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Does Zambia's Artisanal and Small-Scale Mining Policy Approach Support Sustainable Development? Insights and Recommendations



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Summary

- Zambia is advancing resource-driven development by scaling-up copper production whilst also seeking to exploit other mineral reserves, including gemstones, cobalt, manganese, and gold. Strengthening the artisanal and small-scale mining (ASM) subsector has been identified as a strategy to achieve this goal.
- This policy brief analyses the potential of Zambia's ASM policy framework to support sustainable development objectives. It highlights that Zambia has developed a set of policies that are generally supportive of ASM and compatible with most of the Sustainable Development Goals (SDGs).
- However, the policy framework also exhibits biases, missed opportunities, and trade-offs. These include biases towards large-scale mining and artisanal and small-scale gold mining;



SOURCE: CEJ

Miners looking for gold in Serenje, Zambia.

- the failure to directly link ASM with agriculture; and an overemphasis on economic growth compared to livelihood support. At the same time, gaps between policy aspirations and practice persist.
- **The key recommendations are as follows:** to develop a dedicated ASM policy; to identify and capitalise on linkages between ASM and agriculture; to address

gender and environmental issues through targeted interventions and supportive funding; to incentivise formalisation by guaranteeing bottom-up support to licensed ASM miners; and to strengthen ASM governance and institutional capacity through accessible licensing and procedural de-centralisation.

Introduction and Context

Zambia's mining sector continues to play a significant role in the country's economic development, contributing 13.7% to its GDP [1]. A prevailing focus on large-scale copper mining has overshadowed the exploitation of other minerals as well as the potential of artisanal and small-scale mining (ASM), which is the focus of this brief¹.

In Zambia, ASM is formally recognised in the Minerals Regulation Commission Act 2024², which establishes preferential licensing arrangements for local citizens through Artisanal Mining Rights and Small-Scale Mining Licenses. The subsector extracts copper, cobalt, manganese, gold, gemstones, the 3Ts (tungsten, tin, tantalum), and other minerals [1, 3]. Whilst data are difficult to obtain, estimates suggest that ASM provides livelihoods for over 500,000 Zambians [4].

Despite its socio-economic potential, ASM has struggled to deliver widespread transformative benefits in Zambia. Instead, it is often associated with socio-economic challenges (eg high poverty, health concerns, gender inequality, child labour) and environmental impacts (eg deforestation, land degradation, chemical use). ASM activities also intersect both negatively and positively with large-scale mining (LSM) operations. Instances of conflict include forced evictions of ASM miners by mining companies, whilst cooperation has occurred through initiatives such as company-led mineral buying schemes and training programmes [5]. Given ASM's interplay with social, economic, and environmental factors, research has sought to link ASM to the UN Sustainable Development Goals (SDGs) [6].

The Zambian Government has increased attention towards ASM. The sub-sector features in Zambia's Strategic Plan 2022–2026 for minerals development, which aims to diversify mineral production and enable full participation in global mineral value chains. Other policies have also been developed that incorporate ASM: these

are outlined in **Table 1** and, together, can be interpreted as Zambia's 'ASM policy framework'.

Table 1: Summary of Zambia's ASM policy framework

Policy	Year	Highlights
The Eighth National Development Plan (8NDP)	2022	Outlines Zambia's development priorities and implementation strategies for the period 2022 to 2026. Key strategic development areas include 'Economic Transformation and Job Creation', in which mining is cited as a key driver.
The National Mineral Resources Development Policy (NMRDP)	2022	Guides the implementation of various strategies and programmes in the development and management of mineral resources from 2022 to 2032.
The Export Diversification Strategy for Gold and Gemstones (EDS)	2020	Provides strategic interventions to promote the development of the gold and gemstones subsectors at the ASM level to support mineral diversification.
The National Action Plan on Artisanal and Small-Scale Gold Mining (NAP)	2020	Sets out strategies to achieve the overarching goal of reducing and, where feasible, eliminating the use of mercury and mercury compounds in the artisanal and small-scale gold mining sector, as per the Minamata Convention on Mercury (2013).

Despite these policy developments, and a growing prominence of ASM, there is still no standalone ASM policy in Zambia, which is an approach taken by other countries with a prevalence of ASM, such as South Africa and Peru. Analysing the current policy framework and identifying its strengths, trade-offs, gaps, and implementation can provide valuable insights to inform the potential development of a standalone policy. This, in turn, can support efforts to more effectively harness ASM in advancing Zambia's national development priorities and global sustainability commitments, including the SDGs.

¹ ASM refers to the low-tech, labour-intensive processing and extraction of minerals by individuals or groups [2]. These groups often operate through informal labour arrangements, but formalisation is a common governance goal.

² This Act was enacted after the analysis was conducted. It repeals the Mines and Minerals Development Act 2015, which was originally analysed.

Aims and Methodology

This policy brief is based on research that examined Zambia's policy ambitions to expand and diversify its mineral production through ASM. Specifically, the study aimed to ascertain whether the current policies are, in theory, compatible with achieving the SDGs and to what extent the approach has, in practice, achieved progress. In light of the findings, policy recommendations have been developed to support the sector's social, economic, and environmental goals.

Methods

The research approach used the following methods:

1. **Policy mapping and analysis:** An in-depth policy document review and analysis was

carried out to map Zambia's ASM policy framework to all the SDGs, excluding SDG 14 (Life Below Water). This involved assessing the direct and indirect relationships between the policies and SDG targets to shed light on the potential contribution of the ASM sector to the SDGs under the current policy framework.

2. **Semi-structured interviews, and workshop:** Twelve semi-structured interviews with key-informants (eg miners, NGOs, experts) and a workshop in Lusaka were used to explore the current state of Zambia's ASM sector, and to reflect on the gaps between the mapping results and the reality of the sector.

Findings

Part 1: ASM in the Policy Framework

Strengths. Overall, the analysis reveals that Zambia's ASM policy framework is, on paper, compatible with meeting many of the SDGs. This suggests that, if the policy framework was fully implemented, Zambia's ASM sector could meaningfully contribute to the SDGs.

These synergies are summarised in the second column of **Table 2**. Most of the framework's synergies with the SDGs come from policies relating to capacity building; for example, facilitating access to technologies, markets, services, and finance, the formation of ASM cooperatives, and local participation in the sector.

Missed opportunities. Whilst the policy framework demonstrates several strengths, its focus is on SDGs relating to economic outcomes, poverty reduction, and partnerships (SDGs 1, 8, 10, and 17), with comparatively less emphasis on foundational social and environmental goals, such as food security, gender equality, clean water and

sanitation, energy access, and climate resilience (SDGs 2, 5, 6, 7, and 13).

The missed opportunity to directly link ASM with agriculture (SDG 2) is particularly notable, given the interconnections between the two sectors. On the one hand, ASM often serves as an alternative or complementary economic activity for rural communities because of the seasonal nature of agriculture and the challenges in sustaining agriculture as a sole livelihood [7, 8]. On the other hand, ASM's negative environmental impacts and competition with agriculture (in terms of land, labour, and water) can put the two livelihood activities at odds with each other [9]. These conflicts of interest may be exacerbated by the recent surge in ASM licensing coupled with a current lack of requirements and funding for the rehabilitation of ASM sites. From either perspective, Zambia's policy framework fails to make these important connections.

Policy trade-offs and weaknesses. An overemphasis on LSM also persists in the policy framework,



Artisanal and small-scale gold mining site in Serenje, Zambia.

which reflects existing research observations [10]. This is implicit in some general policies, such as the Eighth National Development Plan (8NDP) and National Mineral Resources Development Policy (NMRDP), and the Government's ambitions to scale-up mining activities. The 8NDP maintains an emphasis on increasing copper production, whilst the NMRDP refers to increasing commercial exploitation of mineral resources. The emphasis on LSM and copper production was raised by several interviewees:

“The focus so much on commercial mining is killing artisanal mining ... Even when they are developing policies, they develop policies with no proper regard to the subsector”

(Researcher for Zambian Policy Think Tank)

Ultimately, the policies relating to increasing exploration and exploitation have direct negative impacts on progress towards the SDGs relating to the environment (namely, SDGs 6, 12, and 15), as well as indirect negative impacts on SDG 3 on health and wellbeing. This is unsurprising given mining activities typically negatively impact

ecosystems, biodiversity and water sources; whilst scaling up activities can trigger influxes of workers to new areas, increasing the risk of communicable disease outbreaks [6, 11].

The findings also point to a new bias towards artisanal and small-scale *gold* mining (ASGM), with less attention paid to other minerals. Two of the four policies in the ASM policy framework are specific to gold: the Export Diversification Strategy for Gold and Gemstones, and the National Action Plan for Artisanal and Small-Scale Gold Mining (NAP). This mineral prioritisation therefore only partially meets aims to diversify the exploration and exploitation of non-copper minerals. As such, other minerals (eg manganese) may be neglected³. Nonetheless, the high level of policy attention to ASGM can also be viewed positively, as it offers opportunities for broad sectoral benefits. For example, using alternatives to mercury in ASGM, as envisioned under the NAP, could contribute positively to almost all SDGs [13].

³ Out of the 680 licences granted in 2024, 519 are in gold ASM and 161 are in non-gold ASM, such as manganese and copper [12].

DOES ZAMBIA'S ASM POLICY APPROACH SUPPORT SUSTAINABLE DEVELOPMENT?

Table 2: Summary of ASM policy expectations versus reality in relation to select SDGs

SDG	Expectations of Existing ASM Policy Framework	Reality of Zambia's ASM
SDG 1: No poverty	Access to finance, markets, skills, services, and technologies will empower ASM communities and improve their livelihoods.	Government emphasis on revenue capture with limited bottom-up efforts perpetuates the poverty cycle for ASM miners.
SDG 2: Zero hunger	Access to finance, skills, and markets could indirectly improve food security and agricultural productivity.	The lack of rehabilitation of ASM sites and the increasing commercialisation of ASM have raised concerns about the sector's potential to displace agriculture.
SDG 3: Good health and wellbeing	A mercury-free ASGM sector, and ASM communities with access to healthcare services.	The use of chemicals (eg mercury) and communicable diseases in ASM sites are prevalent, and communities have limited access to healthcare services.
SDG 4: Quality education	Access to finance, skills, and markets, and the formation of cooperatives could indirectly provide access to education.	ASM communities lack education due to child labour in mining sites, poor access to schools, and mining not being on the national curriculum.
SDG 5: Gender equality	Increased female participation in ASM.	Social and cultural norms continue to hamper women's full inclusion.
SDG 6: Clean water and sanitation	The gradual phasing out of mercury in ASGM will lead to safe and affordable drinking water and improve water quality.	The use of mercury in ASGM remains prevalent and, therefore, continues to contaminate water sources.
SDG 8: Decent work and economic growth	A diversified and inclusive sector that is comprised of formalised, skilled, and productive ASM miners who have adopted modern technologies, best practices, and decent labour standards.	Informality, child labour, unsafe conditions, and exploitation are prevalent.
SDG 10: Reduced inequalities	Prosperous and inclusive local operations that provide jobs, income, and skills development for all ASM miners.	LSM is prioritised in the licensing process, which is costly, arduous, and inaccessible for most ASM miners. Women are excluded from ASM and exploitation occurs.
SDG 12: Responsible production and consumption	Access to geological knowledge and regulatory enforcement could prevent aimless mining, land degradation, and chemical use.	Chemical use and discharge (eg mercury) is widespread in ASGM. Geological information is almost non-existent for ASM miners who continue to degrade land in search of minerals.
SDG 15: Life of land	Delineation of ASM sites, elimination of mercury, and skills development will prevent the destruction of the natural environment. ASM sites will be rehabilitated and remediated.	Extensive land degradation occurs due to inadequate geological information and a lack of enforcement of reclamation requirements.
SDG 16: Peace, justice and strong institutions	Appropriate health, safety, environmental, and labour laws and regulations, and their enforcement, will combat violence, deaths, exploitation, illicit flows, and corruption. Institutional capacity will be strengthened.	Issues of child labour, violence, informality, and corruption remain widespread.
SDG 17: Partnerships for the Goals	A sector characterised by stakeholder collaboration, well-resourced cooperatives, and adequate investment.	A lack of a government unit dedicated to ASM (until recently), limited funding, and a 'one size fits all' approach by NGOs has meant ASM miners' needs are often left unaddressed.

Note: All SDGs were identified in the study; however, the SDGs presented below produced the most discussion.

Part 2: ASM in Practice

The primary research (ie interviews, workshop) highlighted the reality of Zambia's ASM sector, enabling insight into ASM's actual and perceived contributions to the SDGs. Findings revealed that issues of poverty, corruption, gender inequality, environmental degradation, and poor access to skills, education, and finance remain. Therefore, despite ASM's socio-economic potential and the theoretical alignment of Zambia's ASM policy framework with most of the SDGs, the subsector's benefits have not been fully realised. **Table 2** summarises the discrepancies between the ASM policy framework expectations and the realities on the ground. The limited progress towards the SDGs can be attributed to the inadequate implementation of the policy framework, as well as the earlier described shortfalls of the framework.

Inadequate policy implementation. A key challenge is the inadequate implementation of socially impactful policies in the ASM policy framework, particularly, those aimed at improving access to finance, services, technologies, markets, and training. These policies, in theory, support progress towards SDGs relating to poverty alleviation, improved livelihoods, women's empowerment, and local economic development. However, interviewees highlighted that opportunities to access this support – such as marketing centres or gender-sensitive financing – are limited. Therefore, ASM in Zambia remains a primarily poverty-driven activity: an observation widely shared, and summarised by this interview extract:

“ASM is actually an activity that is driven by poverty in Zambia... It is about livelihood, it is not really about economic development”
(Zambian Small-Scale Miner)

This highlights the gap between policy intent and policy implementation.

Interviewees and workshop participants attributed this implementation gap to various governance issues, including weak capacity and ministerial coordination; insufficient awareness of the policies; over-generalised policies that tend to be donor-driven and/or fail to meet community-specific needs; a lack of stakeholder collaboration; inadequate monitoring and evaluation; and a lack of a single voice and reporting mechanism to represent ASM interests.

Impacts of the policy framework's weaknesses.

The policy framework's shortfalls also contribute to slow progress towards the SDGs. For example, the findings suggest that the policy bias towards LSM has caused scepticism amongst ASM miners regarding the Government's motivations behind formalising the sector. Formalisation efforts are perceived as economically driven (eg revenue collection opportunities) rather than to improve the welfare of ASM miners.

A costly, arduous, and centralised licensing process – which is, in turn, inaccessible to some ASM miners – is also viewed as favouring large-scale players who are better resourced, connected, and located. These dynamics may disincentivise ASM miners to formalise. The consequent prevalence of informal ASM links to many of the subsector's persistent social and environmental issues.

Key Recommendations

Recent positive developments in Zambia's ASM sector include the formulation of The Geological Minerals Development Act, 2025 – which contains provisions to establish a Director of ASM in the Ministry of Mines and Minerals Development and to create a fund to support ASM – and the launch of an e-licensing system, the Zambia Integrated Mining Information System (ZIMIS). Against this backdrop, this Policy Brief calls for additional, inclusive policy and governance reforms, including:

- **Establish a dedicated ASM policy** to respond to the needs and challenges faced by ASM communities, resulting in a policy that is more relevant and implementable. This could entail consulting ASM stakeholders from the outset of the policymaking process; differentiating between artisanal mining and small-scale mining; explicitly distinguishing between ASM activities and LSM activities; and paying balanced attention to different minerals.
- **Identify and capitalise on linkages between ASM and agriculture** to reduce sectoral conflicts and maximise complementarities. The proposed standalone ASM policy could clearly define sector priorities and management systems, enabling ASM and agriculture to positively co-exist, rather than compete. This is an area where interministerial collaboration and further research is required to fully understand the intersections of policy issues between the sectors.
- **Empower ASM miners through bottom-up support** to help sustainable expansion and

management of the sector. ASM formalisation can be incentivised by combining the licensing process with technical and economic capacity-building support. This could include providing access to finance, equipment, training, and geological information for licensed ASM miners; ringfencing a proportion of the forthcoming ASM Fund for female cooperatives; and introducing 'one-stop-shops' with relevant services for miners (eg assistance with export documentation, mineral valuation, banking, and taxation payments).

- **Strengthen ASM governance and institutional capacity.** The Director of ASM could look to interventions such as ensuring the new ZIMIS system is accessible, streamlined, and user-friendly, particularly for prospective ASM miners in rural areas and those with low IT literacy. In line with the National Decentralisation Policy⁴, the Director could also devolve some responsibilities of the Ministry of Mines and Mineral Development. For example, Local Authorities could be responsible for devolved ASM service delivery, including the establishment of a de-centralised network of licensing cadastres and licensing personnel at district levels.

⁴ The National Decentralisation Policy seeks to devolve the Government's functions and responsibilities from the national level to Local Authorities and other subnational structures. In doing so, it hopes to facilitate citizen participation in sustainable development and enhance service delivery at the local level.

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