



BRIEF

Health Impact Assessment of legal formalization of Artisanal and Small-Scale mining of critical minerals in the DRC. Lessons from the Ministerial Decree 19/15 in Lualaba province¹



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Key Messages

The Health Impact Assessment (HIA) examined the health impacts of artisanal and small-scale mining (ASM) in the Lualaba province, Democratic Republic of Congo (DRC), to assess the effectiveness and application of Ministry of Mines 2019 Decree N°19/15. By examining potential health impacts, the HIA identifies options to maximise health benefits and prevent health risks in the framing and implementation of the decree.

The projected health impacts found in the HIA outlined in this brief led to recommendations for improving and implementing the decree. They included legal revisions to enable voluntary retirement or redeployment of vulnerable workers; to include affected communities and local ASM associations in meetings and decisions impacting their wellbeing and promote improved living and working environments for ASM and adjacent communities.

Recommendations to improve the decree's implementation included encouraging informal artisanal and small scale miners to join cooperatives; strengthening capacities to enforce the decree, together with training ASM associations on health and safety at work; intensifying the monitoring of the health and environmental impacts of mining activities in communities neighbouring ASM sites and developing remediation plans for environmental or health impacts.

The policy context

In the DRC, cobalt and copper ASM involves 150,000 to 200,000 operators, particularly in Lualaba and Haut-Katanga provinces. It involves hazardous work and health risks, with frequent injuries and preventable deaths. In response, and to balance ASM health with economic viability, the DRC Government has set various regulations, including the Ministry of Mines 2019 Decree N°19/15. There are, however, questions on the effectiveness and application of these measures. This motivated assessment of the extent to which Ministerial Decree N°19/15 addresses the health impacts of artisanal cobalt mining in the Lualaba province, to provide information to improve the decree and its implementation.



Women working in the copper-cobalt ASM
Source: ITIE, 2023:p130

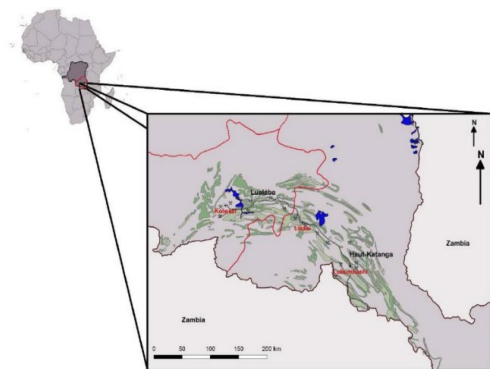
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The Health Impact Assessment

HIA identifies potential positive and negative health impacts to integrate health into policy and planning, to maximise benefits, prevent costly risks and protect vulnerable people. This concurrent HIA aimed to identify the health impacts of the relevant provisions of Decree n°19/15. It assessed the decree in relation to the direct and indirect health impacts of ASM on workers and adjacent communities in Lualaba province, DRC (see adjacent map).



Main areas of artisanal extraction of cobalt and copper in DRC. Source: BGR, 2019:p2

The HIA was implemented and reviewed during an EQUINET regional training programme. It used an internationally recognised method in five stages: screening to identify feasibility, the causal pathways and focus of the HIA; scoping stages to identify key stakeholders and sources and forms of evidence; a profiling and assessment stage to identify the direction, magnitude, severity, likelihood and on this basis the significance of the health impacts assessed; the setting of recommendations for significant impacts; and steps to report and communicate the HIA and propose areas for monitoring implementation of the recommendations.

From the screening and scoping stages, the HIA focused on four aspects of the decree:

- Article 5, Para 1 that prohibits child labour and employment of vulnerable persons in strategic mineral production.
- Article 5, Para 3 that mandates environmental impact assessments for all mining operations.
- Article 7 that assigns responsibility to the Agency for Regulation and Control of Strategic Mineral Substance Markets (ARECOMS) to exclude minors, pregnant women, and unauthorized persons from extraction sites and supply chains.
- Mechanisms for ASM community representation in policy implementation and Article 8 provision for ARECOMS to certify compliance and lawfulness of actors.

As a desk-based assessment using review of secondary documents, the HIA used relevant national and international laws and standards, public health and environmental data and evidence from Lualaba Province ASM. While the HIA faced a limitation in available data post 2019 in key areas, the evidence highlights areas of significant impact, and gives reasonable confidence in the findings. Given the precautionary principle in public health, the findings highlight areas for improvement of the decree and its implementation.

A causal pathway was developed linking the four key elements assessed with health determinants (the factors affecting health and the routes of exposure to them) and health outcomes, derived from evidence. The causal pathway, shown adjacent, informed the HIA analysis.



The causal pathway linking the legal/policy elements to health impacts developed in the HIA

The Findings of the HIA on health impacts

The profiling and assessment stage explored the potential impact of the decree, both provisions and gaps, on the determinants and health outcomes for the four key areas assessed. The HIA pointed to impacts for the pathways for each of the four areas of health impact assessed.

Firstly, in relation to **Article 5 prohibition of child labour and employment of vulnerable persons in strategic mineral production:** A continued high presence of women is reported, (shown in the adjacent photograph). The ASM sector is attractive for young people, with a minimum estimated age of 14 years (Maniraguha et al., 2012). Pregnant women and children in informal mining sites are exposed to degrading and unsafe working conditions, with Afrewatch (2024) reporting that this affects more than 65% of ASM sites. Studies report arsenic, copper, cobalt and lead contaminants that present a severe and significant risk to the health of mothers and new-born children and infants (Maniraguha et al., 2012).



Children and women working in ASM of cobalt (left). A woman mineral washer working with her child (right) (Midingi) Source: Kamala Kaghoma, 2023.



Environmental degradation in areas of artisanal extraction, DRC. Source: BGR, 2019:p2

Secondly, in relation to **Article 5, mandate of environmental impact assessments for all mining operations:** Various forms of environmental degradation are reported in ASM sites, including high levels of air pollution due to dust emissions from pits that expose diggers, transporters and mineral washers to respiratory diseases. Cobalt and copper soil contamination has been found to exceed international thresholds posing risks of gynaecological disease (Maniraguha et al., 2012). Soils contaminated with heavy metals have reduced agricultural productivity, posing nutritional risks for miners and communities.

Thirdly, in relation to **Article 7 ARECOMS duties to exclude minors, pregnant women, and unauthorized persons from extraction sites and supply chains:** Morisho and Lenfant, (2021) found that the exclusion of children and pregnant women is not always enforced and monitoring bodies such as ARECOMS may lack the resources or political leverage to ensure compliance with the decree. Many ASM workers (40%) earn less than the minimum wage, live in poor conditions, and find health care inaccessible or unaffordable, despite experiencing accidents and occupational diseases (ITIE, 2023; BGR, 2019). Extreme poverty leads many children and pregnant women to work in ASM in Lualaba despite these risks.



ASMers working without equipment protection, DRC. Source: ITIE, 2023:p1

Finally in relation to **Article 8 Inclusion of informal actors in mining regulation and support system and ASM community representation in policy:** While an estimated 40% of ASM miners are members of a cooperative (BGR, 2019), 60% are only in informal groups. This raises barriers to information access; rights; certification; and a risk of increased illegal practices and social vulnerabilities. The situation obstructs the Decree's application for all in the sector, leaving many in affected populations excluded from decisions that impact their wellbeing.

Recommendations from the HIA

Based on the findings, various actions are recommended to improve the integration of health in the operation or provisions of Ministerial Decree N°19/15. These are shown overleaf, in order of priority.

Areas for suggested revision of the decree:

The National Labor Authority (Inspection du travail) and “police des mines” are recommended to consider the following revisions of the decree:

- ARECOMS and Entreprise Generale du Cobalt (EGC) to strengthen legal and operational measures that enable voluntary retirement or redeployment of vulnerable workers.
- The Ministry of Mines to strengthen duties to include affected communities and local ASM associations in meetings and decisions relevant to their wellbeing.
- Miners’ organisations and cooperatives to have a duty to promote improved living and working environments in both ASM and adjacent communities.

Recommendations to improve implementation and enforcement of the decree:

- ARECOMS and miners’ cooperatives to encourage informal artisanal and small scale miners to join existing or create new cooperatives.
- The National Labor Authority (Inspection du travail) and “Police des mines” to strengthen capacities to enforce the decree.

Recommendations to enhance the living and working conditions for improved health of ASM and adjacent communities:

ARECOMS, Ministry of Mines and Miners organisations to:

- Train and strengthen miners’ associations on health and safety at work in the ASM sector.
- Intensify monitoring of the health and environmental impacts of mining activities in communities neighbouring ASM sites and raise residents’ awareness on these impacts.
- Encourage mining sites to have a remediation plan for environmental or health impacts.

The recommendations are aimed at key stakeholders with an influence on, or who are affected by the decree. The ARECOMS and EGC are key institutions responsible for Decree 19/15 and its implementation. The Service d’Assistance et d’Encadrement de l’Exploitation Minière Artisanale et à Petite échelle (SAEMAPE) and Mines Police and Mines Division in Lualaba are engaged with miners’ associations in the ASM sector. Raising their awareness of the provisions and role of Decree 19/15 could enhance its implementation.

If more effectively engaged in inclusive planning and training ASM mining cooperatives could play a key role in implementation and proposals for review of the decree. Where no cooperatives exist, informal miners’ committees should be included in these processes, to gain their support and reach their members. Local civil society leadership could also play a role in advocacy and sensitisation of miners. Local universities can provide research and technical support on ASM health issues, including in relation to monitoring the implementation and impact of the Decree.

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