

BRIEF

Health Impact Assessment of the Draft Tanzania Critical and Strategic Minerals Strategy¹

August 2025



Key Messages

Tanzania is an emerging critical minerals development frontier. This Health Impact Assessment (HIA) examined the inclusion of health impacts in the Tanzania draft Critical and Strategic Minerals Strategy, to contribute to policy intentions on health and improve these areas in the draft strategy. Critical minerals extraction and development processes mirror those of conventional mining, and replicate their socio-economic, environmental and health impacts. These include the health impact of air and water pollution and hazardous work; of social changes in mining sites and the mental ill health impact of lack of engagement in mining plans.

The projected health impacts identified in the HIA led to a number of recommendations, including for: monitoring, and managing health risks and outcomes for the various population groups and along different phases of the extractive process; legislating for mandatory HIA in all critical minerals projects; building key agency and community capacities to protect health; ensuring a mechanism for communities to monitor and report on mining compliance with environmental, social and governance (ESG) standards and requiring periodic reporting by state and mining companies on their engagement and awareness campaigns in affected communities. The HIA proposes such strengthening these areas in the draft Critical and Strategic Minerals Strategy.

The policy context

Tanzania is one of several African countries endowed with critical minerals, including graphite, rare earth elements, lithium, cobalt, and nickel, that are crucial for various high-tech and green technologies. To tap this potential, the government is in the final stage of developing 'The Tanzania Critical and Strategic Minerals Strategy'. The strategy aims to enable the country to effectively manage and optimize its mineral wealth, attract investment, and boost economic growth, while ensuring sustainable practices. It establishes a framework for the exploration, mining, beneficiation, value addition, and supply chain of critical minerals to create high-value jobs and address the environmental and social impacts (Ministry of Minerals, 2025). Tanzania uses legislation and systems to manage risks from mining, share benefits, integrate social participation, and to ensure health, social and sustainability benefits.



Tanzania's critical and other minerals reserves. Source: Ministry of Minerals, 2024

This HIA thus provided a critical assessment of the inclusion of health impacts in Tanzania's draft Critical and Strategic Minerals Strategy, to contribute to policy intentions on health and improve these areas in the draft strategy.

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The Health Impact Assessment

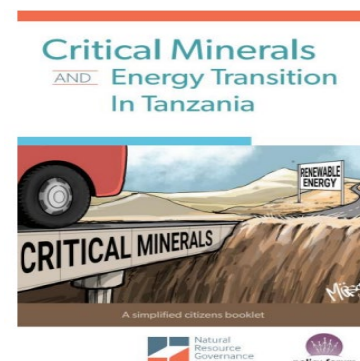
HIA identifies potential positive and negative health impacts to integrate health into policy and planning, maximising benefits, preventing costly risks and protecting vulnerable people. This prospective HIA assessed the health risks and impacts of Tanzania's draft Critical and Strategic Minerals Strategy, enabling early identification of health risks and benefits, including on vulnerable groups, to improve it and its implementation.

The HIA was implemented during an EQUINET regional training activity. It used an internationally recognised five-stage method: screening to identify feasibility, the causal pathways and focus of the HIA; scoping to identify the sources and forms of evidence; profiling and assessment 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 impacts and implementation of the recommendations.

From the screening and scoping stages, the HIA focused on three key elements of the strategy:

- Ensuring the establishment and sustainable development of critical and strategic minerals projects
- Enhancing sector performance on environmental sustainability, social ethics and governance issues in critical and strategic minerals investment.
- Ensuring just, fair and productive engagement of community members at every stage of the critical and strategic minerals value and supply chains.

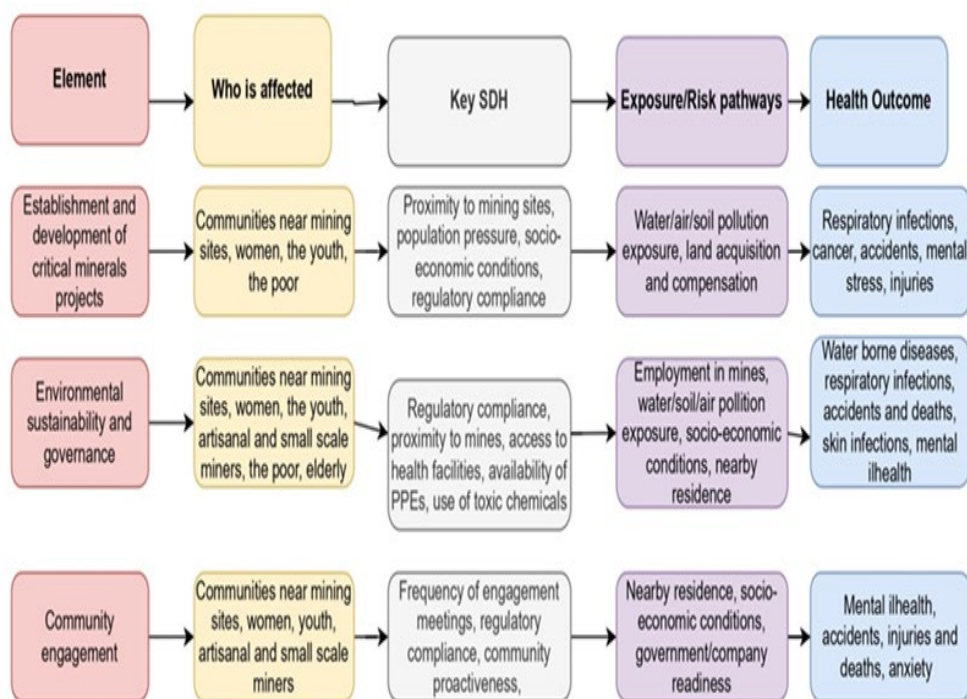
These elements were motivated by the potential health impacts of critical and strategic minerals projects, particularly in remote rural areas; by the need for just and productive community engagement in health given recent protests on the consequences of natural gas projects; and noting the draft strategy's commitment to environmental sustainability, social ethics and governance.



Critical minerals and Tanzania's energy transition. Source: Policy Forum, 2023

The HIA was implemented as a mentored desk review within an EQUINET regional training programme. It used existing secondary sources and emerging evidence from the critical minerals sector. While the reliance on secondary data was a limitation, careful triangulation and peer review of evidence gives reasonable confidence in the findings.

A causal pathway (shown adjacent) was developed that linked the three key elements assessed with the social determinants of health (SDH) (viz: the factors affecting health and the routes of exposure to them), and health outcomes. The causal links were derived from national and international evidence. This causal pathway, informed the HIA analysis.



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

The profiling and assessment stage explored the potential impact of the three key elements assessed on the determinants and health outcomes.

Findings of the HIA on health impacts

The HIA pointed to impacts for the pathways for each of the three areas of health impact assessed. The most severe and significant impacts are summarized below.

Firstly, studies show that **the establishment and sustainable development of critical and strategic minerals projects** can result in increased respiratory infections due to air pollution; and cancer and lung infections from exposure to toxic elements in mining areas. This affects mine workers, communities and artisanal and small-scale miners (ASMers). Socio-economic inequities and mining displacement of communities are reported to lead to mental ill-health in youth, women and elderly people. Rapid population increases in mining sites lead to increased communicable diseases such as HIV/AIDS, while the use of rudimentary tools for artisanal and small-scale mining lead to accidents and injuries (Lyatuu et al., 2021a,b; Rwiza, et al., 2023).



Artisanal and small scale mining accidents and deaths, Source: VOA, 2024

Secondly, in relation to **environmental sustainability, social ethics and governance issues in critical and strategic minerals investment**, research points to water borne diseases in community members, women, ASMers from contamination of water; respiratory infections due to air pollution in communities near mining sites, and skin infections and cancers in communities near mines affecting ASMers and community members. Accidents and deaths are reported in ASMers due to hazardous work (Rwiza, et al., 2023; Rubara, 2025; Kaaya, et al. 2025).



Finally, for **just, fair and productive community engagement**, evidence shows that mining activities result in mental ill-health; injuries and deaths. These health problems arise from violent conflicts and anxiety due to power imbalances between mining companies and communities and lack of meaningful participation in decision-making processes (BBC, 2013; RAID, 2022).



Exposure to consequences of mining activities on youth, communities, women and children. Source: Health Policy Watch, 2023; Mail & Guardian, 2024

The Recommendations from the HIA

Based on the findings, various actions are recommended to improve the integration of health in the draft Tanzania Critical and Strategic Minerals Strategy, and to better protect vulnerable groups. The following recommendations are prioritized for action.

On establishment and sustainable development of critical and strategic minerals projects, the HIA recommends that:

- The Ministry of Minerals, in partnership with Ministry of Health, creates a monitoring and reporting system of determinants, risks and health outcomes, and responses to risks among various population groups and along different phases of the extractive process; and legislates for mandatory conduct of HIA in all critical minerals projects.
- The Ministry of Health strengthens health worker' capacities to detect and respond to risks from the mining process among different population groups.
- The Ministry of Minerals in partnership with mining investors creates a fund to support health, education and equity among local mining communities, to be managed through participatory budgeting.
- The Tanzania Mining Commission establishes communication channels between communities, government and mining industry to help identify and resolve issues.
- Civil society organisations in partnership with the Ministry of Minerals trains community workers and government officials, including in the judiciary and police on the rights of mining communities, as well as on the risks from mining and how to prevent/address them.

On environmental sustainability, social ethics and governance issues in critical and strategic minerals investment, the HIA recommends that:

- Ministries of Minerals and Environment strengthen the financial and technical capacity of state agencies responsible for the oversight and monitoring of the environmental, social and ethical conduct of mining activities.
- The Ministry of Minerals and civil society together raise community awareness in mining sites on Environment, Social and Governance (ESG) issues.
- The Mining Commission and National Environmental Management Council provide a mechanism for communities to monitor and report on the compliance and non-compliance of mining activities with ESG standards.
- The State Mining Corporation and external funders invest in modernising artisanal and small-scale mining through financial and technical support.
- Government reviews the Public Health Act, No. 1 of 2010 and the Environmental Management Act 2004 to include provisions for HIA.

On just, fair and productive community engagement, the HIA recommends that:

- The Ministry of Minerals reviews existing mining laws/ regulations to include a mandatory requirement for the state and mining companies to periodically report on their community engagement, and along with other stakeholders implements awareness campaigns in marginalised communities.
- Civil society organisations conduct advocacy around meaningful community engagement by lobbying government, mining companies and the international community.

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