV?

1.5 Artisanal and small scale mining in Zambia

Zambia’s development trajectory has been shaped by mining. For close to a hundred years, the extraction of copper has dominated the economy. Without exception, the firms that have controlled the sector have been large-scale, mostly foreign-albeit with periods of national ownership- had access to huge capital outlays, and have focused on copper mining. Relatively less is known about Zambia’s ASM sub-sector [11].

For Zambia’s people, ASM is an important economic activity, providing supplementary income for agricultural communities and seed money for small-startups. Although the size of the sector is unknown, it is estimated that around 30,000 people are directly involved in ASM activities [12]. In Zambia, ASM is also associated with a high level of informality. The Distinction of ASM from LSM is however largely dependent on the size of the mining license rather than the actual characteristics of the activity [13].

ASM in Zambia has traditionally been concentrated in the gemstone sub sector, primarily emeralds and amethyst mining. However, recent discoveries of gold in numerous locations in the country is changing the narrative. Gold mining, in particular, has attracted the state’s attention with gold panning certificates issued then quickly suspended with the objective of better organizing the sector. Both presidential and ministerial statements exalting the role that gold mining can play in stabilizing the economy have been issued.

Additionally, due to the rise in demand for electric cars in the West, the demand for manganese, a key component in the production of lithium batteries, has grown rapidly. In 2018 alone exports of manganese in Zambia nearly doubled from 33,000 to 57,000 tons [12]. This new ASM activity differs significantly from traditional ASM in Zambia. It is in contrast characterized the novel nature of operations. The more traditional

challenges that occur with this form of mining are therefore commonplace – lack of safety standards, environmental concerns and child labour practices. Much of what we know about this emerging sector, however, remains anecdotal and more research is needed to better understand the evolving nature of the sector. A coordinated approach is needed if this diversity is to be harnessed and well managed.

ASM in Zambia is known for high levels of formalization. The World Bank's [13] mining and governance review rates the extent to which ASM operators are allowed to legally operate in Zambia as 'Very High' (4.0 out of 4.0). This is if formalization is understood as legalization or the granting of legal title. This high level of formality is in contrast to most of sub-Saharan Africa where ASM is largely informal. This high level of formalization partially emanates from the fact that ASM in Zambia has traditionally focused on the gemstone mining of emeralds and amethyst, which are found in restricted zones that are mapped out as areas under license. What the Zambia case reveals is that formalization, or more accurately legalization, has done little to unlock the benefits that are often touted as the outcomes of formalization.

For instance, the authors in [14] find that even though emerald ASM miners are in possession of mining licenses, they have had limited success in accessing finance, technology, and institutional support from the state. The authors in [14] conclude that the amethyst sector formalization has given rise to different mining arrangements with varying consequences. Three types of mining arrangements have emerged formalized, mine-owner driven enterprises that resemble modern firms and are growth oriented, quasi-formal joint-production arrangements involving degrees of formality and informality, and illegal ventures. Another contingent of ASM miners that also emerges are individuals who hold licenses for speculative purposes. What is clear is that formalization is a necessary but insufficient condition for the development of the sector.

2. Objectives of the study

The overall objective of the study is to review national policies, the institutional and legislative framework, strategies and programmes relating to ASM and determine their alignment with the key tenets of the AMV.

2.1. Context

The research process in this study employed diverse and interactive methodologies aimed at soliciting sufficient and validated information for the attainment of the stated objectives. The study adopted a descriptive design that employed both secondary and primary data in achieving the ultimate objectives of the study.

2.2. Data collection methods

The research was carried out using a desktop study approach. The Desktop study involved reviewing the key government policy documents relating to ASM and mining in general. The study reviewed the 7th National development plan, the amended Mines and minerals development Act of 2016 and Mosi-oa-Tunya declaration.

3. Results and analysis

The data collected in this study was analyzed qualitatively. The analysis involved content analysis where policy pronouncements were compared against the key tenets of the AMV.

3.1 Policy and Legislation- Mines and Minerals Development Act number 14 of 2016

The primary statute governing the mining sector in Zambia is the Mines and Minerals Development Act No. 11 of 2015 of the laws of Zambia (MMDA) as read together with the Mines and Minerals Development (amendment) Act No. 14 of 2016. The MMDA became effective on 1st July, 2015, although the date of assent was 14th August, 2015. It repealed and replaced the MMDA Act No. 7 of 2008. The MMDA deals with mining rights, licenses, large scale mining in Zambia, gemstone mining, health and safety, environmental protection, and geological services on analysis, royalties and charges” [15]. Other pieces of legislation other than the MMDA include mine acquisition.

The MMDA largely covers issues of formalization, definitions and general guidance on environmental protection and rehabilitation. ASM is mentioned only for the purpose of licensing whilst most of the provisions are tailored to handle large scale mining operations.

3.2 Policies and legislation- 8th National Development plan

Zambia has had four development plans since the re-introduction of the medium-term development planning process in the early 2000s, namely the Fifth National Development Plan (FNDP), 2006-2010, Sixth National Development Plan (SNDP), 2011-2015 and the Revised Sixth National Development Plan (R-SNDP), 2013-2016. These Plans were formulated with a view to meeting the national aspirations as articulated in the Vision 2030. These aspirations are to transform the country from a primary product-dependent economy to a strong, dynamic middle income industrialized country by 2030.

The seventh National development plan (7NDP) which covers the period 2017 to 2021 departs from sectoral-based planning to an integrated (multi-sectoral) development approach under the theme “Accelerating development efforts towards the Vision 2030 without leaving anyone behind” [16]. The integrated approach recognizes the multi-faceted and interlinked nature of sustainable development which calls for interventions to be tackled simultaneously through a coordinated approach to implementing development programmes.

Under the development outcome 2 themed “A diversified and export oriented mining sector” the 7NDP under strategy 2 and 4 promotes focus on capacity building, increasing exploration and promotes the mining of industrial minerals. The plan further emphasizes enhanced governance to strengthen policy implementation and regulatory enforcement. This development outcome is underpinned on the following programmes;

- Geological information generation and provision;
- Mineral processing technology development;
- Small-scale miner’s empowerment;

- Small-scale mines regulatory framework enforcement;
- Market linkages development;
- Strategic environmental assessment and risk management; and
- Mineral exploration promotion.

The 8th National development plan (8NDP) which was launched in April 2022 is themed “Social-economic Transformation for Improved Livelihoods”. This developed plan which runs until 2026 centers on the Zambian people to transform their lives beyond just economic growth [17]. The 8NDP takes into account challenges faced in the implementation of previous agendas in the framework of realizing the Vision 2030 (Figure 2).

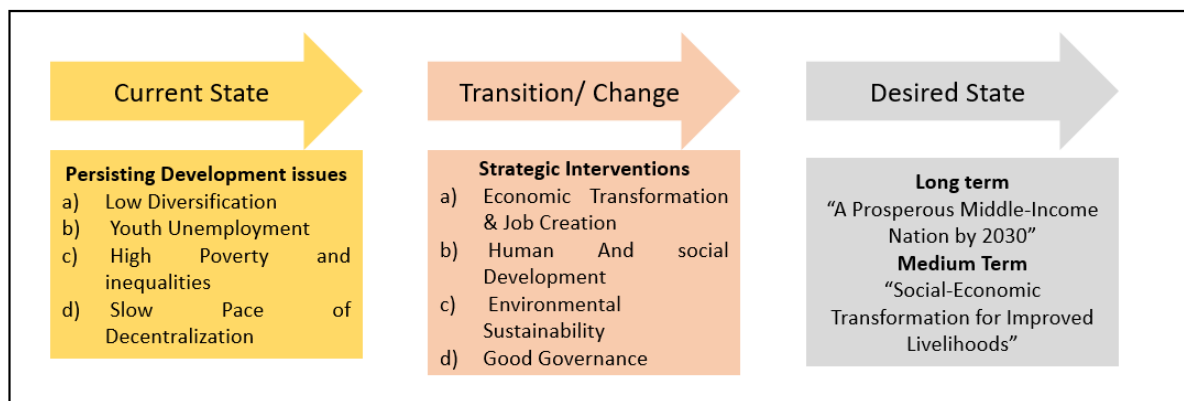


Figure 3: The Change Process Envisioned in the Plan [17]

On the ASM sub-sector, the 8NDP identifies challenges of low level participation, low productivity and informality that still exists despite the 5th, 6th and 7th development plans over the past decade [17]. To overcome the challenges noted in figure 3, with particular interest on small scale mining, the 8NDP has developed strategies of transition to the desired state that supports the vision 2030 of Zambia. ASM is covered under strategy 2 “Promote Traditional and Nontraditional minerals” of the expected development outcomes. The strategy will provide intervention through;

- Formation of cooperatives
- Government facilitation of access to support services
- Facilitate linkages to value chains
- Provide opportunities for the youth, men and women in host communities to participate in the mining value chain and;
- Formalization

3.3 Policies and legislation- Mosi-O-tunya Declaration on ASM, Quarrying and Development

The Mosi-O-tunya International Declaration was held in Livingstone Zambia, 11-13th September 2018 to re-affirm the centrality of ASM for enhanced livelihoods, employment creation, poverty reduction and sustainable development [18].

The Declaration recognized the importance of formalization in the sub-sector to maximize positive economic impact. In terms of specific legal and policy framework, the declaration regretted that many countries do not have the provisions that differentiate artisanal, from small- and medium scale mining and quarrying in law and policy and consequently limits production and concession levels. The declaration also covered areas of gender Main streaming, Health and Safety, access to finance, environmental protection, stakeholder engagement and integration of ASM into the development Agenda.

The declaration affirms the call to host governments to ascribe greater commitment to match the scale and importance of ASM to development.

3.4 Key findings

The AMV provides a key policy framework that can help the ASM sub-sector in Zambia to effectively utilize the mineral resource base to enhance sustainable livelihoods of local host communities. The author in [19] accents to the implementation of the AMV on a broader perspective, even though he notes the low process of implementation since its inception.

The 8NDP clearly provides policy direction on the progression of ASM, however from lessons learnt in the past, their lacks a dedicated unit to create action plans to realize these aspirations. The policy usually remains a pronouncement and lacks the driving force required in implementation. Table 3 below provides a summary of current government policy versus the key tenets of the AMV considering two key thematic areas that include governance and Livelihood assets.

Table 3: The African Mining Vision Tenets Versus Zambia Policy on Artisanal and small scale mining

Thematic area	AMV Expectation	ASM
Governance	Developing a diversified and globally competitive African mineral industry which contributes to broad economic and social growth through the creation of economic linkages	Generally appropriate policy, legislative and regulatory framework in place but lacks implementation, checks and balances
	Harnessing the potential of small scale mining to improve livelihoods and integration into the rural and national economy	Focus has been on formalization and licensing whilst the strategy to improve livelihoods is not clearly provided to support community assets
	Optimizing knowledge and benefits of finite mineral resources at all levels of mining and for all minerals	Exploration and information of mineral resources is lacking, Miners use trial and error and
	Fostering a transparent and accountable mineral sector in which resource rents are optimized and	experience in exploiting the

	utilized to promote broad economic and social development	resources. Clear guidance on Taxation of ASM is required. Focus is on large scale mining
Livelihood Assets	Building human and institutional capacities towards a knowledge economy that supports innovation, research and development	The sector remains novel with low level of skill of ASM Operators. Evidence of simple mechanization exists in some areas
	Fostering sustainable development principles based on environmentally and socially responsible mining, which is safe and includes communities and all other stakeholders	Community assets such as access to clean water, Skills development, and environmental protection not fully developed. There is no existing plan on rehabilitation of former arable land where open pits and trenches have been mined
	Promoting good governance of the mineral sector in which communities and citizens participate in mineral assets and in which there is equity in the distribution	The level of stakeholder engagement between government, civil society and community is still low to advance equal participation in resource exploitation

4. Conclusion

This study determined the extent to which Zambia's key mining policies and legislation are aligned with the key tenets of the African Mining Vision. Three main mining policies were accessed i.e. the 8NDP, Mines and Minerals development act of 2015 read together with the 2016 amendment and the Mosi-oa-Tunya declaration. These key policies were assessed against the 7 tenets of the AMV that aspire to promote good governance; develop institutional and human capacity; optimize knowledge and use of minerals; build local and regional infrastructure; stimulate economic diversification; harness the potential of small-scale mining; and foster transparency and accountability.

From this study it has been established that the government through the 8NDP identifies ASM as a key sector in contributing to the diversification of the mining industry in Zambia. It encourages formalization, access to key support services and linkages to value chains so as to open up opportunities for the youth, men and women.

The Mosi-oa-Tunya declaration affirms the importance of governments in aligning policy on ASM with the AMV by restating the potential that ASM has in improving rural livelihoods and stimulating entrepreneurship in

a socially responsible manner.

The Mines and Minerals development act of 2015 however does not provide sufficient legislation to promote the development of the ASM sector. The act only defines and provides guidance on the separation of large scale mining from ASM.

From the results of this analysis, policy direction exists as shown in the 7NDP ,8NDP and the Mosi-o-tunya declarations. However, existing key policy on ASM is not sufficiently mapped with the key tenets of the AMV and hence the sector suffers an opportunity cost for the activity to aid in local community poverty alleviation. The key policy pronouncements are not well tailored to objectively address the various gaps identified in the AMV on the ASM sub-sector.

To mitigate this, the study suggests that apart from providing clear policy direction gap analyzes and guided the AMV should be done to measure progress and to develop actions plans to mitigate short comings. Government should create a deliberate department to manage the affairs of the ASM sub-sector. to satisfy some of the tenets of the vision but on a larger extent gaps exists that if addressed can potentially ameliorate the various challenges being faced by the ASM sub-sector. Governance of the subsector has been found wanting because their lacks well established institutional structures to manage the affairs of the sector. Too much emphasis has been put on formalization, whilst ignoring the welfare of the miners and the environmental and social performance of ASM. Important capitals like skills development, capacity building and access to capital are still yet to be fully harnessed. ASM miners continue in a cycle of poverty amidst plenty.

5. Limitations to Study

The study had limitations in its assessment of just how little information is available on key policy pronouncements on ASM in Zambia. Beyond outdated estimates of how many people work in ASM, and production numbers, there are little other publicly available data. Data holes include information on the structure of the industry in Zambia and its impact on livelihoods of local host communities.

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