



## Environmental Impact Assessments of Tanzania's Mineral Sector

### Strengthening the Inclusion of Health

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#### Key Messages:

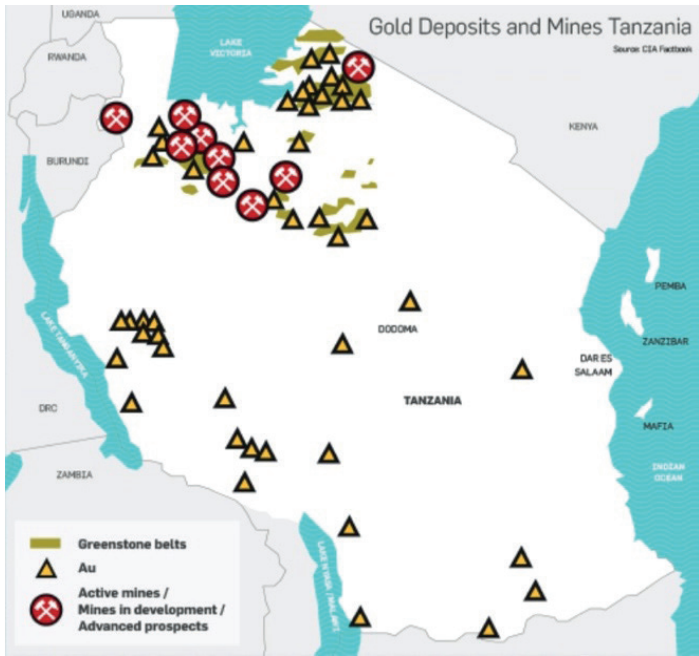
- Environmental Impact Assessment (EIA) tends to not adequately consider health impacts and therefore misses important gains in arranging sustainable development
- Inclusion of Health Impact Assessment (HIA) into current regulatory framework can further provide opportunities to strengthen EIA and also promote sustainable development.
- Strengthening capacity of regulatory institutions and promoting cross-sectional collaborations have potential to improve the consideration of public health in impact assessment practice in Tanzania.

#### Large-Scale Mining and Tanzania's Economy

Tanzania's Mining Sector has been one of the fastest growing industries in the last decade. The sector is expected to contribute up to 10% of the country's GDP by 2025. Over six large-scale

gold mines have been in operation in Tanzania since the 1980s, generating over \$1.5 billion in mineral exports by 2019. In 2015, Tanzania became the fourth largest gold producer in sub-Saharan Africa, behind South Africa, Ghana and Mali. In addition to gold, Tanzania has increased the large-scale mining of diamonds, gemstones and other precious metals (e.g. copper, silver, nickel) over the years.

Part of this growth has been driven by a slew of economic and Mining Sector reforms and regulations introduced in the late-1990s that aimed to increase the country's attractiveness for foreign direct investments and the mining industry's contribution to the economy. Currently, the Mining Act (2010) and Mineral Policy (2009) are key regulations with principles and provisions that seek to build a strong, vibrant and well-organized mining industry, that promises to conduct activities in a safe and environmentally-sound manner that contributes to sustainable growth and development. However, some mining companies in Tanzania have been accused of environmental pollution and operational negligence that could significantly impact health outcomes of nearby communities.



## Regulating Impacts of Large-Scale Mining – Current Frameworks

In Tanzania, EIAs are a critical regulatory tool used to minimize and mitigate negative impacts of large-scale mining projects on the environment, society and public health. The Environmental Management Act (2004), EIA and Environmental Audit (EA) Regulations (2005), and the Mining Act (2010) mandate mining companies to carry out EIAs prior to initiating mining operations in Tanzania. In order to mitigate negative impacts of mining activities, every applicant for a mining license is required by Section 41 (4) (e) of the Mining Act (2010) to submit an

## Health and Social Impacts of Large-Scale Mining in Tanzania

Studies have shown that, by investing in corporate responsibility projects aimed at improving access to clean water and sanitation, building health facilities and schools, and improving housing conditions, mining companies are able to directly contribute to fostering good health and well-being (Sustainable Development Goal number 3). However, the various potentially positive effects are often offset by adverse impacts. Project-induced immigration puts a burden on local health systems, sanitation and water systems and food security.

Furthermore, a rapid increase in the population density within mining communities can exert a burden on existing essential resources such as e.g. clean water, housing and healthcare. The proliferation of infectious diseases such as malaria, HIV and TB, and water-borne illnesses can emerge as a result of poor local infrastructure (e.g. roads and adequate housing), and low access to health services. Lastly, pollution and environmental damage caused by mining operations, including the haphazard use of hazardous chemicals can also impact key resources communities rely on for their livelihood, health and wellbeing.

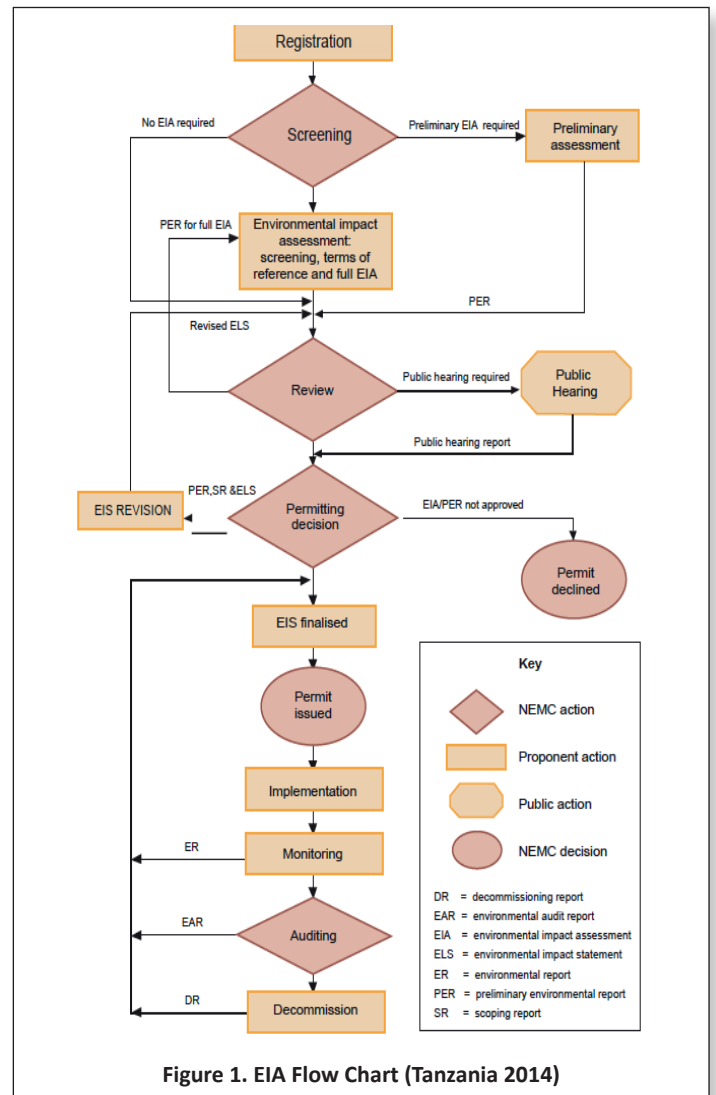


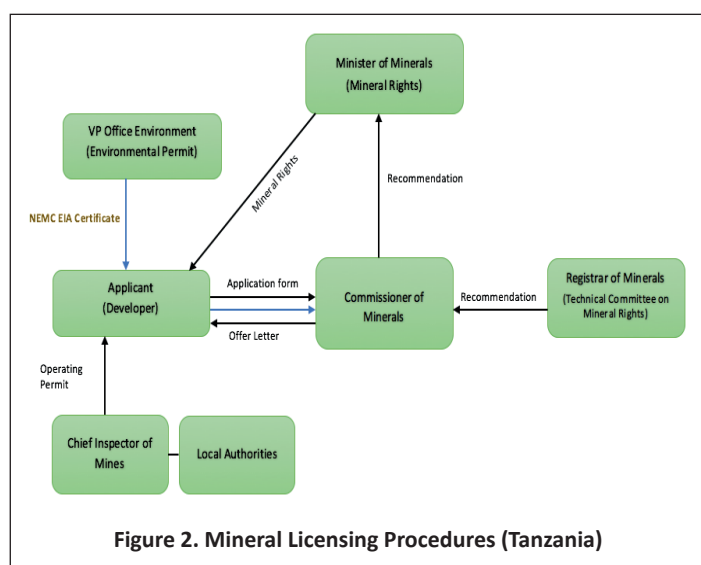
Figure 1. EIA Flow Chart (Tanzania 2014)



Environmental Certificate issued in terms of the Environmental Management Act.

Therefore, mining companies are only able to commence operations once they receive a permit signed by the Minister of Environment, and the National Environmental Management Council (NEMC), which oversees the sustainable management of the environment and natural resources in Tanzania. EIAs follow universal procedures that take place in stages, as outlined in **Figure 1** with each stage requiring the engagement and oversight of stakeholders including NEMC, EIA consultants, government ministries (e.g. Ministry of Minerals), project proponents, local government authorities and the public or affected populations.

The overall workflow of the mineral licensing process in Tanzania is outlined in **Figure 2** and indicates a specific step (blue arrow) in its procedures that requires the developer to obtain an Environmental Permit (EP) from the Vice President's Office (Division of Environment). The developer presents the EP to the Commissioner of Minerals, along with other supporting documents required for applying for mineral rights (e.g. special mining license or mining license). EP forms, a key component of the recommendations, the Commissioner of Minerals provides the Minister of Minerals, which informs the decision to issue mineral rights to the developer or applicant.



## The Insufficient Inclusion of Public Health in the EIA

Both the EMA (2004) and the Mining Act and Regulations (2010) include provisions for addressing social and health impacts associated with mining activities. Nevertheless, health impacts are considered narrowly in the EIA and EA, when compared to environmental or social impacts related to mining activities. The EIA largely focuses on the health of workers and staff (occupational health), and minimally considers health challenges of communities and populations living in mining areas.

Furthermore, current EIA guidelines and regulations stipulated by the EMA (2004) and EIA and EA Regulations (2005) do not

mandate the implementation of full HIAs to comprehensively evaluate health impacts of projects in Tanzania (including mining projects). Rather, some companies voluntarily undertake, at additional cost, to conduct separate and independent HIA studies for projects deemed of significant risk to both occupational health and safety, and public health.

The inadequate inclusion of health in the EIA process is also reflected by the lack of institutional coordination, and clear accountability frameworks for mitigating health impacts. The EIA and EA procedures rely on multi-sectoral stakeholder engagements and collaborations to ensure transparent and comprehensive assessments. Prior to issuing environmental permits, NEMC consults a cross-sectoral Technical Review Committee to highlight potential impacts of a project. For EIAs of projects in the Mining Sector, the committee composes of stakeholders from various central-level ministries institutions in Tanzania, including the Ministry of Minerals, Ministry of Land and Human Settlements, and Ministry of Environment.

From the health sector, the Occupational Health and Safety Agency plays a key role in assessing, monitoring and regulating potential occupational health and safety risks of mining projects. However, the Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC) has no formal oversight or regulatory role in the Mining Sector, and does not form part of the committee that advises NEMC on public health impacts. This represents a key gap in the institutional framework for mitigating adverse health impacts for communities in mining regions. Furthermore, it outlines a lack of adequate accountability structures for ensuring that community-level impacts are regularly monitored and mining companies are held accountable for them.

## Policy Options for Strengthening the Inclusion of Health in the EIA - Recommendations

Interviews with officials from NEMC, the MoHCDGEC, the Vice President's Office (Division of Environment) and President's Office – Regional Administration and Local Government (PO-RALG) argued for the broader inclusion of health in the EIA process. Based on interviews with stakeholders from public and private sector, we outline four possible approaches to strengthen the inclusion of public health in Tanzania's licensing processes (the order does not present prioritization):

- Build Capacity within the Ministry of Health:**

To play a more active role in ensuring that EIAs mitigate health impacts of mining projects, the MoHCDGEC would need to build internal capacity. For instance, developing or directing internal systems and human resource capacity to oversee and take part in stages of the EIA and EA process, including screening of mining projects, evaluating potential health impacts (review), inspections of mining facilities, and health surveillance for surrounding communities during the implementation phase.



The MoHCDGEC would benefit from engaging in direct collaborations with NEMC, in order to develop efficient and robust institutional and cross-institutional processes that would increase its role in the EIA; for instance, the MoHCDGEC would need to be part of the Technical Review Committee that advises the NEMC before mining companies are issued environmental licenses.

- **Strengthen the consideration of health in the existing EIA Procedures:**

Amending EIA regulations to require new and upcoming mining projects to collect baseline population health data, allowing for more accurate assessment, monitoring and evaluation of health impacts before, during and after project implementation. A key challenge in implementing HIAs of large-scale mining companies currently in operation would be generating baseline data for health. The HIA first describes baseline health data of affected populations, then assesses potential impacts. In order to adequately assess, monitor and mitigate health impacts, data needs to be collected at baseline, prior to the operational phase of a mining project, so that any observed impacts can be strongly linked to the existence of the project.

- **Amend EIA legislation with HIA requirements:**

Amending both EIA and Mining Regulations to include provisions that mandate the implementation of full and independent HIA, particularly for projects likely to pose significant risk to worker or population health. The mainstreaming of HIA in impact assessment practice would allow the health sector to identify and regulate health-related impacts more directly, allocating resources and

setting up institutional capacities to enable these functions.

Project developers, including mining companies, should be mandated to seek a level of approval, permit or license from the MoHCDGEC (Department of Preventative Services) prior to initiating mining activities. Further, the MoHCDGEC should be tasked with administering HIAs for the Mining Sector, including overseeing approval procedures, monitoring procedures and inspection of mines and surrounding communities to address potential public health impacts.

- **Decentralize EIA Oversight and Monitoring:**

In Tanzania, local government authorities serve as a key initial entry point for the implementation of interventions, legislation, and regulations, including those for the Mining Sector. Currently, NEMC works closely with local government authorities, specifically District Health and Environmental departments, to oversee health matters at the district and community levels. District Health and Environmental Officers are primarily responsible for providing oversight on health (and environmental) issues, and can be useful in monitoring impacts during the implementation of mining projects.

To ensure more efficient oversight over mining operations, adopt a decentralized monitoring system that gives local government authorities a key and active role in monitoring and informing central authorities such as NEMC and the Ministry of Minerals about community-level impacts of mining activities. This would facilitate close monitoring of health impacts, allowing stakeholders to respond quickly and leverage the existing institutional local government infrastructure to work with communities and mining companies to address health and socioeconomic challenges.

## References

Demissie, Meaza Serihun. 2014. "The Natural Resource Curse in Sub-Saharan Africa: Transparency and International Initiatives." Paper 6: 96. <http://aquila.usm.edu/dissertations/6>.

Gbenga, Ajifowo Michael. "Acacia Resolves Water Pollution Issue in Latest Dispute with Tanzania's Government." Ventures Africa. <http://venturesafrica.com/acacia-resolves-water-pollution-issues-in-latest-dispute-with-tanzania-government/>.

International Finance Corporation. 2014. "Sustainable and Responsible Mining in Africa." International Finance Corporation. The World Bank Group. <http://www.ifc.org/wps/wcm/connect/dfaac38043fea19b8f90bf869243d457/>

Sustainable+Mining+in+Africa.pdf?MOD=AJPERES.

Tanzania, United Republic of. 2014. "Mining Sector EIA Guidelines." Report (october): 128.

The Mining Act 2010.

United Republic of Tanzania (URT), and Republic Of. 2009. "The Mineral Policy of Tanzania 2009."

United Republic of Tanzania. 2004. "The Environmental Management Act, 2004." (c).

United Republic of Tanzania. 2005. "The Environmental Management Act, 2004 (Act No. 20 of 2004), The EIA and Audit Regulations, 2005." Environmental Management Act 2004(20). [http://www.tic.co.tz/media/Environmental Audit](http://www.tic.co.tz/media/Environmental%20Audit)

Regulations 2005.pdf.

Viliani, Francesca et al. 2017. "Mining and Emerging Infectious Diseases: Results of the Infectious Disease Risk Assessment and Management (IDRAM) Initiative Pilot." *Extractive Industries and Society* 4(2): 251–59. <http://dx.doi.org/10.1016/j.exis.2016.08.009>.

Walwa, William John. 2016. "Large-Scale Mining and the Right to a Clean , Health and Safe Environment in Tanzania." 43(2): 97–123.

Winkler MS, Adongo PB, Binka F, Brugger F, Diagbouga S, Macete E, Munguambe K, Okumu F (2020). Health impact assessment for promoting sustainable development: the HIA4SD project. *Impact Assessment and Project Appraisal* 38: 225-232.