

Zambia's mineral wealth: a double-edged sword for prosperity and pollution.

by Mutinta Champita

Zambia, a country renowned for its abundant mineral resources, occupies a leading position as the largest copper producer in Africa and ranks second in the world, behind Chile. The importance of mining to Zambia's economic growth is undeniable, but it has a high environmental cost that has left its mark on the community.

Mining, the cornerstone of Zambia's economy, has played a central role in the country's transformation. The sector has generated employment opportunities, contributed to the country's GDP, and attracted foreign investment. However, beneath the surface, there is a harsh reality that cannot be ignored. The environmental consequences of mining have imposed substantial costs on both the environment and the Zambian people.

A glaring example of this environmental record is the lead and zinc mine, which cast a shadow over the town of Kabwe in Zambia's Central Province. Tragically, Kabwe is now infamous for being the most polluted place on Earth due to lead poisoning. The devastating consequences of this pollution are profound and, above all, affect the mental development of the city's population, especially its children (Carrington 2017).

Lead poisoning is a silent threat lurking everywhere in Kabwe, infiltrating every aspect of daily life. It permeates the water people drink, contaminates the food they eat, and alters the air they breathe. The consequences of this silent epidemic are heartbreaking, the most vulnerable, children, bearing the brunt of its impact. (Yamada, et al. 2020). The effects of lead poisoning on children are particularly alarming. Exposure to lead at a young age can lead to irreversible cognitive and developmental impairment. Children affected by lead poisoning often experience a range of health problems, including learning disabilities, reduced IQ and behavioral problems. The long-term consequences of this affliction extend far beyond the individual; They ripple through communities and stifle the potential of entire generations.

The pressing question hanging over Kabwe and other similarly affected areas is whether it is even possible to restore the environment given the scale of pollution. Cleaning up such a large contamination is a monumental challenge, requiring not only substantial financial resources, but also a global and sustained effort.

Efforts are being made to address this crisis. Various stakeholders, including government agencies, international organizations, and environmental activists, came together to explore solutions. However, the road ahead is fraught with pitfalls and there is no silver bullet. Long-term commitment, collaboration, and resources are essential if the damage is to be repaired. (Hako 2023).

Zambia's mining industry is at a crossroads, facing both immense potential for prosperity and the daunting challenges of environmental pollution. The Zambian government has set ambitious targets to increase mine production from 760,000 metric tons per year to more than 3 million metric tons in ten years. While this effort aims to attract investors and support the growth of the mining sector, it must be undertaken with a deep commitment to addressing the environmental costs associated with mining (Besa 2023).

As the country embarks on this quest for increased mining production, it is imperative that mechanisms are in place to ensure that mining companies internalize the external costs associated with their operations. Mining operations can impose a range of external costs on the community and the environment such as water and air pollution, land degradation, habitat destruction

First and foremost, the government must build capacity and the authority of its environmental agencies to monitor corporate behavior in the mining sector. Government can increase capacity by allocating additional financial resources to environmental agencies, allowing them to hire more staff, invest in training, and acquire advanced equipment and technology for monitoring and enforcement. Provide resources for specialized training to enhance their knowledge and expertise of environmental agency in areas such as environmental science, mining regulations, and enforcement techniques.

This improvement is essential to align mining activities with international pollution prevention best practices and standards. By holding mining companies accountable for their environmental

impact, Zambia can take an important step towards mitigating damage to its communities and natural resources. (Christin, Londi and Gurnard 2007) (Hillman 2009)

In addition, it is crucial to engage in comprehensive outreach programs within affected communities. These programs will empower residents to address environmental damage caused by mining companies. Lobbying, advocacy, and accountability efforts can serve as potent means to engage all stakeholders, including government authorities, international organizations, and the general public, in addressing important issues. These collective voices can advocate for change and demand that mining companies prioritize responsible environmental practices. (Pure Earth Blacksmith Institute Inc 2020)

In addition, mining companies themselves must take responsibility by implementing pollution prevention strategies as part of their corporate social responsibility initiatives. Beyond profit, these companies have a moral obligation to protect the environment and the communities that depend on it. By actively engaging in efforts to reduce pollution and minimize their environmental footprint, mining companies can contribute to the sustainable development of Zambia's mining sector. (Hillman 2009)

Zambia is on the brink of a new era in its mining industry. The government's commitment to increased production is commendable, but it must go hand in hand with a commitment to environmental stewardship. By strengthening environmental agencies, empowering communities and holding mining companies accountable, Zambia can chart a course for economically and environmentally sustainable prosperity. As the nation strives to maximize its wealth, it must also safeguard the well-being of its people and preserve the natural treasures that define this beautiful land.

In conclusion, Zambia's mineral wealth has undoubtedly contributed to economic growth and development. Yet it has also left a sobering legacy of environmental degradation, with the Kabwe lead poisoning crisis serving as a stark reminder of the sacrifices made in the name of progress. As Zambia grapples with this difficult dilemma, the world looks back with hope that the nation will find a way to balance economic prosperity with environmental responsibility, ensuring a better future for all its citizens.

References

- Besa, Esther Nyemba. 2023. Zambia's Key Reforms for the Actualization of the 3 Million Metric Tonnes of Copper in a Decade. Policy Brief, Lusaka: Policy Monitoring and Research Centre.
- Carrington, Damian. 2017. The Guardian. May 28. Accessed September 13, 2023. <https://www.theguardian.com/environment/2017/may/28/the-worlds-most-toxic-town-the-terrible-legacy-of-zambias-lead-mines>.
- Curristine, Teresa, Zsuzsanna Lonti, and Isabelle Journard. 2007. "Improving Public Sector Efficiency: Challenges and Opportunities." OECD Journal on Budgeting 7 (1): 1-41.
- Hako, Nasi. 2023. Esi Africa. March 10. Accessed September 13, 2023. <https://www.esi-africa.com/east-africa/zambia-works-to-clean-up-toxic-lead-mine-and-build-a-green-city/>.
- Hillman, Arye. 2009. Public Finance and Public Policy. Edinburgh: Cambridge University Press.
- Pure Earth Blacksmith Institute Inc. 2020. Pure Earth. Accessed September 16, 2023. <https://www.pureearth.org/project/kabwe-lead-mines/>.
- Yamada, Daichi, Masato Hiwatari, Peter Hangoma , Daiju Narita, Chrispin Mphuka, Bona Chitah, John Yabe, et al. 2020. "Assessing the population-wide exposure to lead pollution in Kabwe, Zambia: an econometric estimation based on survey data." Scientific Reports 1-11.