International Journal of Natural Science (IJNS)

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

Nachinanga Gubula Siaciti and Dr. Jewette Masinja





www.iprjb.org

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

^{1*}Nachinanga Gubula Siaciti
Post Graduate Student: School of Mines, University of Zambia
*Corresponding Author's Email: gubula2012@gmail.com
²Dr. Jewette Masinja
Lecturer, School of Mines, University of Zambia
Co-Author's Email: Hichikoko.masinja@unza.za

Abstract

Purpose: 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.

Methodology: The study used desktop literature method. The 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 Mosioa-Tunya declaration.

Findings: 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.

Unique Contribution to Theory, Practice and Policy: 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, Small Scale Mining, Sustainability, African Mining Vision



www.iprjb.org

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, government policy, stakeholder engagement and performance of community assets in the ASM sub- sector after the domestication of the AMV.

Objectives of the Study

To achieve the overall goal of the study, the following specific objectives were pursued:

- 1. To identify the key Stakeholders in the implementation of AMV
- 2. Review national policies, the institutional and legislative framework, strategies and programmes relating to ASM and AMV.

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.

Data Collection Methods

The research was carried out using a desktop study approach.

Desktop Study

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.

Data 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



www.iprjb.org

Key Research Findings Table 1: AMV Tenets versus ASM

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 Fostering a transparent and accountable mineral sector in which resource rents are optimized and utilized to promote broad economic and social development	Exploration and information of mineral resources is lacking, Miners use trial and error and experience in exploiting the 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



www.iprjb.org

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 (African Union, 2009). 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;

Table 2: Key Tenets of AMV (African Union Commission, 2011)

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 ben

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 (AMDC, 2011) structured around nine program



www.iprjb.org

clusters set out in its action plan. These clusters are a set of actions with objectives and expected outcomes:

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

 Table 3: AMV Action Plan (Southern Africa Resource Watch, 2016)



www.iprjb.org

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' (Oxfam, 2015) which continues to over shadow this sector has caused it to remain an enclave, disconnected from broader economies (Oxfam, 2017).

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" (Hilson, 2009). 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 (Hilson, 2009). 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 (Hilson and Pardie, 2006).

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 through a case study approach assesses its impact on creating resilient communities in ASM surrounding communities.

One of the initiatives resulting from this common vision is the African Minerals Governance Framework developed in 2016 among the interventions proposed, one goal is 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" (Oxfam, 2017:13).

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. Oxfam (2017 :10) 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."

The African Mining Vision Implementation

The AMV (2009) 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



www.iprjb.org

(CMV) (see figure 2) 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 2: The CMV Process (African Minerals Development Center Country Vision Handbook, 2014)

However, the implementation of AMV has proved to be slow and ineffective (Hilson, 2020) The AMV adoption in 2009 poses the toughest test of the minerals and metals extractive sector in Africa (Akong and Busia, 2017). Akong and Busia (2017) argue 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.



www.iprjb.org



Figure 3: Metals Price Index Includes Copper, Aluminum, Iron Ore, Tin, Nickel, Zinc, Lead And Uranium Price Indices (IMF Primary Commodity Price System).

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. (Oxfam, 2017). 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" (Oxfam, 2017).

Hilson (2020) 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?

Artisanal and Small Scale Mining in Zambia and Its Challenges

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 (IGC, 2019).

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



www.iprjb.org

unknown, it is estimated that around 30,000 people are directly involved in ASM activities (ASM Handbook, 2017). 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 (ZMM, 2016).

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 (Lusaka times, 2019). This new ASM activity differs significantly from traditional ASM in Zambia. It is in contrast characterized by high levels of informality. The more traditional challenges that occur with informal 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 (2016) 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, Siwale and Siwale (2017) 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. Siwale (2018) finds that in 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.



www.iprjb.org

RESULTS AND ANALYSIS

Policies and Legislation- Mines and Minerals Development Act

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" (ICLG,2020). 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.

Policies and Legislation- 7th National Development Plan

Zambia has had three development plans since the re-introduction of the medium-term development planning process in the early 2000s, namely the Fifth National Development Plan, 2006-2010 (FNDP), Sixth National Development Plan, 2011-2015 (SNDP) and the Revised Sixth National Development Plan, 2013-2016 (R-SNDP). 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". 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



www.iprjb.org

• Mineral exploration promotion.

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.

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.

Conclusion

The AMV road map envisages to create "transparent, equitable and optimal exploitation of mineral resources to underpin broad-based sustainable growth and socioeconomic development". Expressed in seven tenets discussed in this study, the core aspirations of the AMV are 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 however, it has been established that policy direction exists as shown in the 7NDP and the Mosi-o-tunya declarations 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.

The study also establishes that stakeholder collaboration exists, but is not well developed to manage and solve concerns raised by ASM host communities.

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.



www.iprjb.org

REFERENCES

- 7th National Development plan (2018). Lusaka. Republic of Zambia African Mining Development Centre (AMDC) (2014). A Country mining vision guidebook – Domesticating the Africa Mining Vision. Available at:
- Africa Mining Vision Implementation Action Plan (2011), p. 10.
- African Union (2009). Africa Mining Vision p. 26.
- African Union (2009). Africa Mining Vision. Addis Ababa: African Union Commission and United Nations Economic Commission for Africa.
- Artisanal and Small-scale Mining Knowledge Sharing Archive. (2017). ASM inventory. Retrieved from <u>http://artisanalmining.org/Inventory</u>
- Banda, W. (2019). Zambia's Domestication of the Africa Mining Vision: A Gap Analysis. Centre for Trade Policy and Development Lusaka, Zambia
- Bohne, E. & Thiam, I. (2019). The Africa Mining Vision Can Business as Usual Be Visionary? Perspectives from Four Regions
- Busia, K. & Akong, C. (2017). The African Mining Vision: Perspectives On Mineral Resource Development in Africa. Afe Babalola University: J. Of Sust. Dev. Law & Policy. Vol. 8: 1. Available at: https://dx.doi.org/10.4314/jsdlp.v8i1.7
- Hilson, G. & Pardie, S. (2006). Mercury: An agent of poverty in Ghana's small-scale gold-mining sector? Resources Policy, 31(2), 106–116.
- Hilson, G. (2020). The 'Zambia Model': A blueprint for formalizing artisanal and small-scale mining in sub-Saharan Africa? *Resources policy journal* 68 (2020) 101765
- Hilson, G., (2009). Small-scale mining, poverty and economic development in sub-Saharan Africa: an overview. Resources Policy 34 (1–2): 1–5.

http://www.uneca.org/sites/default/files/PublicationFiles/country_mining_vision_gui debook.pdf

- IMF Primary Commodity prices. Available at: https://www.imf.org
- Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF). (2017). IGF guidance for governments: managing artisanal and small-scale mining. International Institute for Sustainable Development, Winnipeg.

International Cooperative Legal Guides (2020). Zambia Mining Laws and regulation

Lundazi District Situational report (2018). Lundazi. Republic of Zambia

Mines and Minerals Development Act. (2015). Lusaka. Republic of Zambia

Ministry of National Planning and Development, (2006). Vision 2030. Republic of Zambia



www.iprjb.org

- O' Faircheallaigh, C. & Corbett, T. (2016). Understanding and improving policy and regulatory responses to artisanal and small scale mining. The Extractive Industries and Society, 3(4), 961–971.
- Oxfam (2015). Community Consent Index 2015: Oil, Gas and Mining Company Public Positions on Free, Prior, and Informed Consent.
- Oxfam (2016). From Aspiration to Reality Unpacking the Africa Mining Vision. Available at: <u>http://www.oxfam.org</u>
- Oxfam (2016). Scoping Study of the Mineral Extractive Sector in Zambia. Internal report on extractive industries programme development prepared by J.A. Consultancy Services, Lusaka
- Shoko, P. M., Mwitwa, J. (2015). Social Economic Impact of Small Scale Emerald Mining on Local Community Livelihoods: The case of Lufwanyama district. *International Journal of education and research*
- Siwale, A. & Siwale, T. (2017). Has the promise of formalizing artisanal and small-scale mining (ASM) failed? The case of Zambia. *The Extractive Industries and Society*. 4:10.
- The World Bank, (2016). Building on the knowledge created under the Communities and Small-Scale Mining (CASM), our extractives practice focuses on empowering sustainable livelihood alternatives for the rural poor.
- Zambia Mining and Investment Review, (2011). International Bank for Reconstruction and Development / The World Bank.