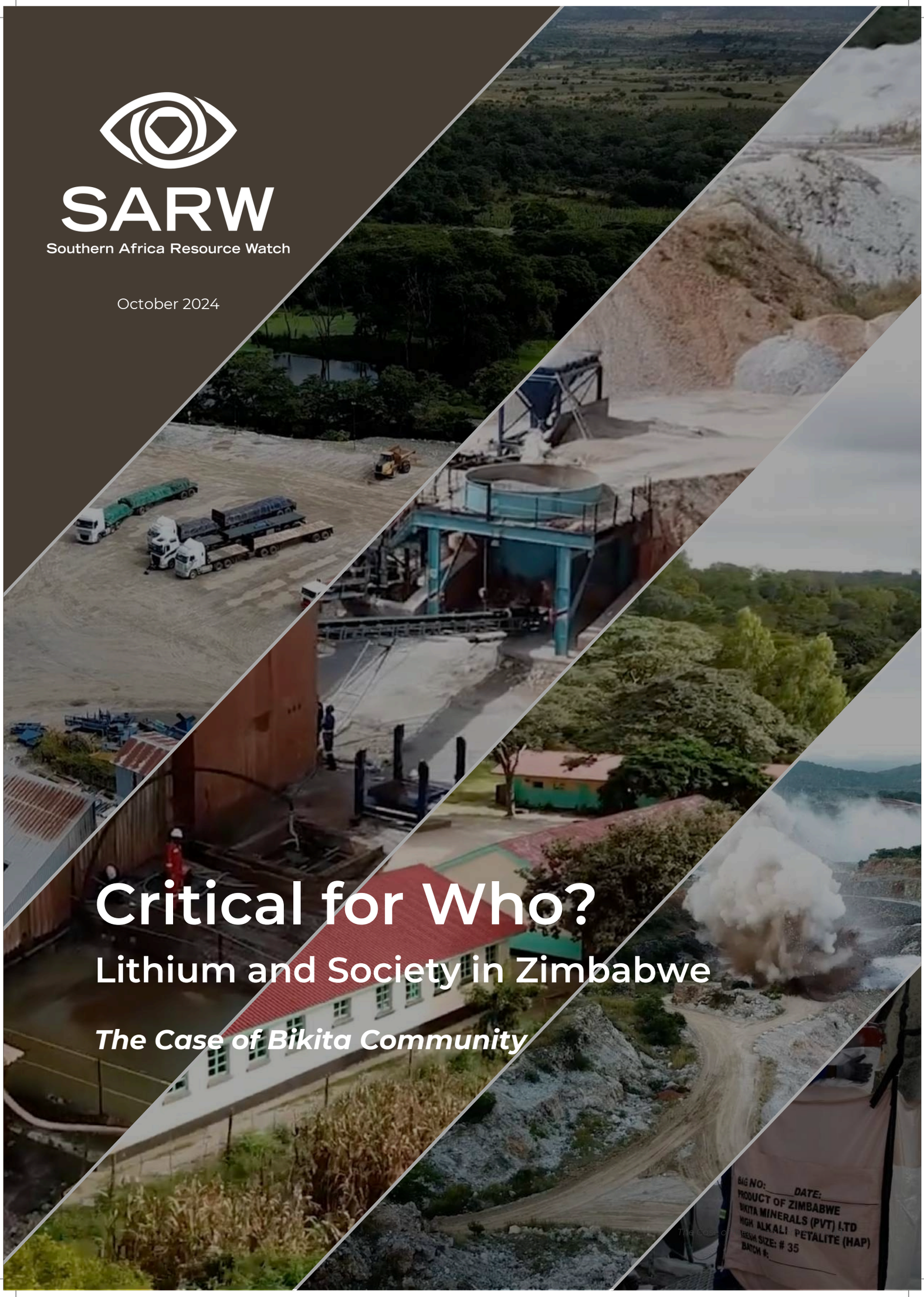
SARW

Southern Africa Resource Watch

October 2024




# Critical for Who?

## Lithium and Society in Zimbabwe

***The Case of Bikita Community***

# TABLE OF CONTENTS

# LIST OF TABLES

# LIST OF ACRONYMS

| | | |
|---|---|---|
| AFRODAD | - | African Forum and Network on Debt and Development |
| ASM | - | Artisanal and small-scale mining |
| BRDC | - | Bikita Rural District Council |
| CBO | - | Community-based organisation |
| CNRG | - | Centre for Natural Resource Governance |
| CRD | - | Centre for Research and Development |
| CSO | - | Civil society organisation |
| CSOT | - | Community Share Ownership Trust |
| CSR | - | Corporate social responsibility |
| DRR | - | Disaster risk reduction |
| EIA | - | Environmental impact assessment |
| EITI | - | Extractive Industries Transparency Initiative |
| ESG | - | Environmental, social, and governance |
| IEA | - | International Energy Agency |
| MMCZ | - | Mineral Marketing Corporation of Zimbabwe |
| MRTI | - | Mineral Revenue Transparency Initiative |
| RDC | - | Rural District Council |
| SADC | - | Southern African Development Community |
| SARW | - | Southern Africa Resource Watch |
| SGBV | - | Sexual and gender-based violence |
| SHE | - | Safety, health and environment |
| SI | - | Statutory instrument |
| SRHR | - | Sexual and reproductive health rights |
| USD | - | United States Dollar |
| ZELA | - | Zimbabwe Environmental Law Association |
| ZESA | - | Zimbabwe Electricity Supply Authority |
| ZIMCODD | - | Zimbabwe Coalition for Debt and Development |

# EXECUTIVE SUMMARY

**The Southern Africa Resource Watch (SARW) conducted a study to identify the policy, legislative, and institutional arrangements and related gaps associated with extracting green or critical resources, their value chains, and benefit-sharing in Zimbabwe.**

The study also aimed to explore the stakeholder and power structures, using critical theory, at both macro and micro levels related to critical resource governance in Zimbabwe.

The study examined the positive and negative contextual implications of transitioning to green energy through social, ecological, economic, and geopolitical lenses, focussing on the production relations associated with the lithium value chain in Zimbabwe.

The study used a mixed-method approach to investigate Zimbabwe's legislative and policy positions on resource nationalism, community resistance, and benefit-sharing arrangements. For data collection, a survey was conducted among selected households in the lithium mining areas of Bikita, using closed-ended questionnaires and Kobo-collect software. Key informant interviews were conducted with various actors and institutions to gather data on mining permit and licensing processes, resource volumes, and regulatory frameworks.

The research reached 130 respondents through the questionnaire. Most respondents (54 per cent) were women. Most of the respondents were between 18 and 59 years old.

The mining sector is significant in the Zimbabwean economy. However, the study found that it only employs 6.2 per cent of the local population in the lithium mining of Bikita, which is lower than expected. Zimbabwe is the fifth largest lithium producer globally, and the lithium sector has unlimited potential for further development. However, the political economy of critical minerals in Zimbabwe is complex and multifaceted. The country has significant deposits of minerals such as platinum and lithium, which are essential to its economy and have the potential to contribute significantly to its development, but there are concerns about managing these resources, including transparency, accountability, and equity issues.

Similar to the earlier colonial mining arrangements, women's inclusion in the lithium mining sector in Zimbabwe has been relegated to ancillary staff with little attention to controlling the means of production or mercantile dealings.

The government has broadened its investment sources within lithium mining to include less traditional partners in the green sector, such as China and Belarus. However, the investment patterns in the lithium sector mirror those in every other sector of the Zimbabwean economy, where local capital has not been afforded affirmative action for easier market entry in preference of foreign companies.

The study found that communities perceive mining to have impacted on economic, social, cultural, and environmental aspects. Regarding employment, 25.4 per cent do not think mining has created employment opportunities. The study also noted that the local chief conducts shortlisting to employ locals, but there are reservations over this approach.
Most respondents reported that they did not experience severe negative impacts of mining (such as displacement from their homes or destruction of crops), but the study revealed various

socio-cultural impacts such as cultural exchange, cultural tensions and cases of increased criminality, sex work, underage sex, school dropouts, and child abuse.

Regarding the impact of mining on corporate social responsibility (CSR), the study revealed that almost half of the community felt that the mining company did not invest in any visible CSR activities for them, although the results also indicated that 19.2 per cent believed that some CSR activities did happen. In light of the global critical resource scramble, Zimbabwe has found itself sandwiched between its "Look East" bias and fighting the neocolonial economic interests of the west.

The study investigated whether mining companies have successfully promoted social enterprises, and found that 40 per cent of the respondents believe that mining companies have not been able to encourage the establishment of social enterprises. Half of the respondents stated that the mining company has failed to establish any community recreation.

Regarding employment, most respondents (89.2 per cent) noted that no female member from their household was employed at the mine. In comparison, 75.4 percent reported that no male member was employed either. Only 10 per cent of the respondents reported female participation in any form of engagement with the mining authority. The younger generation desired the mine to reserve a specific quota in their recruitment efforts for local youth.

Over 38 per cent of the respondents reported gender-specific problems arising from the mine's establishment: 40.8 per cent of respondents reported cases of sexual and gender-based violence (SGBV) since the mine was established; 38.5 per cent noted discrepancies in the mine's treatment of men and women; and 28.5 per cent reported a lack of reporting arrangements for any issues they may have with the mining authorities. Although 26.9 per cent of respondents perceived the recruitment ratio balanced between male and female employees in the mining industry, 31.5 per cent of the surveyed population reported not being involved.

The study found that the environmental impact assessment (EIA) process had low participation, with only 14.6 per cent of the population participating in any EIA processes related to the mine. A total of 16.2 per cent of community members had participated in discussions related to the mining activities in their area.

According to the survey, 64.6 per cent of respondents reported severe consequences faced by their communities due to the impacts of climate change, and 60 per cent observed the initial signs of climate change at the beginning of the 21st century. Although most respondents (63.1 per cent) hold the pessimistic view that there is little they can do to tackle climate change, 70 per cent of respondents believe that society has a collective responsibility to take action and restore the climate, and 69.2 per cent strongly believe in the responsible behaviour of local people towards climate stewardship.

Most respondents (64.6 per cent) suggested that the extracted minerals should be used to deal with the impending threat of climate change, starting with their local community. A positive sign was that 60 per cent of respondents believe that agriculture is already adapting to climate change.

A significant 68.5 per cent of respondents were unaware of the critical role of lithium in electrifying the transportation sector to reduce carbon emissions. Moreover, 80.8 per cent of respondents were unaware of the destinations to which the lithium was being shipped, indicating a lack of transparency and accountability in the supply chain.

According to the survey, 69.2 per cent of respondents stated that workers consistently wear protective clothing, 73.9 per cent mentioned that workers are given off days, and 68.5 per cent reported that workers receive medical allowances and are provided with training in safety, health, and environment (SHE). However, 41.7 per cent of respondents stated that workers are not recruited based on merit, with corruption being one of the main reasons behind this issue, and 47.7 per cent do not believe the company uses affirmative action to recruit local people.

Only 50 per cent of respondents believe that employees can access recreational facilities, and only 67.6 per cent of respondents believe that employees have access to health services.

Only 26.2 per cent of respondents could confirm that mineworkers receive training in disaster risk reduction (DRR).

According to the survey, 75.3 per cent of the respondents believe that the local community has insufficient information about the investor in the area.

The survey showed that 69.2 per cent of the respondents had experienced increased local rentals due to the influx of mineworkers into their area. Furthermore, 74.6 per cent of the respondents believe that there is an increase in the number of sex workers in the area, which could be related to mining operations.

Over 60 per cent of the respondents noted increased environmental damage caused by mining activity, and 59.2 per cent of respondents do not believe mining has improved the local economy. The survey found that 83.9 per cent of respondents feel that corporate social responsibility (CSR) arrangements must be made known to everyone.

The survey concluded that 61.6 per cent of respondents think that the mine owners do not respect local culture and tradition.

Mining in Zimbabwe, and particularly the lithium sector, has tremendous potential for further growth and development. However, the country needs to address several challenges to ensure that the exploitation of these resources is transparent, accountable, and equitable. The study found concerns over managing these resources, including transparency, accountability, and equity issues. There were also concerns about the impact of lithium mining on communities, including employment opportunities, corporate social responsibility, and socio-cultural and environmental impacts.

The community faces climate change and its consequences, but they cannot explain how lithium is part of the solution to energy transition or how it can directly benefit their community.

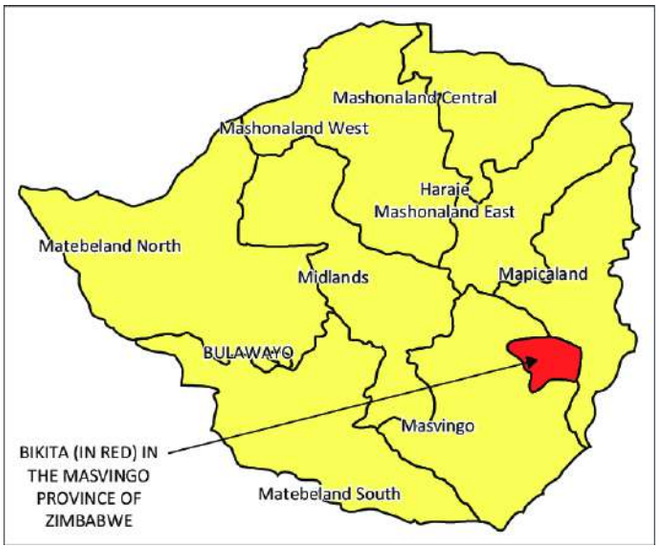
### RECOMMENDATIONS ARE MADE IN THE FOLLOWING AREAS:

- policy reforms at the national level;
- Community share ownership schemes;
- policies at the local Rural District Council level:
- corporate social responsibility;
- increase local employment;
- promote women's inclusion;
- ensure transparency and accountability;
- create an inclusive lithium policy;
- promote sustainable mining practices;
- address community concerns;
- increase participation in EIAs.

# INTRODUCTION

This report provides an overview of a research study conducted in the Bikita community of Zimbabwe, where lithium mining occurs. The study aimed to gain insights into the impact of socio-economic, environmental, and cultural rights on the community of Bikita. The report is a collection of the community's view of lithium mining and whether this mineral's increased attention and importance has brought any significant social, cultural, economic, and environmental changes to the community.

Bikita District is located in northeast Masvingo Province of Zimbabwe. It shares borders with Gutu, Zaka, Chipinge, Chiredzi, Buhera, and Mwenezi Districts. The district is approximately 80 kilometres (50 miles) east of Masvingo town. Nyika Growth Point serves as the administrative centre of Bikita District, while its former administrative centre was at Bikita Office, located 10 kilometres south of Nyika Growth Point, towards Jerera Growth Point in Zaka District.[1]




*Map of Zimbabwe Showing Bikita*[2]

The world's shift towards clean energy sources to reduce climate damage has led to a revival in the energy and critical minerals sector. The increasing investment in renewable energy has resulted in a surge in demand for resources such as lithium, cobalt, graphite, and copper, essential for the green economy and low-carbon technologies. This demand has triggered a new global resource rush as countries vie for control over the supply of raw materials, particularly minerals, for green energy. Along with the search for these critical resources, the urgency of the climate crisis has drawn attention to the uneven and unsustainable human use of the planet's biosphere, and the shared pool of resources.

Much like in the fossil fuel era, critical resource exploration and exploitation still directly contribute to ecological damage, biodiversity crises, displacement of populations, water pollution, and air pollution. However, there are significant conceptual gaps regarding the power balance in climate governance and energy control at both global and local scales. Moreover, there is a need to address the historical patterns of primitive accumulation and dispossession within the mining political economy. The concept of socio-ecological justice is incompatible with current

[1] https://en.wikipedia.org/wiki/Bikita_District
[2] Source: Nyahunda, Louis & Tirivangasi, Happy. (2019). Challenges faced by rural people in mitigating the effects of climate change in the Mazungunye communal lands, Zimbabwe. Jamba: Journal of Disaster Risk Studies. 11. 1-9. 10.4102/jamba.v11i1.596.

economic growth paradigms that rely on unsustainable extraction and exploitation practices, which contribute to the upset of planetary boundaries and limits. Therefore, it is crucial to urgently decolonise the underlying colonial-capitalist ideologies and practices. There is a risk of casualties if Zimbabwe does not invest in a meaningful transformation of the mining sector during the modern-day mineral rush.

If justice issues are considered at the design stage, a clean-energy-powered system should fundamentally differ from one fueled by traditional hydrocarbon and fossil fuel resources. Addressing the issues of climate breakdown, ecological destruction, and planetary boundaries is challenging because they are embedded within unsustainable exploitation and an unfettered economic growth system. This research aims to see whether the increased demand for lithium in Zimbabwe for the energy transition has addressed the need to be more just and confront the inherent challenges of natural resource extraction.

## 1.1. BACKGROUND TO CRITICAL RESOURCES EXTRACTION IN ZIMBABWE

Global demand for minerals for clean energy technologies is set to quadruple by 2050 in the Net Zero scenario, with annual revenues reaching US$400 billion according to the International Energy Agency.[3] Like all other resources in the extractive sector, critical mineral prices suffer unpredictable volatility in the global market, subjecting producer economies to the Dutch disease.[4] The tendency for the global north to dominate the global mineral markets and supply chains could delay energy transitions or perpetuate inequality and protracted energy poverty in the global green market. In the wake of intensified nationalism and a goings-out approach[5] in the resource race, Africa risks falling into the resource curse trap again. In other words, an energy transition not predicated on a transformed global economy will still create a marginalised Africa despite its vast natural resource endowments. It is, therefore, essential to ensure diverse, resilient and secure clean energy supply chains for critical minerals.

Economies in the Southern African Development Community (SADC), such as South Africa and Zimbabwe, are expanding their thermal energy plants. The transition towards green energy infrastructure, which includes solar photovoltaic plants, wind farms, lithium batteries and electric vehicles, requires more critical minerals to build than fossil-fuel-based infrastructure. As a result, nation-states are driven by the realist principle of international relations to pursue their best interests, which may include intensifying hydrocarbon prospection as they confront low carbon transition. For instance, an electric car requires six times more mineral inputs than a conventional car, and an offshore wind plant requires thirteen times more mineral resources than a gas-fired plant of similar size. Since 2010, the average amount of mineral resources needed for a new unit of power generation capacity has increased by 50 per cent as the share of renewables in new investments has risen. Therefore, it is necessary to conduct extensive policy analysis to adequately map the costs and benefits of the green transition, including the negative externalities that affect critical populations such as local communities, women, children, and youth.

Zimbabwe has had its extractive sector, including mining, primarily linked to its British colonial history. Chinese, Russian and Belarusian presence has grown in Zimbabwe in the last decade, with most investment in lithium, cobalt, gold, diamonds, iron and steel. The regulatory and governance arrangements for the mining sector are very centralised. Mining investors, including those in the green resources, have benefited from tax holidays and investment incentives facilitated by the state as the state looks forward to a US$12 billion mining economy

[3] https://www.iea.org/topics/critical-minerals
[4] An economic phenomenon where the rapid development of one sector of the economy (particularly natural resources) precipitates a decline in other sectors.
[5] An approach where countries like China and India are using their state owned enterprises to facilitate resource nationalism and invest in the global resource scramble.

by 2030. In Zimbabwe, the Mines and Minerals Act (Cap 20:25) is under review and has generated intense debates. In December 2022, Zimbabwe banned raw lithium ore exports to maximise the economic potential of artisanal mining and encourage investments in state-approved product lines. Then, in January 2023, another ban followed, covering all base mineral ores under Statutory Instrument number 5 (Cap 20:25) Base Minerals Export Control (Unbeneficiated Base Mineral Ores) Order, 2023. While this is seen as a step towards resource nationalism, typical of the earlier Indigenisation and Economic Empowerment Policy, citizens remain unaware of the ownership arrangements within the critical resources sector.

To ensure significant benefits for the local producer economies, there are efforts to onshore part of the energy supply chain, including critical minerals. With the move to electric vehicles and batteries to reduce greenhouse gas emissions and power regional economic growth, SADC should promote a more significant direct role in overseeing and managing environmental issues associated with mineral extraction and processing. This includes finalising and adopting the SADC mining vision and the Africa Green Strategy. Diversifying clean energy supply chains and prioritising producer economies and communities will facilitate reforms in royalty or tax regimes and legal reforms. Producer economies want to see their leaders and experts involved in projects that develop value-added industries within the green energy economy. Innovative investments could lead to technologies that reduce the mining sector's environmental impact and minimise risks if these new methods are pursued alongside community participation, international standards, corporate initiatives, and cooperation across governments. As a region, SADC must manage environmental and social risks and insulate the sector from corruption.

Crucial questions of equity arise from both impacts and shared responsibilities surrounding the geopolitics of planetary environmental change and injustice. The uneven outcomes of pursuing resource-based economic growth (including green resources) and biospheric exploitation have far-reaching consequences regarding who benefits, where, why and how (O'Neill et al., 2018; Steffen et al., 2015). The global north, joined by China, has (through industrialisation, high consumption and emissions) contributed significantly to the transgression of several planetary boundaries and tipping points. Climate and ecological breakdown results from extraction, overproduction, overconsumption and disposal that are very unequally and inequitably distributed around the world, mainly because of historical factors that produced colonialist-capitalist systems of unjust economic growth and geopolitical control (Gardiner, 2011; Sultana, 2022a).

## 1.2. DEFINING CRITICAL RESOURCES AND THEIR ROLE IN THE ENERGY TRANSITION

The types of mineral resources used for energy vary by technology. Lithium, nickel, cobalt, manganese and graphite are crucial to battery performance. Rare earth elements are essential for permanent magnets in wind turbines and electric vehicle motors. Electricity networks need considerable copper and aluminium, with copper being a cornerstone for all electricity-related technologies. As countries accelerate their efforts to reduce emissions, they must also ensure that energy systems remain resilient and secure. The rising importance of critical minerals in a decarbonising energy system requires energy policymakers to expand their horizons and consider new potential vulnerabilities.

Concerns about price volatility and security of supply do not disappear in an electrified, renewables-rich energy system. Given the legacy of human rights violation and conflict associated with mining, the energy transition presents an opportunity and a moral imperative to pursue new approaches to extraction. Mining communities have pressed to protect their cultural heritage when traditional shrines are situated downstream of tailings ponds. Community participation and benefit-sharing remain a sticking point in mining communities. Local stakeholders, including local governments, are crucial partners in shaping this sector. These stakeholders, from community members and organisations to local government structures, determine whether companies have the social license to operate. But they're too often seen as secondary stakeholders whose views, opinions, and concerns aren't always considered.

Exclusion from dialogue opens the door to problematic mining concessions, human rights violations (like child labour), and unfair production relations, and communities are left with unmet needs. Artisanal and small-scale mining (ASM) operators number about 45 million across 80 countries and produce a sizable portion of global gold, tin, and cobalt supplies. Because of their role in mineral production, the green transition cannot proceed without ASM operators. The ASM sector faces limited market opportunities, a lack of expertise, and discriminatory gender norms. To adhere to international standards and norms, certification can help ensure that big and small companies have addressed environmental, social, and governance (ESG) concerns. Certification processes should emphasise public audits and environmental impact assessments (EIAs) because these help communities weigh in on the impacts of mining activities. As Rammelt et al. (2023, p. 216) posit, the fair allocation and redistribution needed to advance discussions around just access 'must be understood in the context of the Great Inequality, which demonstrates that a relatively smaller part of the world population claims too much of the Earth's resources at the expense of others who cannot claim enough to satisfy basic needs'. For example, the dominant focus has primarily been on distributive justice in planetary justice scholarship, in which respect Gupta et al. (2023) and Rockström et al. (2023) recently posited that adjusting boundaries and limits to reduce harm and increase access needs to account for substantive and procedural justice for those who have been oppressed.

## 1.3. THE RATIONALE OF THE RESEARCH

The discussion about the limits and availability of planetary resources is a political issue that requires investigation at regional and local levels, and has local-global interconnections. For instance, concerns about extraction, trade, waste disposal and colonisation of the atmosphere are driven not by individual countries in a vacuum but are deeply tied up with unequal geopolitical and imperial power relations (Agarwal & Narain, 2012; Malm & Warlenius, 2019). The extractive sector, especially large-scale commercial mining in the SADC region, is primarily driven by global capital or a few indigenous political and economic elites. The lifestyles of the wealthy are often presented as ideal for everyone, promoting a hyper-consumerist, extractive, and wasteful culture that is seen as a symbol of progress while ignoring its harmful effects on society and the environment. This is affluence but unsustainable affluence (Wiedmann et al., 2020).

Since gaining independence, indigenous people have faced significant barriers in entering the mining sector, with laws, structures, and systems failing to facilitate their participation, except through the under-regulated, informal, and artisanal sectors. As the world moves towards cleaner, greener energy, coupled with nationalist development and the consolidation of authoritarianism, citizens are struggling to see how this transition will deliver a developmental pathway. Zimbabwe's critical minerals sector will be studied to understand the policy and practice of the transition to green energy, focusing on the role of local government and communities in the benefits-sharing arrangement, particularly for women and youth.

### 1.3.1. Research objectives

**Specifically, the research seeks to:**

1. identify the policy, legislative, and institutional arrangements and related gaps associated with green and critical resource extraction, value chains, and benefit-sharing in Zimbabwe;
2. explore the stakeholder and power structures (using critical theory) at macro and micro levels associated with critical resource governance in Zimbabwe;
3. examine the positive and negative contextual implications of the transition to green energy through social, ecological, economic, and geopolitical lenses;
4. investigate the production relations associated with the lithium value chain in Zimbabwe.

### 1.3.2. Research questions

**The research sought to answer the following research questions:**

- What are the country-specific policies, laws, institutions and gaps associated with green and critical resource extraction in Zimbabwe?
- To what extent are the current policies, laws and institutions structured as enablers or inhibitors for community and local-government-level benefit-sharing (including women, youth and other interest groups)?
- To what extent are benefit-sharing, production relations, and value chains gendered and associated with the green energy transition?
- Who are the key actors (players) in the green energy transition in Zimbabwe, and to what extent are they pushing for social justice in the green energy transition at local levels (addressing issues of corruption, rent-seeking, etc.)?
- How do global and local power asymmetries and geopolitics influence the distribution of green extractives in Zimbabwe?
- How can the human rights based approaches and gender analyses be invoked to inform green energy values and supply chain advocacy?
- How do the green energy transition mining regimes resonate with climate coloniality in terms of continuities and discontinuities in resource justice and markets, fair trade, ecological justice and labour relations (including child labour, sexual and gender-based violence, sexual reproductive and health rights, ASM, health and wellbeing) in Zimbabwe?
- What mechanisms and frameworks exist at the community level to allow for monitoring of local, regional and global standards of compliance in the extractive sector?
- How has the transition to green energy contributed to improved labour relations in the lithium sector in Zimbabwe?

# 2. METHODOLOGY AND APPROACH

The study adopted a mixed methods approach, integrating both qualitative and quantitative methods. It delved into secondary research to document Zimbabwe's legislative and policy stances on crucial matters such as resource nationalism, community resistance, and benefit-sharing arrangements. Furthermore, it aimed to showcase exemplary models of resource governance architecture.

As a part of primary data collection, the research conducted quantitative data collection by administering a questionnaire to sampled households within the lithium mining areas of Bikita. The sample was chosen based on the most recent district and household statistics where mining is being conducted. The household member selected to respond to the interview was determined using the kish selection grid for randomisation purposes to ensure a normally distributed sample regarding age, gender, and other such attributes. The data was gathered by using questionnaires with closed-ended questions. Trained enumerators carried out the survey using Kobol-collect software.


*Some of the participants of the focus group discussions.*

Key informant interviews were conducted with various actors and institutions from both state and non-state brackets to gather data on mining permit and licensing processes, extracted resource volumes, and the regulatory frameworks for extraction and benefit sharing. The interviews were conducted with local authorities, traditional leaders, and duty-bearers within the affected communities and environments. The chief, councilors and headmen were interviewed in their homes to minimise disruption to their routines and life patterns. Experts from civil society organisations, the mining industry, and local government representatives were also interviewed. The research engaged actors within the clean energy value chain to establish the government's policy position.

The research conducted six focus groups with community members in and around the mining area, including women, mixed groups, and youth. In addition, a panel of experts with experience and interests in the extractive sector was engaged. To ensure that sectoral interests were well covered and mixed, women and youth groups were engaged separately to allow adequate documentation of their grievances and concerns. For state agencies, civil society organisations (CSOs), community-based organisations (CBOs), and organisations working in the extractive industries, human rights, youth, and women, expert opinions were documented through an expert panel where experiences were shared.

A local team of assistants was engaged to conduct these discussions, and key informant interviews were used to ensure effective communication and cultural appropriateness. Before deployment, the interviewers were also trained in interviewing skills to ensure efficiency and ethical compliance. Before administering interviews and questionnaires, the research team piloted the interviews in a non-targeted village to familiarise themselves with the questions and the interviewing techniques. This pilot allowed the team to perfect the tools before the research roll-out.

## 2.1. DEMOGRAPHY OF THE RESPONDENTS

Bikita's estimated population of 199 680 for the year 2021 is based on the Census 2012 population of 162 356, and an estimated annual growth rate of 1.4 per cent. The information shows that in the whole district combined, men constitute 47 per cent of the total population, while women constitute the remaining 53 per cent.

The research reached 130 respondents through the questionnaire. Most respondents (54 per cent) were women. Most of the respondents were between 18 and 59 years old, which is consistent with the district's population profile.

| Sex | Age Groups | | Total (n) | |
|---|---|---|---|---|
| | 18-35 years | 36-59 years | 60+ years | |
| **Male** | 50.0% | 30.0% | 20.0% | 60 |
| **Female** | 38.6% | 51.4% | 10.0% | 70 |

*Figure 1: Respondent Demographics*

7.7 per cent of the respondents were persons with disabilities, of whom 40 per cent (4 respondents) were persons with disabilities arising from past conflict or violence. Regarding religious affiliation, most respondents (9 in 10) were Christians, and in terms of marital status, the majority (59.2 per cent) were married.

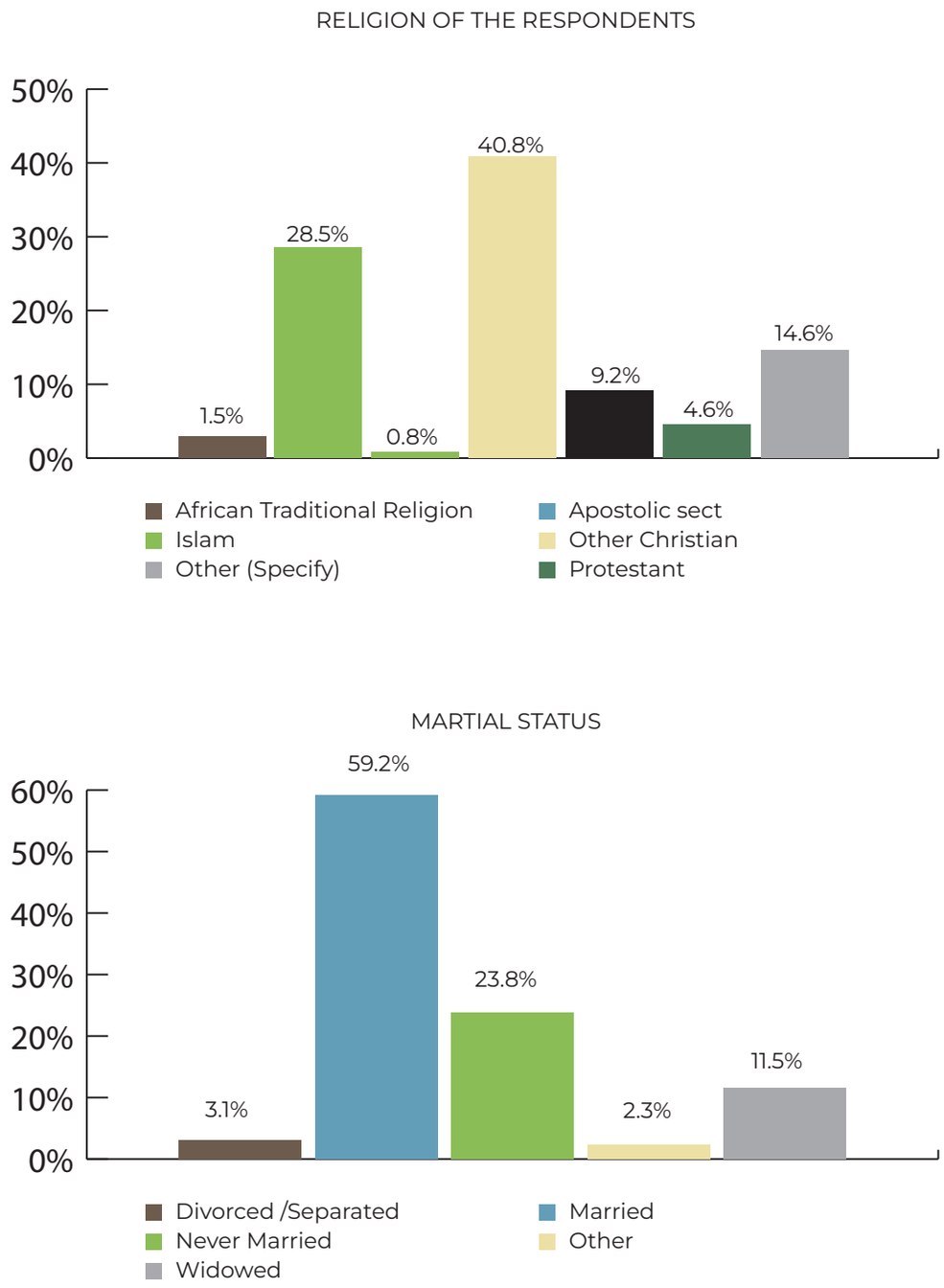



*Figure 1: Respondent Demographics*

The survey results indicated that when it comes to employment, a significant proportion of respondents (31.5 per cent) were either unemployed or actively looking for work. Meanwhile, 30.8 per cent of the respondents were self-employed, indicating a potential trend towards entrepreneurship. In contrast, only a small percentage (13.8 per cent) of respondents were in paid employment.

During the key informant interviews and focus group discussions (FGDs), it was revealed that the locals are facing significant challenges in securing employment opportunities despite a mining company being in their area. This is either a result of a lack of job opportunities or a mismatch between the skills of the local population and the needs of the mining industry.

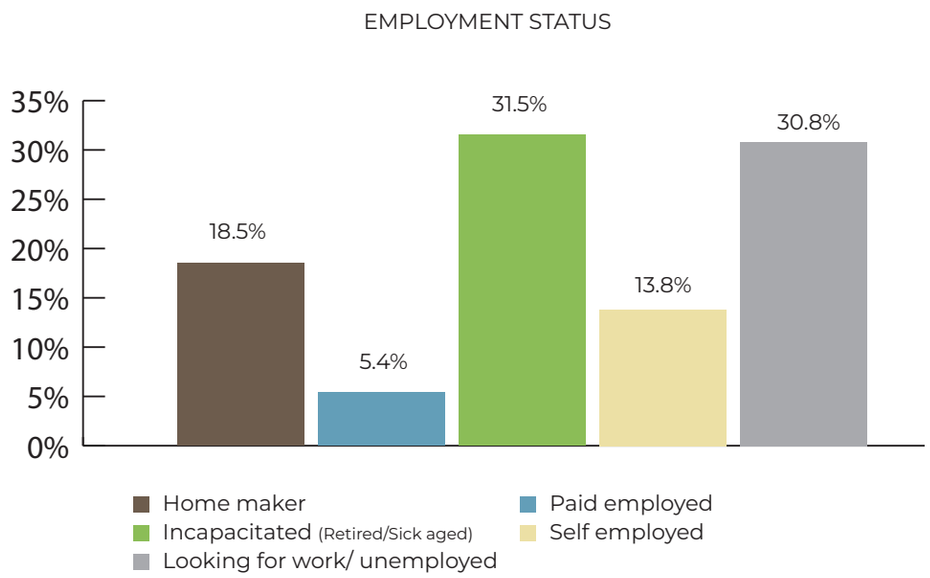



*Figure 2 Employment Stats of Respondents*

Of the employed population (in all sectors), 20 per cent are men, whereas only 8.6 per cent are women. This disparity points towards a more significant problem in the mining sector: women are not given equal opportunities to participate in the workforce.

| **Sex** | Home maker | Incapacitated (Retired / Sick aged) | Looking for work / unemployed | Paid employee | Self employed | Total (n) |
|---|---|---|---|---|---|---|
| **Male** | 1.7% | 10.0% | 35.0% | 20.0% | 33.3% | 60 |
| **Female** | 32.9% | 1.4% | 28.6% | 8.6% | 28.6% | 70 |

*Table 2: Employment status by sex*

Most respondents (40 per cent) said they were employed in agriculture, and 25.4 per cent were not in any specific sector. According to the study, the mining sector, a significant economic sector in the community, employs only 6.2 per cent of the local population, which is lower than expected. The other sectors of employment are detailed in the figure below:

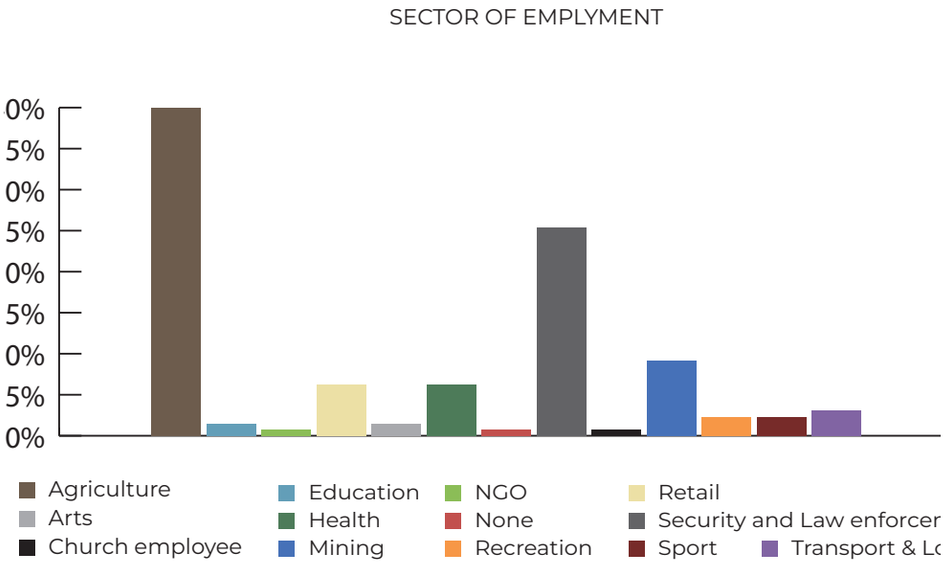



*Figure 3: Sector of Employment for Respondents*

Most respondents (98.5 per cent) had Shona as their mother tongue, while 1.5 per cent were Ndebele. Most survey respondents (69.2 per cent) had secondary education as their highest level, with 13.8 per cent having only primary and 12.3 percent also having tertiary education. The same trend was realised for gender, save for the higher percentage of tertiary education among males, as depicted in Table 3 below.

| | None | Primary | Secondary | Tertiary | Total |
|---|---|---|---|---|---|
| **Male** | 5.0% | 13.3% | 66.7% | 15.0% | 60 |
| **Female** | 4.3% | 14.3% | 71.4% | 10.0% | 70 |
| **Total** | 4.6% | 13.8% | 69.2% | 12.3% | 130 |

*Table 3 illustrates the advances in education that have been attained across genders.*

## 3.1. THE GEOPOLITICAL DIMENSIONS OF CRITICAL MINERALS

To contend with worldwide changes, it is imperative to think about scale (whether global, regional or local) and the different geopolitical and social structures and actors driving the breaching of ecological and biospheric balances.

Capitalist elites manipulate the rationalities of overproduction while overconsuming and disproportionately intensifying extraction, commodification and usage of various resources, thereby threatening planetary systems and justice (Fanning et al., 2020). Through media, advertising, influencer culture and control over the means of production, they not only exacerbate inequities but also perpetuate destructive growth models and logics of overproduction, overconsumption, disposal (wastage) and disregard that cross boundaries and borders (D'Souza, 2015; Sturman et al., 2017). The complexities of the extractive sector, coupled with the contested colonial histories of mining in the SADC region, require extensive primary and secondary data gathering for detailed comprehension.

On the one hand, this underscores the necessity of degrowth in rich countries to facilitate growth in historically impoverished countries so that well-being is enhanced everywhere without exploitative and inequitable plunder (Kallis et al., 2020). On the other hand, quantifying the unequal ecological exchange demonstrates that most countries of the global north have far exceeded national emissions and will continue to overshoot, given current trajectories. This historical national responsibility means liability for damages to poorer countries amounting to trillions of dollars (Fanning & Hickel, 2023). The externalisation of the socio-ecological costs of production, consumption, and waste (emissions) to marginalised communities in the global south is a process in which capital, state, and geopolitical relations are thoroughly entangled. In the context of the invigorated climate action and green energy thrusts, critical resource extraction must be questioned for the claims made about 'clean energy' if this is premised on the disenfranchisement of the global south and its resource-rich communities. Global north countries contribute directly to ecological harms, biodiversity crises, water pollution, air pollution and climate breakdown that they rarely experience firsthand (Brand & Wissen, 2021), but which undermine the well-being and safety of the majority of communities everywhere. This research proposes a detailed review of the framings around clean energy and how green energy supply chains have been transformed in the not-so-distant past to put a related resource scramble on the rails in the global south, and particularly in Africa.

In light of the global critical resource scramble, Zimbabwe has found itself sandwiched between its 'Look East' bias and fighting the neocolonial economic interests of the west. This has led to a duplicity in policy response, with the government claiming to re-engage with the west and increasing the Chinese footprint in the hydrocarbon (fossil fuel) and clean energy sectors. Effectively, the country and the region have extended the Chinese capital network and fenced the region off from western competitor investors.

## 3.2. LEGISLATION, POLICY AND STRATEGY ON CRITICAL MINERALS IN ZIMBABWE

Zimbabwe is the fifth largest lithium producer globally. There is unlimited potential for further development of the lithium sector. The government of Zimbabwe has designated lithium as a key element in its US$12 billion dollar mining industry by 2023. To that effect, the government has lined up a series of measures to support this target. The government has since given a moratorium (through Statutory Instrument 5 of 2023) banning the exportation of raw lithium.

There are efforts to further expand this into a lithium policy with several other measures.

Alongside the thrust towards value addition, the government is also linking the lithium rush to the devolution agenda to allow resources to provide employment and development dividends to the communities where resources are extracted. With the Mines and Minerals Bill bogged down by continued debate in parliament after the president returned it for further debate, lithium may become a good vehicle to advance the re-engagement agenda with the developed economies.

The government has responded differently to different lithium deposits. In Bikita, the government created the Marozva Community Share Ownership Trust (CSOT) without the awareness and sensitisation of community members. The Bikita Rural District Council RDC was also not part of the CSOT arrangement. There are claims that the CSOT was to get 5 per cent of the annual revenues from Bikita Minerals. In some areas where lithium was discovered, like Mberengwa, the state, through the Ministry of Mines, deceived people into free lithium extraction and selling to Sandawana Mine, and later came with the backing of riot police to forcibly take the villager's hard-earned lithium stocks without payment. The lithium claim was later granted to the Zimbabwe National Army. In Shamva, artisanal miners disposed of their lithium ore at deplorably low prices after the government banned small-scale resource selling. The extractive sector in Zimbabwe has experienced similar state-facilitated takeover in the early years of the Chiadzwa diamonds mining. While other sectors have generally allowed for artisanal miners' involvement, the government, through unwritten policy, has pushed artisanal miners away from the lithium sector.

## 3.3. HISTORICAL CONTEXT OF LITHIUM MINING IN BIKITA

The research established that mining at the Bikita Minerals Mine started in 1953.[6] One key informant born in the 1960s claimed that the Bikita Minerals was already in operation when he was a young boy. The mine was opened in a section of George Nolan's farm called Majoberg Gold. There have been multiple changes in ownership over time, and the white owners reneged on accountability. Over the years, the mine owners have been under-declaring under the pretext that the ore was inadequate.

Bikita mineral started just as a lithium mine. The Germans were the ones who began exporting the mineral. Today, it is understood that the lithium at Bikita comes as a group of minerals (petalite, tantalite and spodumene). An investment of US$300 million is understood to have been injected by Sinomine. The Sinomine investment is estimated to be more than ten times the German production. Bikita will produce 300 000 metric tons of spodumene concentrate, which is further processed abroad to produce lithium minerals used in the manufacture of batteries. The mine will also see its annual petalite output rise to 480 000 metric tons from about 50 000 metric tons previously. Petalite is used in the ceramics and glass industries.[7] The Chinese generally are less bureaucratic, and their operations are seen as more efficient. Today, the company has a staff complement of approximately 1500 people; the most significant proportion are locals. In 2022, the government announced a moratorium banning the exportation of raw lithium. The Bikita Mine has, therefore, planned to establish a lithium battery beneficiation plant.

Through its Hong Kong-listed unit, Sinomine is buying 100 per cent of African Metals Management Services and German investor Wilfried Pabst's Southern African Metals and

[6] Zimbabwe Environmental Law Association and the Africa Institute for Environmental Law (2023), Implications of Lithium Mining Rush in Zimbabwe, Analysis of Legal Developments.
[7] https://www.reuters.com/markets/commodities/sinomine-completes-300-mln-zimbabwe-lithium-projects-2023-07-10/

Minerals, the Mauritius-registered companies that hold a combined 74 per cent in Bikita Minerals. The US$180 million transaction values Bikita at around US$243 million. The Sinomine board announced getting a line of credit from the Shanghai Pudong Development Bank for Bikita. The credit line, the equivalent of US$86.5 million, is in line with the company's development strategy, according to the Masvingo Mirror of May 2023.

Indigenous minority shareholders Dzikamai Mavhaire (who sold 328 000 shares at 16 per cent) and Nehemiah Mutendi (who held 107 625 shares at 5.25 per cent) received US$39 million and 12.7 million respectively, from the estimated US$243 million Bikita Minerals value.

Sinomine plans to run a 110km 132kVA powerline to feed the plant. The line will be available for use by ZESA Holdings. The Sinomine investment is expected to realise an annual foreign exchange income of US$300 million, which means that the government will receive more tax for utility use. Sinomine has been exploring lithium in Zimbabwe since 2014. In 2018, Sinomine bought a 10 per cent stake in Prospect Resources and agreed to buy up to 390 000 tonnes of spodumene concentrate and over one million tonnes of petalite over seven years. That arrangement was cancelled to make way for the acquisition of Prospect's Arcadia project by Huayou Cobalt.

Before the acquisition, Sinomine was exploring whether spodumene resources were viable. After exploration, Sinomine set up a US$150 million plant to process spodumene.

Sinomine now runs two lithium processing plants: a gravity separation plant (petalite) with an annual capacity of two million tons of petalite concentrate, and a floatation plant (spodumene) with an annual capacity of two million tons of spodumene concentrate. According to Sinomine's general manager, the expected revenue is US$500 million in 2023, US$600 million in 2024, and increasing to US$800 million.

## 3.4. POLITICAL ECONOMY OF CRITICAL MINERALS IN ZIMBABWE

The political economy of critical minerals in Zimbabwe is complex and multifaceted. The country has significant deposits of minerals such as platinum and lithium. These minerals are essential to the country's economy and have the potential to contribute significantly to its development. However, there have been concerns about managing these resources, including transparency, accountability, and equity issues in their exploitation. The government has tried to address these concerns through various policy and legislative measures to promote responsible and sustainable mining practices. However, challenges remain, including the need to balance economic development with environmental and social considerations, and to ensure that the benefits of mineral exploitation are shared equitably among all Zimbabweans.

Just as in the earlier colonial mining arrangements, the inclusion of women in the mining sector has been relegated to ancillary staff with little possibility of controlling the means of production or mercantile dealings. Women usually participate in menial jobs such as food provision, laundry, office cleaning, etc. The green energy transition mining regimes resonate with climate coloniality in terms of continuities, such as colonial dormitory housing for the workers, zero collective bargaining negotiation for working conditions and earnings, and discontinuities in resource justice, such as shared ownership arrangements between mining companies and communities. Chinese investors, coming from the command economic models, generally struggle with unionised labour. Like colonial mining experiences, lithium flows have moved from the developing enclave economies to the development metropoles (in this case China). Green energy value and supply chains therefore reproduce skewed production relations that were earlier advanced by multinationals and are now pushed by Chinese state capital and enterprises. The appetite for ecological restoration by the so-called investor is minimal, contradicting the moral behind energy justice, and generating more carbon and climate inequality.

## 3.5. PATTERNS OF INVESTMENT IN THE MINING AND GREEN ENERGY SECTORS

The government has broadened its investment sources in the green sector to include less traditional partners, such as China and Belarus. At Bikita Minerals, not all tasks are centralised. The company has subcontracted several Zimbabwean companies to do the blasting and skirting by Chitombo, and transportation is done by Hoscheni, Chinhari, and Kio Blasting (which also does blasting). According to Masvingo Mirror of May 20, 2023, Chinese companies are leading the global charge for lithium resources. Since 2018, Chinese companies have acquired over US$6 billion worth of lithium mining projects globally (including those in Zimbabwe). By October 2021, Chinese firms had bought 6.4 million tonnes of lithium resources. This almost matched the 6.8 million tonnes bought by all other companies in 2020. In Zimbabwe, deals worth US$700 million have been recorded since November 2020 alone. Most buyers are Chinese and United Kingdom companies. The Table below illustrates the patterns of investments in Zimbabwe's lithium sector.

| Company | Location | Investment Estimate (US$ million) | Short Notes |
|---|---|---|---|
| Arcadia Lithium Mine | Harare | 422 | Owned by Chinese company Zhejiang Huayou Cobalt |
| Sabi Star Lithium | Buhera | 77 | Owned by Chinese company Chengxin Lithium Group |
| Zulu Lithium Project | Fort Rixon | 34.6 | Premier African Miners and Government of Zimbabwe |
| Step Aside Lithium Project | Harare | NK | Owned by Australian Prospect Resources |
| Mirrorplex Lithium Project | Shamva | NK | Owned by six Sigma and Mirrorplex |
| Kamativi Lithium Project | Kamativi | NK | Owned by Zimbabwe's Lithium Company and Zimbabwe Mining Development Cooperation |
| Mutoko Lithium Pvt Ltd | Mutoko | NK | Joint venture company setting up Lithium processing in Mutoko |

*(from the ZELA Report February 2023), NK means 'Not known.*

The investment patterns in the lithium sector mirror development in every other sector of the Zimbabwean economy, where local capital has not been afforded affirmative action for easier market entry in preference to foreign companies. The involvement of political actors in mining deals is understood to be the basis of increased opacity in the mining sector in general and the lithium sector specifically.

## 3.6. ECONOMIC, SOCIAL, CULTURAL, AND ENVIRONMENTAL CHANGES BROUGHT BY MINING

The study found that communities perceive mining to have impacted economic, social, cultural and environmental aspects. Table 5 below highlights a measure of the benefits that the community has witnessed after the establishment of the mine.

| | This did not happen | This happened, and affected a few households (1 to 10) | This happened, and affected several households (more than 10) | Dk/NR |
|---|---|---|---|---|
| Mining has created employment | 25.4% | 34.6% | 32.3% | 7.7% |
| Mining came with CSR | 48.5% | 19.2% | 11.5% | 20.8% |
| Mining created many social enterprises | 40.0% | 22.3% | 21.5% | 16.2% |
| Mining created community recreation | 50.0% | 19.2% | 20.0% | 10.8% |
| Mining came with cultural disruption | 36.9% | 18.5% | 30.8% | 13.8% |

*Table 5: Benefits experienced by the community after the establishment of the mine*

**Mining , employment and community livelihoods**

Regarding employment, 34.6 per cent of the community believes that mining has created job opportunities, affecting a few households. Another 32.3 per cent believe that mining has created employment and affected several households, and 25.4 per cent do not think mining has created employment opportunities. Information from focus droup discussions indicates that these jobs are primarily for unskilled and low-paying jobs.

The study noted that the local chief conducts shortlisting to employ locals. There are reservations over this approach as not all village heads and headmen contribute to this process. It is also alleged that people from the chief's church are the ones who usually get the opportunities. The study noted from key informants that the locals constitute close to 80 per cent of the labour force, although they generally occupy menial positions. The recruitment approach through the chief is compromised because there are no consultations with the other community development leaders. Local councilors have also planned to meet mine management to request the equitable distribution of mining jobs. The councilors are the ones on the ground who understand community dynamics, but they are excluded when decisions on benefit sharing are made.

As per the findings of a youth focus group discussion, it came to light that many young people struggle to find employment despite completing their education and training. Many of these individuals are facing a catch-22 situation where they need experience to secure a job but cannot get a job to gain experience. The youth expressed disappointment and disillusionment with their region's lack of job opportunities, despite its abundant lithium resources. They feel that residents of such a resource-rich area have a right to access job opportunities that match their skills and qualifications. However, the harsh reality is that the lack of employment opportunities leaves many young people feeling hopeless and uncertain about their future.

Women mentioned that job opportunities are only secured through nepotism. Those who are recruited are allegedly churchmates with the chief. The women also highlighted that corruption is too high and getting anything without connections inside is challenging. One of the women shared her experience, saying, "I worked for Bikita Minerals for 11 years. I submitted my resume hoping to get something, but I got tired. Even my son applied, but he didn't get anything."

Mining has provided job opportunities for the local people and given them access to a product called vim[8], sold to travelers passing through the mining community. The local chief requests the mining company to bring vim for the villagers. When the vim is delivered, people scramble to get their hands on it. It is known as kuvhovha, because the supplies do not meet the demand.

### 3.6.1. Vim: The cost of green transition to Bikita's alternative economy

With increased investment into the mining sector, particularly lithium, and an anticipated revenue boom, mining is likely to remain at the centre of Zimbabwe's economic recovery. But because communities are peripheral to economic decision-making, some communities essentially live on mining by-products rather than the mining itself. The story of Bikita Minerals, now Sinomine, is a case of substantial community resilience and transformation.

Over decades, able-bodied women and men who have survived without regular and formal employment have existed on the lithium quarry dust. The previous German mine owners made available 100 tonnes of quarry dust per week. Those with trucks and carts could also collect the dust from the quarry. This dust was then packaged and resold to urban areas around Zimbabwe as a scouring powder for household dishes. Vending was also rife along the roadside as travellers always stopped to buy the product.

The quarry dust, hereafter referred to as vim, gained popularity at Bikita Minerals as local traders sold this product to travellers on the Mutare-Masvingo road. Bikita became a wholesale centre for travellers who placed orders and resold to bigger urban settlements around the country.

But the vim trade came with its challenges. Vim dropping out of mine trucks attracted serious scrambles among the vendors. This process, which is locally termed kuvhovha (shovelling into individual stockpiles), exposed the vendors to respiratory challenges as they took in many dust particles due to a lack of protective clothing. Physical wrangles also resulted in localised conflicts, with some traders embarking on fist fights. Elderly women would end up with less of the product compared to younger, more powerful and energetic vendors. Community members recounted their experiences of kuvhovha and how many of them are now having serious back problems arising from the heavy loads of vim and the intensity of the work involved.

*Women packing some of the "Vim" for resale along the Mutare-Masvingo Highway in Bikita*

With the coming in of Sinomine in 2018, the new investor strategically decided to keep all the products and by-products of the mining, including the lithium dust which is also used in ceramic products. The quarry dust, which used to be given to communities for free, was no longer available. The volume of vim shared with communities was significantly cut and this had serious implications on community livelihoods and incomes. Stories from the vendors indicated that the frequency of vim loads have dropped and the income levels have fallen drastically. Those who

[8] a scouring powder generated from the mining dust.

remain in the trade are now being contracted by one vendor who orders the vim from a mine in Gutu and pays US$200 to bring a truck per week. The vendor has contracted a group of women who now work for him.

Whereas vendors used to get a minimum of US$200 or more monthly, some have been forced out of the trade. Vendors used vim proceeds to participate in internal savings and lending schemes, and would use their income to build houses, send children to school and refurbish their homes. Today, most vendors are grappling with a challenging economic environment that offers little or no livelihood options. Several women have been forced into sex work, lured by the incomes of mineworkers. The experience in Bikita shows how investors can make communities worse off.

Vim had an empowering impact on communities and its withdrawal has plunged households into more deprivation and vulnerability. SARW hopes to undertake comprehensive research on the implication of vim on Bikita's local economy.

### 3.6.2. Corporate social responsibilities

On the impact of mining on corporate social responsibility (CSR), the study revealed that almost half (48.5 per cent) of the community felt that the mining company did not invest in any visible CSR activities. The survey results indicated that 19.2 per cent of the community members believed some CSR activities did happen but that only a few houses benefited from them. Only 11.5 per cent of the community reported that CSR activities did occur, and several households benefited from them. During the engagements with the community through focus group discussions, it was highlighted that the community had high expectations for the company to invest in some CSR activities that would benefit them and help improve their living conditions.

A Bikita Rural District Council representative shared that their council receives much less royalties from mining companies than other districts with mineral resource extraction. Typically, other councils use the benefits from mining to pursue development projects and to pay salaries for their employees. Due to little knowledge regarding the mineral profile of Bikita Minerals, there were claims that the mine was under-declaring its income from mining, which means that the local authority was also shortchanged. The compound ore is called petalite, and the communities are unaware of its mineral composition. The council, therefore, would like to develop a mechanism to audit the resources in their jurisdiction to track their royalties adequately.

Because communities don't feel included in the council's benefit-sharing arrangements, respondents thought they were motivated to loot and smuggle. Despite these grievances, corporate social responsibility was seen as satisfactory by local authorities, with the following key activities being supported:

- grading of roads
- fuel for borehole drilling at Nyika Growth point
- fuel for cholera mitigation
- local contracting of vehicles when the company is required to transport goods.

A contrary view was shared by one former councilor in the mining area. According to him, not many benefits were obtained during the German and Chinese ownership of the mine. "We expected the custodians of the lands to benefit more through clinics, schools, and roads, but all we have seen is pollution, a lot of waste, and cracks on the walls of our houses." The community, besides having the mining company for years, still has no access to clinics and schools. According to a former council chair, in 2013, the construction of the Shumbaimwe clinic was proposed as a plough-back into the community. The community contributed the bricks. Although the council was already working on the clinic, the mine assisted and wanted to claim that the clinic was their project. Through the Constituency Development Fund, the western wing of the clinic was started. The German owners then helped

until the clinic was completed. At Fashu Secondary School, the mine also established a science laboratory. However, Sinomine has not contributed much in terms of community development.

**Mining and Social Enterprises**

The development of social enterprises plays a vital role in promoting the well-being of communities impacted by mining activities in their localities. By establishing such enterprises, mining companies can help create employment opportunities, stimulate economic growth, and enhance residents' overall quality of life. Through these initiatives, communities can derive tangible benefits from mining operations, which can help to foster a positive and sustainable relationship between the mining industry and local populations. The study investigated whether the mining company has successfully promoted social enterprises. Many of the respondents (40 per cent) believe that the mining companies have not been able to encourage the establishment of social enterprises; 22.3 per cent of the respondents indicated that some enterprises were established but only a few households benefited, while 21.5 per cent felt that several households were helped.

According to some key informants, Chinese investors are more effective at investing in social enterprises that support local businesses, particularly those that supply hardware. This represents a significant improvement over the previous operators who refused to allow local service providers to offer supplies to the mining company.

**Mining and community recreation**

According to the study, a significant proportion of the respondents (50 per cent) stated that the mining company had failed to establish any community recreation facilities. In mining communities, community recreation is crucial as it allows the local people to engage in leisure activities and entertainment. This is particularly important since mining activities often occur in remote areas with limited access to entertainment facilities, making community recreation a welcome relief for the residents.

### 3.6.3. Development contributions after the Sinomine takeover

The mining company made several development contributions after the Sinomine takeover. These included donating quarry stones to schools and clinics upon request until 2022, when the Chinese took over the mine. They also gave vim to the Marozva community and contributed to the Shumbaimwe clinic, initiated by Bikita RDC and Chief Marozva before the Chinese takeover.

In addition, the company supported the construction of roads surrounding the mine in 2023 and the Domboshava piped water scheme. They also established the Bikita Community Share Ownership Trust, which included painting schools and constructing one classroom block per constituency.

However, the Bikita RDC did not benefit adequately from Bikita Minerals, as the company did not pay royalties or work closely with district authorities. It seems that they corrupted top leadership from relevant ministries.

### 3.6.4. Challenges experienced by the community due to the mine.

According to the study, lithium mining in Bikita has resulted in some challenges for the local community, but not much in the way of displacement and land losses. Most respondents reported that they did not experience severe impacts such as destruction or displacement from their homes (63.8 per cent), destruction of crops (74.6 per cent), loss of farmland (63.1 per

cent), loss of grazing land (57.7 per cent), loss of burial sites (70 per cent), loss of firewood (53.1 per cent), challenges in accessing routes (53.1 per cent), loss of access to school (63.1 per cent), lost access to the health centre (73.1 per cent), or polluted water for domestic use (58.5 per cent).

During further investigation into why only a small number of community members had reported on the impacts of mining on land ownership and forced relocations, it was discovered that the long-term operation of the mines had resulted in fewer people being affected by these issues, which are typically associated with the establishment of mines. Historical land ownership also plays a role, as the mining operations are carried out on land that has been privately owned since the colonial era. A few community members reported that they had lost some of their farmland when the company constructed a road that passed through their fields.

Further engagement with key informants on the issue of the road construction indicated that the road that used to pass through the mine to Rusununguko had been blocked. The road that has been established has been put in to ensure that locals do not access the mining area and have, by default, made distances across the mine very long and costly. The Berdmore-Rusununguko road was carved through people's fields without community engagement. Extension of the claims has also resulted in communities losing their grazing land, and animals may be trapped in ponds and mining excavations. The area is in need of water points. There are few boreholes to cover the needs of the local households in the area. Although some families that lost their farming land were compensated, the compensation was inadequate; it was reported that each got US$1200. The community's complaints have not been considered because they are unaware of systems available to air their grievances.

Most of the respondents noted two significant challenges caused by mining operations. Firstly, 41.6 per cent of the respondents reported that the air quality in the region has significantly worsened due to the mining activities. Secondly, 79.2 per cent of the respondents mentioned that noise pollution caused by mining operations has become a significant concern. These findings indicate that the local community is experiencing severe environmental consequences due to lithium mining.

| | This did not happen | This happened, and affected a few households (1 to 10) | This happened, and affected several households (more than 10) | Dk/NR |
|---|---|---|---|---|
| Destruction of or displacement from home | 63.8% | 13.1% | 6.9% | 16.2% |
| Destruction of crops | 74.6% | 6.2% | 8.5% | 10.8% |
| Loss of farmland | 63.1% | 7.7% | 15.4% | 13.8% |
| Loss of grazing land | 57.7% | 10.0% | 20.8% | 11.5% |
| Loss of burial sites | 70.0% | 8.5% | 7.7% | 13.8% |
| Loss of woodland/ firewood access | 53.1% | 11.5% | 26.2% | 9.2% |
| Change in access routes (e.g. market shut down, or road to it became unsafe) | 53.1% | 14.6% | 13.8% | 11.5% |
| Lost access to school (e.g. school shut down, or road to it became unsafe) | 63.1% | 10.8% | 14.6% | 11.5% |
| Lost access to the health centre (e.g. health centre shut down, or road to it became unsafe) | 73.1% | 6.9% | 8.5% | 11.5% |
| Polluted water for domestic use | 58.5% | 7.7% | 18.5% | 15.4% |
| Polluted air | 43.1% | 15.4% | 26.2% | 15.4% |

*Table 6: Challenges experienced by the community after the establishment of the mine*

### 3.6.5. Impacts on the local economy

The study noted that some changes in the mining management have affected offshoot benefits for the local economy. Before the Chinese company's takeover, the community looked forward to a weekly 30-ton truck delivery of 'scouring' powder from lithium waste dumps (popularly known as "vim", which is a brand name for a popular scouring powder). They would sell this and generate income for themselves, averaging over US$200 per vendor per month. However, since Sinomine took over, the free quarry stones and the scouring powder that the community used to receive are no longer given to them. Additionally, the chief requests the release of scouring powder for the local people. Unfortunately, the quantity of scouring powder has decreased since the company indicated that it needs it for its pottery and cup-making business.

> **Since 1989, we could get vim. In 1992, we started taking vim for sale in Masvingo, and it was seen as a waste product during Holden's time. But during Magufero's time (a British mine manager), we would get vim, but it was cumbersome, and so many women suffered severe back problems. From vim sales alone, we bought cattle and wheelbarrows, constructed our houses, did mikando (ISALs), and sent our kids to schools. In 2011, vim was brought outside the mine, and people scrambled for it and hated each other. Chief Marozva then controlled this by separating men from women. As of now, many people have left the industry. Holden also used to give gravel for free for construction. Even schools could also get free quarry stones (Women's FGD Bikita).**

According to the communities, the current Chinese owners want to retain everything, and in cases where locals had lithium boulders at their homes, the mine went on to buy back the ore. Since the Chinese came, the vim vendors have been buying vim from Gutu, and therefore, their profits have declined substantially.

Efforts to localise and empower the community have weakened , and as a result, most of the resource-rich communities' Community Share Ownership Trusts were disbanded. Although local small-scale players have significantly participated in the gold and chrome sectors, not much has happened in the lithium sector. Despite the challenges, Sinomine is doing its part by procuring from local businesses, especially hardware equipment needed at the mine, improving the quality of local products and boosting local manufacturing. The company normally buys locally.

### 3.6.6. Socio-cultural impacts

The study noted that cultural disruptions have resulted from the mining operations. Almost four in ten study respondents (36,9 per cent) indicated that mining has caused cultural disruptions to some of the community's ways of living.

**Cultural exchange**

When it comes to cultural exchange, the study found that there are various spheres in which foreigners and locals interact. For instance, foreigners enjoy local free-range "roadrunner" chicken while locals indulge in the foreigners' tobacco brand. Although the Chinese buy some livestock from the community, they do not regard the offal, meaning they pay lower prices than the community would ordinarily get.

**Cultural tensions and cases of increased criminality**

Locals also believe that there are too many 'people from outside' recruited by management at the expense of locals. Over 75 per cent of workers from outside Bikita rent accommodation, giving community members income. However, landlords feel shortchanged when they see people outside Bikita earning better than them.

In some cases, machette gangs from outside Bikita are ransacking homes and stealing from locals. The locals feel that this is the case because these gangs do not have any cultural connections with the people, and they do not care about any reputational impacts that such behaviour might bear.

***"Those from other places engage in criminal activities when they fail to get jobs. They sometimes become thugs who waylay people and take their possessions – our children from this community would not do that". Key Informant Interview***

There is an increased inflow of youth who come into the mining areas for lithium smuggling. When these activities fail, the youth end up embarking on criminal activities such as burglary and rape.

As a result of an increased influx of people into the community, Nyika and the surrounding business centers have more activities as mineworkers visit these places for entertainment. The foreigners at the mine also eat donkey meat, and this has become a new market for the local communities, while some people are also stealing livestock for sale to the mineworkers.

**Sex work**

The report recorded that there has been an increase in sex work in the community, which has also resulted in a high incidence of sexually transmitted infections due to the sexual interaction between mineworkers and local women and girls. The area around the mine has become a hotspot for sexually transmitted diseases. Reports indicated that 15 learners at Bikita Fashu High School contracted an unnamed STI from sexual activities with mineworkers. During evening hours, the mining area is flooded by sex workers, especially local bars and entertainment spots. The foreign workers at the mine generally prefer to date unmarried women, but married women are also claiming to be available to get into transactional relationships with foreigners, and this has caused strain in marriages. This could be a sign of the socio-economic conditions that the women stay within. According to the Food Poverty Atlas, the prevalence of food poverty ranges between 3.2 and 24 per cent. Ward 30 has the lowest poverty rate (3.2 per cent) and Ward 3 has the highest (24.3 per cent).[9]

According to focus groups with sex workers, the foreign workers pay better, and local people act as pimps to connect the ladies to the mineworkers due to language constraints. Furthermore, the sex workers claimed that they have good relationships with mineworkers, especially foreigners, who pay well for the service rendered. They reported that they get $5 for one lady, but a man can take two ladies and pay $3 each. Some even buy beds and other goods for their favourites. In terms of sexual health rights, they use protection, and they treat sex workers very well and respect their rights. They noted that most foreigners like oral sex. Local miners, however, have a reputation for harassing sex workers and sometimes pay less than demanded, and they are occasionally violent towards women.

**Underage sex, school dropouts and child abuse**

The increase in sex work has resulted in the involvement of school-going girls. Some are underage. This has resulted in several school dropouts as well as other negative sexual and reproductive health challenges.

***Young girls are shortchanged and given USD1 in exchange for sex. Along the 'touchline area', which is the area near the mine, sex workers come and undress themselves to entice the mine workers. These ladies come from as far as Birchenough Bridge. Most local youths have also been influenced to go into sex work, and some unnamed STI infected 14 school children. At Jah Ladys Bar, strip dancing is rife, and the sex workers charge USD2 or USD1 late into the night (FGD with Sex Workers 08/2023).***

[9] https://fnc.org.zw/wp-content/uploads/2023/04/Bikita-District-Profile.pdf

Schoolchildren may be paid up to US$50, but the pimps get the bulk of the payments. To disguise themselves, children carry other clothes apart from their uniforms and change on their way. A case has been recorded where a woman was dating a mineworker, who ended up having sex with the woman's daughter.

### 3.6.7. Dimensions of community conflict

Mining and community conflicts are not uncommon, especially in communities where natural resources are abundant. In the case of the Bikita community's experience with lithium mining, some conflicts have been noted, and these offer insights into the potential social, cultural, economic, and environmental impacts of critical resource extraction.

Mining generally introduces disruptions to community life. This disruption may be related to community landholding patterns. In Bikita, some of the farmers had their pieces of land incorporated into the mining claims, while others were affected by the opening of a new road. The mine boundary is seen through a well-cleared fireguard, which sets out community trespassing restrictions. Communities have traditionally used this land for grazing, water, firewood and other uses. So, land-use realignments and contests have generally put the communities at loggerheads with Sinomine.

There has been encroachment of mining concessions onto farming and grazing lands, and as a result, communities have invaded the mining areas. More than sixty families were relocated with small compensation and a promise of employment. However, some individuals feel left out and alienated, leading to rampant smuggling.

Noise pollution from blasting, dust from the gravel roads around the mine, blasting induced vibrations that are leading to cracking of houses, are some of the grievances raised by communities. However, besides reporting to the traditional leaders, the community does not seem to be able to lodge their complaints and address the mining companies directly.

The death of a local youth who was killed on the suspicion that he was smuggling lithium has raised tensions between the mine and the community. These tensions have caused the community to question the extent to which the safety and security of the community are considered against the company's interests.

A marked and latent conflict exists between the locals and the higher-earning people from outside. Recently, the local people were banned from food vending at the mine, yet the chief's wife won the contract to cook for the mineworkers at the canteen. Local people feel that mining managers are recruiting their relatives and excluding others. Community grievances have been further exacerbated because the local chief is the one who shortlists individuals to be recruited by the mine, but the selection criteria are not transparent, The chief is a beneficiary of the mine and is alleged to favour individuals from his church.

Illicit dealings in lithium in Bikita include the nocturnal smuggling of ore through syndicates. Claims of illicit financial flows in Zimbabwe's mining sector have been well documented.[10,11] Mine security regularly arrests young people in and around the mining claims to identify lithium smugglers. Youths in the area claim that smugglers are identified through the roughness of their hands, and often youth are wrongly accused because their hands are rough because of other activities, not smuggling. The local truck loaders, zvidhongi, hired to sneak into the claims and load boulders of ore, are paid a paltry US$10 per truckload. The lead loader (called Soho in

[10] AFRODAD: State-of-Mineral-Resources-Governance-in-Southern-African-Development-Community-1.pdf
[11] https://choicenewsafrica.co.za/2023/07/28/lithium-leakages-impoverishing-a-treasure-mineral-economy/

the local dialect) gets over US$50 per truckload. The smuggling zones are high-risk areas where people get injured and shot at. The areas are littered with pits, which make them hard to walk or run through during skirmishes with mine security. The riot police are usually well-spaced around the mine to reduce access.

### 3.6.8. Power relations in terms of SGBV, SRHR, displacement

The research explored issues related to sexual and gender-based violence (SGBV), sexual and reproductive health rights (SRHR), and displacement, which have a bearing on women who are more affected by mining operations than their male counterparts.

Regarding employment, most of the respondents (89.2 per cent) noted that they do not have any female member from their household employed at the mine. In comparison, 75.4 per cent reported that there was no male member employed. Although the findings indicate a generally low level of employment for the communities, women are affected more. Mining is one of the industries that traditionally has limited employment opportunities for women. Despite a few notable exceptions, such as the increasing number of women employed in administrative and support roles, the mining sector continues to be male-dominated.

The data suggests that women are significantly under-represented in the mining industry's engagement activities, as only 10 per cent of the respondents reported female participation in any form of engagement with the mining authority. This low level of participation highlights a concerning lack of gender diversity and inclusion in the industry, which requires urgent attention and remedial action. Despite the existence of a national gender policy that seeks to promote gender equality and women's inclusion, the mining sector has failed to implement effective measures to achieve this goal. The sector has been historically male-dominated, and women have been under-represented in both employment and leadership positions. This lack of representation has led to a culture that is not inclusive of women or their unique needs and perspectives. The mining industry must take proactive steps to address gender disparities and create a more inclusive workplace that values women's contributions and provides them with equal opportunities for growth and advancement.

The study highlights several concerning issues related to the establishment of the mine. A significant number of respondents (38.5 per cent) reported gender-specific problems arising from the mine's establishment. This suggests that there may be challenges related to gender equality and inclusivity in the workplace. In fact 40.8 per cent of respondents reported cases of sexual and gender-based violence (SGBV) since the mine was established. This profoundly troubling finding underscores the need for robust policies and procedures to prevent and address such incidents. Another concerning finding is that 38.5 per cent of respondents noted discrepancies in the mine's treatment of men and women. This suggests that gender-based biases or disparities in the workplace may need to be addressed.

According to the findings of the study, the current utilisation of critical minerals and the shift towards clean energy are not having the desired effect of transforming the colonial paradigm. On the contrary, they are perpetuating it. This implies that the existing power dynamics and inequitable distribution of wealth and resources are being reinforced, rather than being challenged. This raises serious concerns about the concept of a just transition, which aims to ensure that the move towards a sustainable and low-carbon economy is socially and economically equitable. The study highlights the need for a more comprehensive and inclusive approach that considers the historical and structural factors that perpetuate colonialism and inequality.

The study results indicate that few respondents (28.5 percent) are aware of any reporting arrangements for issues they may have with the mining authorities. This highlights the need for better communication channels between the authorities and the public to address concerns and to ensure transparency. A community grievance redress mechanism is crucial for mining companies for several reasons. Firstly, it allows communities to raise any issues or concerns they may have safely and confidentially, which helps to identify problems early on, potentially

preventing them from escalating into more significant issues that could impact the company's productivity and reputation. Secondly, having a grievance redress mechanism demonstrates to the community that the company values their input and takes their concerns seriously, which can improve the social license to operate. Finally, it can help the company comply with local regulations and international standards for responsible business conduct, enhancing its reputation and attractiveness to investors, customers, and other stakeholders. In February 2023, the company was ordered by government to suspend operations until it complies with legal provisions that include labour, environmental and immigration laws.[12] The study found that the currently available reporting system for complaints regarding mining relations with local communities is ineffective, as it is routed through traditional channels such as chiefs, councilors, and mine management.

The survey revealed that only 26.9 per cent of respondents perceived the recruitment ratio balanced between male and female employees in the mining industry. This indicates the need for more efforts to promote gender diversity and inclusion in the sector. Maintaining a balanced recruitment ratio is essential for mining companies for several reasons. Firstly, it helps to promote diversity and inclusion within the industry, leading to a broader range of perspectives and ideas. Secondly, it helps to ensure that all qualified candidates have an equal opportunity to be hired, regardless of gender. This can help to address gender imbalances within the industry and promote a more equal and fairer workplace. Finally, a balanced recruitment ratio can help improve mining companies' reputations, indicating that they are more progressive and forward-thinking. Overall, there are many benefits to maintaining a balanced recruitment ratio, which all mining companies should strive to achieve.

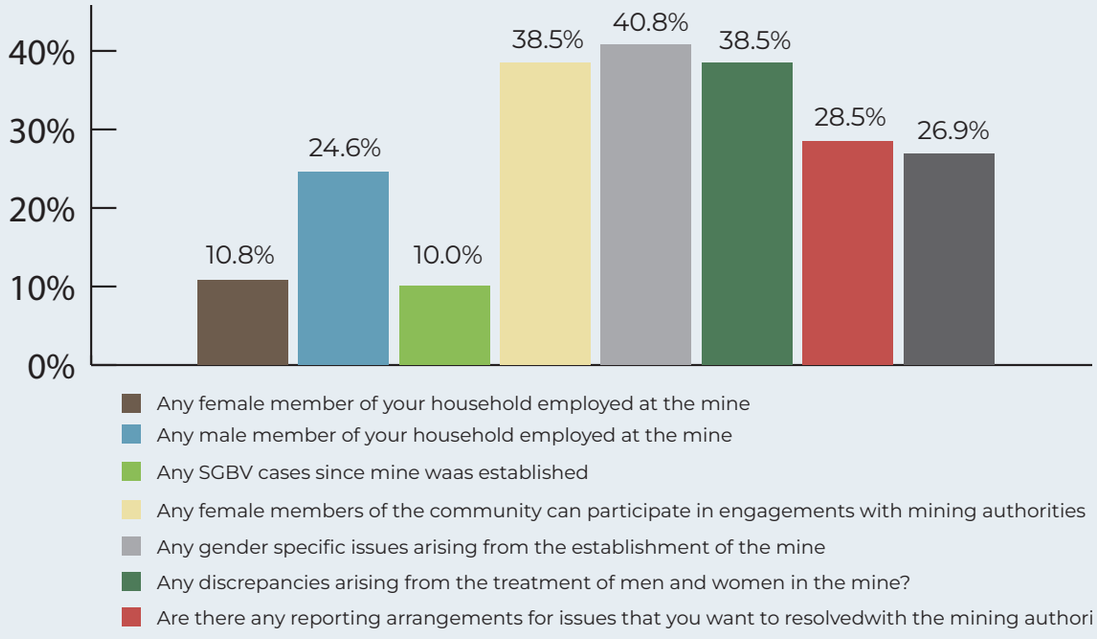



*Figure 4: Gender Relations in Bikita*

[12] https://www.newsday.co.zw/theindependent/business-digest/article/200012603/bikita-minerals-sees-exports-at-us500m

### 3.6.9. Level of community participation in mining decisions

The study's findings revealed a considerable lack of community engagement in the mining of lithium. The research examined various aspects of community involvement, and the results showed that a significant portion of the community were not engaged in the establishment of the mine. Specifically, 31.5 per cent of the surveyed population reported not being involved. Furthermore, the study found that the environmental impact assessment (EIA) process, which is crucial in mitigating the impact of mining activities on the environment, was not inclusive of the community. Only 14.6 per cent of the population participated in any EIA processes related to the mine. The study also identified a need to improve community engagement in discussing possible benefit-sharing arrangements. Of the surveyed population, only 16.2 per cent were involved in such discussions. These results suggest a significant gap in community involvement in lithium mining in Bikita, which needs to be addressed to promote sustainable and equitable community development.

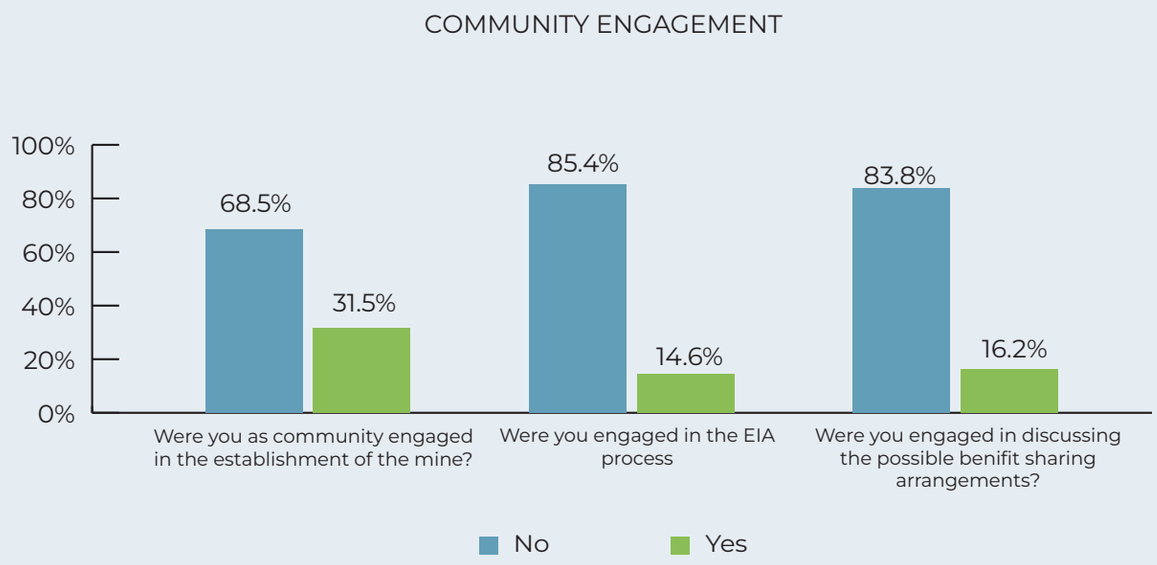



*Figure 5: Community Engagement*

In an interview, one of the community leaders remarked that "all these groves and mountains are damaged. In terms of EIA issues, the community enlightenment is very low. The roads that have been laid down here are not maintained for us. But were made for us not to disrupt mining operations. But the same roads have disrupted our farming, especially in the old resettlement areas where six families' fields were disrupted without compensation. Only two families were compensated US$1200 each after the intervention of the chief". One disgruntled councilor mentioned that "as development focal persons, we should be the centres of development and devolution". It was reported that several youths queue at the chief's homestead for jobs, but not all are considered for shortlisting.

Young people expressed the need for the mine to have a youth quota in its recruitment efforts. When locals, especially youth, feel marginalised, they assert their agency; they express their grievances through some form of resistance. During the earlier part of the year, the youth organised to go and stage a demonstration at the mine against discrimination and nepotism in recruitment. The mine then deployed the police, and the youth were labelled as opposition activists. Youth are generally displeased with the recruitment processes adopted by the mine in cahoots with the local chief. During the focus group discussions, some said that "On one of the occasions, while we were queuing at the chief's homestead for jobs, Bikita Minerals was recruiting."

### 3.6.10. Structure of benefit sharing in the green energy extraction industry

One Bikita Rural District Council senior executive highlighted that Bikita Minerals do not pay royalties to them. They pay unit tax. From 2009 to 2021, they paid an average of US$24 000 annually. In 2023 they paid US$100 000. No royalties were delivered to the Rural District Council (RDC). The payments are based on production tonnage as per the third schedule of the RDC Act. Benefit-sharing frameworks and arrangements at the community and local authority levels are ad-hoc and contingent on the community's circumstances and the state's interests. There are few if any, deliberate efforts to allow systematic community access to the lithium mining sector, let alone the downstream value chains. In the absence of transparent concession and claim issuance and a revival of the Mineral Revenue Transparency Initiative (similar to EITI), there is little likelihood of a proper benefit-sharing regime with lower-tier actors like artisanal miners and communities.

The right of communities to benefit from resources is enshrined in the Zimbabwean constitution. Under the supreme law, the government has devolved certain powers and responsibilities of central government to local administrations at the centre of the development agenda, as required by Section 264 of the constitution. Under the devolution agenda, there is a provision for revenue-sharing arrangements between central and local tax authorities. The constitution dictates: "Not less than five per cent of the national revenues raised in any financial year must be allocated to the provinces and local authorities as their share in that year". There is currently no specific arrangement for revenue sharing between the central government and resource-rich localities. However, under Section 276 (2) (b) of the constitution: "an Act of parliament may confer functions on local authorities, including (...) a power to levy rates and taxes and generally to raise sufficient revenue for them to carry out their objects and responsibilities". The fact that the constitution says that an Act of parliament "may" confer fiscal powers to local authorities leaves a leeway for central government to either choose the route of fiscal decentralisation or not.

The Rural District Councils (RDC) Act and the Mines and Minerals Act both contain mechanisms to ensure that local authorities benefit from mining activities. A huge impediment, however, remains in the regressive nature of these tax instruments. For instance, manual labour is used as a basis for calculating taxable units of the mining enterprises according to the RDC Act. The first 100 manual labourers equate to one unit, and thereafter, every 50 labourers equate to one unit. Nyamucherera and Sibanda (2020) argue that the rate is set annually through public local budget consultations, and the formulation is then applied to the number of units to determine the accruable local mining tax revenue. In a world impacted by the fourth industrial revolution, defined as production driven by automation instead of labour, the authors submit that a labour-denominated tax instrument is inappropriate and effectively short-changes local authorities. This partly explains the struggles faced by local governments in areas rich in resources to optimise tax revenue from mining. Another hurdle is the lack of tax transparency.

Because mineral rights are owned by the Zimbabwean government, mining tax revenues accrue to the central government. RDCs in resource-rich areas have limited legal and political leeway to collect revenue from mining activities in their areas. Local mining taxes are collected through land development levies according to the RDC Act. The levies are computed differently for precious metals versus low-value minerals. On tax revenue collections by the central government, mineral sales are primarily conducted by the Minerals Marketing Corporation of Zimbabwe (MMCZ), other than gold and silver, which fall under the authority of the Reserve Bank of Zimbabwe (RBZ). As the world moves to address the climate crisis and shift away from fossil fuels, certain minerals identified as strategic are essential to building technologies needed

for the energy transition.[13] Heightened demand for these transition minerals in the foreseeable future has elevated the catalytic role of the mining sector. One of the ways through which Africa's mineral-rich countries benefit from the growth in demand for transition minerals is through optimal tax revenue collection from the sector.

### 3.6.11. Community perceptions of climate change

While communities are happy with the idea of jobs from mining, the research also explored community views regarding climate change.

The survey results show that more than half of the respondents (64.6 per cent) have reported that their community is facing severe consequences due to climate change. The survey data indicates that climate change has negatively impacted various aspects of their community, including agriculture, water availability, public health, and infrastructure. The survey further highlights the need for urgent action to mitigate the impact of climate change and protect the affected communities.

The majority of the respondents (60 percent) have observed the initial signs of climate change at the beginning of the 21st century, and a significant proportion of respondents (63.1 per cent) hold a pessimistic view that there is little they can do to tackle climate change. Almost half of the respondents (44.6 per cent) believe that climate change will signal the end of the world.

Despite the negative outlook, the community has shown high responsibility and agency when addressing climate change. As many as 70 per cent of the respondents believe that society is responsible for taking action and restoring the climate. Additionally, 69.2 per cent of the respondents strongly believed in the local people's responsible behaviour towards climate stewardship.

Regarding utilising the available resources in their community, 64.6 per cent of the respondents have suggested that the extracted minerals should deal with the impending threat of climate change, starting with their local community. The survey has also highlighted that 60 per cent of the respondents believe that agriculture is already adapting to climate change through implementing climate-smart agricultural practices, such as precision farming and using drought-resistant crops, which is a positive sign, but more needs to be done.

Even though the extraction of lithium, a metal used in the production of batteries, is taking place in their area, a significant percentage of the respondents (68.5 per cent) are not aware of its use and its critical role in the electrification of the transportation sector to reduce carbon emissions. Lithium batteries are becoming an increasingly popular choice for energy storage in local communities. With their high energy density, long lifespan, and low maintenance requirements, they offer a reliable and cost-effective way to store energy and provide power to homes and businesses. By using lithium batteries, communities can reduce their dependence on traditional energy sources and become more self-sufficient.

However, to fully realise the benefits of lithium batteries, government policies need to be in place to support their implementation. Rather than focusing solely on global markets, policymakers should prioritise resolving local challenges, such as providing reliable and affordable energy access to under-served communities. By doing so, local communities can directly benefit from the use of lithium batteries, instead of just being a small part of a larger global initiative.

For example, electrification of transportation, while important for reducing global carbon emissions, may not directly benefit local people. In contrast, investing in energy storage using lithium batteries can provide immediate benefits to local communities, such as improved energy access, increased energy security, and reduced energy costs. This can lead to more sustainable and equitable development, helping to create a better future for all.

[13] https://acep.africa/leveraging-africas-transition-minerals-for-optimal-domestic-revenue-mobilization/

Despite the growing concern about the need for climate action, the respondents' lack of awareness about the importance of lithium highlights the need for more education and awareness-raising efforts. Similarly, 80.8 cent of the respondents are unaware of the destinations to which their lithium is being shipped, which could indicate a lack of transparency and accountability in the supply chain.

| Community Awareness of Climate change | Strongly Agree | Agree | Disagree | Strongly Disagree |
|---|---|---|---|---|
| Our community is seriously affected by climate change | 25.4% | 39.2% | 18.5% | 16.9% |
| We started to see the signs of climate change at the start of the 2000s | 24.6% | 35.4% | 23.1% | 16.9% |
| There is little we can do about climate change | 10.0% | 53.1% | 25.4% | 11.5% |
| Climate change signals the end of the world | 3.1% | 41.5% | 37.7% | 17.7% |
| As society we are responsible for restoring our climate | 13.1% | 56.9% | 21.5% | 8.5% |
| Our local people are acting responsibly in terms of climate stewardship | 13.8% | 55.4% | 21.5% | 9.2% |
| The minerals being extracted should help us to deal with climate starting with this local community | 23.1% | 41.5% | 26.2% | 9.2% |

*Table 7: Community perceptions on community action and collaboration on climate action*

While the thrust towards clean energy persists, the nature of extraction brings with it serious human rights issues that need to be managed.

### 3.6.12. Production relations

The production relations in mining are crucial to understanding the power dynamics and social structures involved in extracting and exploiting lithium in Bikita. These relations refer to how labour is organised and managed, the ownership and control of mines and related infrastructure, and the distribution of profits and benefits derived from mining activities. Production relations can significantly impact the social, economic, and environmental outcomes of mining operations, as they can determine the extent to which local communities benefit from mining activities and the extent to which they are negatively affected by externalities.

The study established that at Bikita Minerals, workers work every day and only get leave days by working overtime. Since this mining sector requires heavy machinery, there are limited opportunities for indigenous unskilled labour.

According to safety, health, and environment (SHE) protocols, workers received fresh milk to clean their respiratory system due to the dusty conditions at the workplace. However, this practice has been discontinued since the Germans (previous mine owners before the current one) took over. Additionally, workers must undergo respiratory health tests every year, based on previous recommendations. Lithium is known to be a hazardous substance, and exposure to it can cause significant health risks. When inhaled, it can lead to respiratory tract irritation, coughing, and shortness of breath. In severe cases, high exposures can result in the accumulation of fluid in the lungs, which is a medical emergency that requires immediate attention. Additionally, direct contact with lithium can severely irritate and burn the skin and eyes, leading to painful rashes and possible loss of vision. Therefore, it is crucial to handle lithium with care and take necessary precautions, including wearing appropriate safety gear and avoiding direct contact with the substance.

Despite the existence of SHE protocols under Sinomine a majority (67.6 per cent) of the respondents believing that employees have access to health services (with 23.8 per cent noting that they receive them always and 43.8 per cent reporting that they access them sometimes), there remain concerns regarding the level of protection provided to miners. These protocols fail to provide adequate protection, a major issue that must be addressed to ensure a just transition for mineworkers. The concept of a just transition aims to protect workers' welfare, especially those most vulnerable. In the case of the mining industry, this means protecting the health and safety of miners who face numerous hazards in their work environment. Therefore, mining companies must prioritise the implementation of effective SHE protocols that provide comprehensive protection for their workers. This will ensure miners' safety and well-being and contribute to a sustainable and fair transition towards a cleaner and more just future.

Local workers are provided with transportation, but many must pay company leaders a few hundred US dollars to secure their jobs. The salary range for most workers falls between US$200 and US$300, far below the poverty datum line (US$500). Furthermore, there are allegations that protective clothing is initially provided during recruitment, but that workers are expected to purchase their own safety gear after that.

In June 2023, the workers organised a demonstration to demand better transportation for residents and improved housing for nationals. As a result of the protests, the provision of three people per room was withdrawn. The workers also demanded improved living conditions, including better salaries with a component in US dollars. The company responded by closing for seven days until the member of parliament, community leaders, and Chief Marozva met with the management to discuss the workers' demands. Overall, the mines do not respect much of the worker's rights. It is reported that workers can lose their jobs if they fall sick and cannot take sick leave.

The study further characterised labour relations by asking the respondents to share their views on various elements. The majority (69.2 per cent) of the respondents indicated that workers always have protective clothing.

According to the survey, 73.9 per cent of the respondents indicated that workers get days off. In addition, 68.5 per cent of the respondents noted that workers have medical allowances and get trained in safety, health, and environment (SHE).

The survey also revealed that merit is not always considered during recruitment; only 41.7 per cent of the respondents indicated that workers are recruited on merit. Corruption was cited as one of the main issues in this regard. Furthermore, 47.7 per cent of the respondents do not believe that the company uses affirmative action for local people's recruitment.

Regarding recreational facilities such as sporting facilities, half of the respondents believe that employees have access to them, with 10 per cent saying always and 40 per cent saying sometimes. However, most respondents (66.9 per cent) do not believe that employees have decent shelter, with 30 per cent saying rarely and 36.9 per cent saying never.

| Which of the following forms of labour relation do you see | Always | Sometimes | Rarely | Never |
|---|---|---|---|---|
| All workers have protective clothing | 69.2% | 20.0% | 7.7% | 3.1% |
| Workers get off days | 30.8% | 43.1% | 15.4% | 10.8% |
| Workers have medical allowances | 33.1% | 35.4% | 14.6% | 16.9% |
| Workers get trained in SHE | 32.3% | 36.2% | 17.7% | 13.8% |
| Workers are recruited on merit | 19.2% | 41.5% | 20.0% | 19.2% |
| The company uses affirmative action for local people's recruitment | 14.6% | 37.7% | 20.0% | 27.7% |
| Employees have recreational facilities | 10.0% | 40.0% | 23.1% | 26.9% |
| Employees have decent shelter | 6.2% | 26.9% | 30.0% | 36.9% |

*Table 8: Labour Relations*

According to the study, 61.5 per cent of respondents know whether or not mineworkers receive training in disaster risk reduction (DRR); 26.2 per cent confirmed that mine workers do receive this training, and 12.3 per cent said that they do not. Mineworkers must receive DRR training to ensure their safety and the sustainability of mining operations. Effective measures and practices for disaster risk reduction can contribute to a safer and more sustainable mining industry while minimising the negative impacts of mining activities on the environment and on local communities.

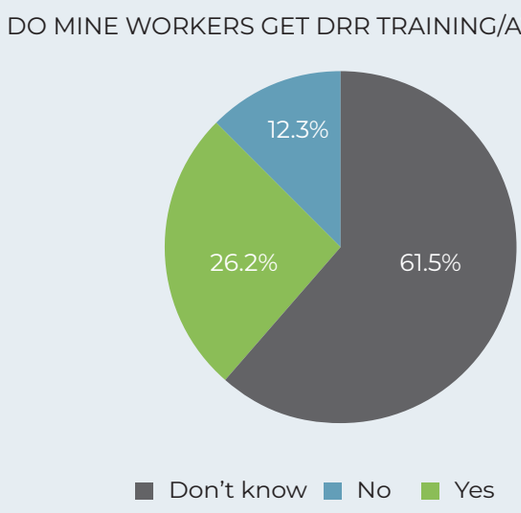



*Figure 6: Disaster Risk Reduction and Awareness*

There are few opportunities for artisanal small-scale mining in the lithium sector. On the quarry side of the mine, locals sort and smuggle materials for buyers. Typically, these buyers are wealthy individuals with political connections and links to company security. Local boys are hired to load smuggling vehicles and are paid a measly sum of around US$10 for loading large trucks, some carrying as much as 30 tonnes. It has been reported that lithium-bearing rocks are being smuggled from George Nolan's farm. The locals cannot extract the ore due to its excessive depth, so they sneak into the claims and steal lithium ore. During a visit in August 2023, one suspected smuggler was killed by the patrol team. This practice usually occurs at night, and it is dangerous for artisanal miners who risk getting injured or trapped while running away from mine security in the dark.

### 3.6.13. Economic, social and cultural rights and local culture

The community is unhappy with the roads that the company created without their consent, and most of the company's employees are from other areas. Women have not been given leadership roles. In the past, when Robert Mugabe was still the president, the indigenisation policy allowed local communities to establish a Community Share Ownership Trust (CSOT). However, political players were part of the mining arrangements, even during this period. The CSOT was district-based and not based on the affected community, so there was no community representation. The CSOT was not responsive to the interests of the community. In September 2023, spills from the tailing ponds contaminated the Matesva dam, which supplied water to the mine in Ward 30. The spills affected livestock and people, leading to potential chemical poisoning. Approximately 500 families in Gutu were also affected by the spills.

During a focus group discussion with women, it was revealed that only 10 per cent of mining employees in the area are women. Women's key source of livelihood in the area is selling scouring powder.

The women further shared that their rights to decent shelter are being violated by the mining operations whose blasting causes the cracking of their houses. One woman narrated the following during the discussion:

***We live near the mine's boundary, which causes our houses to crack due to blasting tremors. To collect firewood, you will need a letter from HR. If you plan on using a car, we must provide the mine authorities with the vehicle's number plate. Some locals have stolen valuable minerals like tantalite, petalite, gold, and lithium from the mining claims. Therefore, we are unaware of the full range of minerals extracted from the mine. (Women FGD, 08,2023)***

Another key informant shared, "Just near the mine boundary, there is an elderly blind man who stays by himself. His house has cracked due to blasting. And it's a deathtrap".

**The study sought to measure the community's awareness of vital rights-related elements, as detailed in the table below:**

| Community Awareness | Strongly Agree | Agree | Disagree | Strongly Disagree |
|---|---|---|---|---|
| We are informed about the investor | 3.8% | 20.8% | 33.8% | 41.5% |
| We are informed about the use of lithium/cobalt | 3.1% | 28.5% | 33.1% | 35.4% |
| Local rentals have gone up due to mining workers | 26.9% | 42.3% | 26.2% | 4.6% |
| There are more sex workers due to mining | 53.1% | 21.5% | 21.5% | 3.8% |
| There is more environmental damage due to mining | 26.9% | 33.8% | 26.2% | 13.1% |
| Mining has improved the local economy | 8.5% | 32.3% | 39.2% | 20.0% |
| The company CSR arrangements are known to all | 2.3% | 13.8% | 58.5% | 25.4% |
| We are aware of where the lithium is going | 3.1% | 16.2% | 34.6% | 46.2% |
| The mine owners respect local culture and traditions | 4.6% | 33.8% | 43.1% | 18.5% |
| The mine owners respect our sacred spaces | 3.8% | 34.6% | 46.2% | 15.4% |

*Table 9: Community Investor Awareness*

The survey results show that 75.3 per cent of respondents believe the community are not informed about the investor in the area. Furthermore, despite lithium mining in their area, most respondents (68.5 per cent) are unaware of its use. Similarly, 80.8 per cent of the respondents are unaware of where the lithium is going.

Furthermore, 69.2 per cent of the respondents noted that local rentals have increased due to mining workers in their area, and 74.6 per cent of the respondents believe that there are more sex workers due to mining operations in their area.

Most respondents (60.7 per cent) noted more environmental damage from mining, and 59.2 per cent of respondents do not believe that mining has improved the local economy.

Although the company does some CSR, the majority (83.9 per cent) of respondents feel that their CSR arrangements need to be made known to all. Additionally, 61.6 per cent of respondents think the mine owners do not respect local culture and tradition, and 61.6 per cent of the respondents believe that mine owners do not respect sacred spaces.

Regarding employment, most (77.7 per cent) respondents do not believe that higher positions are shared with local people.

A youth focus group outlines complaints that young people do not even know what lithium is, apart from just knowing the colour. “We just know that it’s white in colour”. For most of them, the critical observable effects of the mining have been the spread of STI, increasing poverty, and young ladies selling sex. In the recent past, one youth was killed for allegedly smuggling lithium. There is also massive noise from explosions and trucks driving up and down the roads. For our young girls, there is also a lot of selling sex for jobs.

***Young people, we generally live on gardening, but this is affected by the severe and frequent droughts. The youths have also started taking mutoriro (crystal meth). When the Chinese want ladies, they say, “Maria shiku shiku”. This is the code that they use to communicate the need for sex workers. (Youth FGD. 08/2023)***

Mining has pitted the locals against externals and planted a sense of conflict between them. Most empowerment promises have not materialised, especially when the Empowerment Bank came. They promised funds for startups but never gave any, even if we had ideas.

According to Chief Marozva, people are concerned about vibration from blasting and the issue of cracks in their homes, and there are complaints about the way Chinese subcontractors abuse local workers and don’t employ from the local community. The rights of workers are not respected, and workers end up buying their own work-clothes and protective equipment. The chief believes that respect for local culture and sacred places is good, as they have graded the area (***guva remhondoro***[14]***)*** to secure it. In all areas they are told, they do respect.

[14] Burial ground for the spirit media

### 3.6.14. Environmental impacts of mining

According to the Environmental Management Act (Cap 20:27), mining operations are obliged to undertake an environmental impact assessment (EIA) and to implement adequate management plans against potential environmental risks. Sinomine conducted its EIA, but local leadership claimed that the EIA was not comprehensive. The local people did not understand the EIA process when it was done, so they did not raise many issues. The commitments given during the meetings are no longer remembered. The graded roads produce a lot of dust, making some homes very dirty. More recently, the Spodumene processing plan has also conducted its EIA, but the management plans for the environmental impacts have not been publicized, and it's unclear if or how the communities were engaged.

**Policy**

Consistent with the National Development Strategy 1 (2022-2025), the government is moving towards establishing energy infrastructure. "There is also a strong movement towards devolution and local economic development. The ownership interests for mining claims and concessions has gone up, and the pathways are getting opened for locals" (BRDC councillor). There are claims that government efforts for local empowerment have weakened. The local recruitment process advocated by the government is not straightforward, especially at the mine, because the chief gets a monthly allowance from the mine and has a house built for him. The former chief also had another house built for him, and the homestead has been connected to electricity. Being compromised, the chief is less likely to pressure the mine to address the community's interests.

# 4. CONCLUSIONS

The mining sector plays a significant role in Zimbabwe's economy, particularly the lithium sector, which has the potential for unlimited development. However, the study found that the employment rate in Bikita's lithium mining sector was lower than expected, employing only 6.2 per cent of the local population.

Zimbabwe is the fifth-largest lithium producer globally. The country has significant deposits of critical minerals such as platinum and lithium, which are essential to the economy and hold promise for significant contributions to its development. However, several challenges exist in managing these resources, including transparency, accountability, and equity issues in their exploitation.

Women's inclusion in the lithium mining sector in Zimbabwe is limited to ancillary staff, with little involvement in controlling the means of production or mercantile dealings. This is similar to earlier colonial mining arrangements.

While the government has broadened its investment sources within the lithium mining sector to include less traditional partners such as China and Belarus, local capital has yet to be afforded affirmative action for easier market entry, as foreign companies are given preference.

The study found that mining has impacted on economic, social, cultural, and environmental aspects, with communities perceiving mining to have negative impacts overall.

There were concerns about employment opportunities, corporate social responsibility, and the socio-cultural and environmental impacts of lithium mining on communities.

The study also reveals that the mining company failed to establish community recreation, and many respondents reported gender-specific problems arising from the mine's establishment.

The environmental impact assessment (EIA) process had low participation, with only 14.6 per cent of the population participating in any EIA processes related to the mine. A total of 16.2 per cent of communities participated in discussions related to the mining activities in their area.

According to the study, 64.6 per cent of respondents reported severe consequences faced by their communities due to the impacts of climate change. To ensure the sustainable development of the mining sector in Zimbabwe, the government and mining companies need to address these challenges. They must ensure transparency, accountability, and equity in the exploitation of critical minerals and promote sustainable mining practices that benefit the economy and the local population.

# 5. RECOMMENDATIONS

Based on the findings and conclusions of the study, the following recommendations are proposed to ensure sustainable mining practices in Zimbabwe:

1. **Policy reforms at the national level:** With the current focus on lithium mining, Zimbabwe can progress by completing the long-awaited Mines and Minerals Policy. This policy should include a precise definition of critical minerals and their significance for the development of Zimbabwe and the communities affected by mining. In terms of lithium, there is a need to expand the sector beyond energy to increase the benefits accruing to the communities and the nation. Exporting raw, unprocessed, or partially processed lithium results in massive losses of revenue and jobs. Lithium, a rare resource, should be a strategic long-term contribution to the fiscus. There is a need to establish processing and manufacturing industries instead of allowing foreign partners to process finished products outside the country. Let processing happen close to the resource. The thrust for industrialisation should be the localisation of the production and manufacturing of end products in-country. This will create several spillovers, such as the expansion of supply chains. In this manner, local and national employment will boom. The government should expand the lithium value chains and strategically target other uses such as ceramics, grease, heat-resistant glass and the construction sector, which would decrease costly imports. Given the limited character of lithium deposits globally, the resource should significantly contribute to a sovereign wealth fund that government has already created and effectively feed into addressing the needs of present and future generations, thus ensuring sustainability. Such an expanded lithium sector would massively expand the country's revenue base and create forward and backward linkages with other economic sectors.

2. **Community share ownership schemes:** If the government decides to establish community share ownership schemes, they must conduct thorough community outreach and consultations before setting up the trusts. This will help to ensure that community members are aware of the initiative and can provide feedback and suggestions, which could lead to a more prosperous and sustainable outcome. Transparency and openness in the process will foster trust in the community and encourage a sense of ownership and stakeholder engagement.

3. **Policies at the local Rural District Council (RDC) level:** The Bikita Rural District Council (BRDC) should focus on three critical structural reforms to promote local development using mineral resources. Firstly, they should establish a Memorandum of Agreement between Bikita Minerals and the community. Secondly, they should establish a Memorandum of Agreement between BRDC and Bikita Minerals Pvt Ltd. Lastly, they should revive the Community Share Ownership Trust. These three reforms will address critical service delivery issues such as water and sanitation, social protection, education, health, infrastructure and utilities, electricity provision, environmental management, and housing development in Nyika Growth Point. Contract negotiations with investors should come with CSR clauses and not depend entirely on voluntary philanthropy (although this becomes a push factor for investors given the neoliberal "open for business" thrust of government). This will compel investors to deliberately plan for community transformation, and not just focus on production growth, which reflects extractivism.

4. **Corporate social responsibility:** The community is urging Bikita Minerals to share their resources as part of their corporate social responsibility (CSR) and community benefit sharing. There is a dire need for employment opportunities for our youth to reduce crime rates. Additionally, the social impact of mining, particularly the damage to homes and the need for business development, must be examined. It is also crucial to prevent the smuggling of resources, as the high demand from the mine has led to the theft of livestock such as goats, dogs, and donkeys. This loss of assets must be addressed.

# 5. RECOMMENDATIONS

5. **Increase local employment:** The government and mining companies should prioritise local employment in the mining sector to ensure that the local population benefits from the economic opportunities created by mining activities. This can be achieved by developing skills and training programmes for the local population.

6. **Promote women's inclusion:** The mining companies should promote women's inclusion in Zimbabwe's lithium mining sector. This can be achieved by creating opportunities for women to control the means of production or mercantile dealings, while increasing their participation and representation in the mining sector.

7. **Ensure transparency and accountability:** The government should ensure transparency and accountability in exploiting critical minerals to avoid abuse of power, resource plundering, and corruption. This can be achieved by making information on the mining sector accessible to the public and implementing effective monitoring and evaluation systems.

8. **Create an inclusive lithium policy:** Since 2009, there have been some efforts to create a mineral-specific policy, starting with the diamond policy. But even with such a policy, there is also a need to push a "whole of government" approach to ensure that all ministries and departments linked to lithium are kept engaged and involved. The practice of that policy should dismantle vertical and horizontal enclaves within ministries and departments and make sure that all tiers of government are aware of the government strategy in the green energy transition, not just the energy and mining ministries.

9. **Promote sustainable mining practices:** Mining companies should adopt sustainable mining practices to minimise the negative impacts of mining on the environment and communities. This can be achieved by implementing thorough EIAs and developing effective community engagement mechanisms. To ensure a better transformation of the lithium sector, Zimbabwe's negotiation for mining deals must be extensively capacitated with legal, economic and technical expertise, so that foreigners do not shortchange the government bureaucrats. The government also needs to harness domestic capacities for advisory services. The government should not depend on foreigners to know its subsurface wealth.

10. **Address community concerns:** The government and mining companies should address community concerns about employment opportunities, corporate social responsibility, and mining activities' socio-cultural and environmental impacts. This can be achieved by ensuring regular and open communication channels between the mining companies and the communities affected by mining activities. this involves ensuring that communities are at the centre of the green transition, rather than just creating energy for foreign recipient societies. Efforts should also be made to bring small-scale miners into the lithium sector by lowering industry entry thresholds. As things stand, the government has set high capital thresholds, which scares local entrepreneurs away. This contradicts the "open for business" mantra when the environment is restrictive for small players.

11. **Increase participation in EIAs:** The government should increase participation in the EIA process to ensure that the concerns of all stakeholders are considered. This can be achieved by creating awareness campaigns and providing the necessary resources to enable meaningful participation.

12. By implementing these recommendations, the government and mining companies can ensure that mining activities in Zimbabwe contribute to the green transition globally while remaining sustainable and benefiting both the national economy and the local population.


**SOUTHERN AFRICA RESOURCE WATCH**
41 Holt Street, Parkmore, Sandton, Johannesburg 2196, South Africa
**Tel:** +27 10 745 4572 | **Email:** info@sarwatch.org
**www.sarwatch.org**