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Ruth Hachitapika Chibbabbuka
Jewette Masinja
Isabel B. Franco

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Legal Reforms as a Tool for Sustainable Development in Former Mining Communities: A Case Study of Kabwe Lead-Zinc Mine, Zambia

Ruth Hachtapika Chibbabbuka, Judge in the High Court of Zambia, The Judiciary of Zambia, Plot No. 438, Independence Avenue, P.O. Box 50267, Lusaka, email: chibbabbukar@gmail.com

Jewette Masinja, PhD (Queensland), Lecturer, Department of Metallurgy and Material Processing, University of Zambia, Lusaka, Zambia, email: jewette_masinja@yahoo.com

Isabel B. Franco, Institute for the Advance of Study of Sustainability, United Nations University, 5 Chome-53-70 Jingumae, Shibuya, Tokyo 150-8925, Japan, email: franco@unu.edu or Isabel@isabelfranco.com (I.B.F)

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The mining legacy in Zambia has seen the rise and fall of towns and cities built around the mines which flourish when the mine is in its operational phase but perish once the mine closes. Sustainable Development initiatives at the regional and international level have been formulated and agreed upon for community development requirements in mining laws for resource rich countries to implement in their countries. A research study was established to, investigate the effects of the closure of Kabwe lead-zinc in Zambia, on the local community in the context of sustainable development, and examine the laws and policies that affect the mining sector in the country. This was to ascertain the impact that these have on communities adjacent to mining operations, across the mine life cycle and propose what legal reforms can be enacted to actualize the concept of sustainable development in the mining communities. A mixed research approach was adopted using both the quantitative and qualitative methods. Purposive and snowballing sampling techniques were used to select respondents. A total of 100 questionnaires were administered as and the study received a response of 79%. Closed and open questionnaires, focus group discussions and interview guides were used to collect data from respondents. The study revealed that due to lack of laws on the sustainable development of the mining community at the time of the closure of the of the mine in Kabwe, economic activities dwindled and most former mine workers have ended up being engaged in other activities, mostly agriculture to earn a living. The study also revealed the need to have laws in place to regulate the mine closure in terms of benefits, but revealed a general lack of understanding on the concept of sustainable

Keywords: Legal Reforms, Sustainable Development, Advocacy, Ombudsman
1. INTRODUCTION

This article explores the effects of the closure of the Kabwe lead-zinc mine on the community in the context of sustainable development. Likewise, it examined the laws and policies that affect the mining sector in Zambia so as to ascertain the impact these have on communities adjacent to mining operations throughout the mine lifecycle. This article also proposes that legal reforms be enacted to concretize the concept of sustainable development in the mining communities.

Communities around mines in Zambia often sink into a state of abject poverty once the mine closes, as all opportunities of economic and socio activity disappear with the mine closure. This scenario has replicated itself in various communities in the mining towns of Zambia and in particular in Kabwe where a lead-zinc mine, once operated. This article focuses on the Kabwe experience. Although the law in Zambia adequately provides for the planning of a mine from exploration right through the operational phase and eventual closure of the mine, what seems to be clearly lacking is the planning for the sustainable development of the community economically and socially, after the closure of the mine and then ensuring that these laws are enforced. The benefits that accrue to a community where a mine operates are apparent, as during its lifetime jobs are created, and business opportunities arise in terms of supplies and services to the mines. However, once the mine closes all these opportunities disappear, and leave the members of the community in a dire situation, as this case study of the Kabwe lead-zinc mine will show.

This article shows that the economic, social and environmental decline of the community in Kabwe is mainly attributable to the lack of a socio-economic closure plan at the time of mine closure. Further and more specifically it is attributable to the lack of a legal framework that is not only regulated but enforced to guide the mine and the community on the measures that needed to be put in place to ensure that the sustainable development of the mineral resources was attained economically, socially, as well as environmentally, beyond the life of the mine. It is proposed that Legal Reforms
can address this gap, so as to provide for practical guidance and implementation measures that can contribute towards sustainable development. Such measures could include the legislation of corporate social responsibility in a harmonized legal framework, as well as the creation of a complaint and investigative body such as an Ombudsman, in relation to the mining sector that will hold mining companies accountable to set goals and targets, as agreed with the community, for areas of prioritization in terms of sustainable development. A harmonized legal framework could provide for cohesion across the ministries and authorities that regulate mining. Coordination in the manner in which investors in the mining sector carry out corporate social responsibility activities would also be structured, in line with Government policy, on attaining sustainable development in the mining sector and beyond.

This article is divided into four sections as follows. After this introduction, section 2 examines the socio-economic impacts of the Kabwe lead-zinc mine. This examination is presented through an outline of the research design and methodology employed for the given context of the case study. This section is wrapped up by the literature review. Section 3 is dedicated to a discussion of the findings obtained from the research and culminates into recommendations. Ultimately section 4 is the concluding section.

2. ASSESSMENT OF SOCIO-ECONOMIC IMPACTS OF THE KABWE LEAD-ZINC MINE

2.1 Research Design and Methodology

The methodology for the research questions was a single, descriptive and analytical case study of the Kabwe lead-zinc mine. A mixed method research approach was adopted using both the quantitative and qualitative methods. Purposive and snowballing techniques were used to select respondents. A total of 100 questionnaires were administered to former miners and response rate of 79% was achieved. Closed and open questionnaires, focus group discussions and interview guides were used to collect data from respondents in a focus
group discussion and key informants whom included three officers from the Local Council in Kabwe, two doctors from Kabwe General hospital and Kabwe Mine Hospital respectively, a Church leader from the United Church of Zambia, a teacher from a Secondary School in Kabwe, an officer from Kabwe Chamber of Commerce, an officer from Kabwe Farmers Association, a Chief Engineer from the Ministry of Mines and Resource Development and a Chief Draftsman at the Ministry of Justice. Apart from books a total of 65 papers were read and 36 databases were consulted for the literature review.

2.2 Literature review

Mining has been the mainstay of the economy in Zambia for several decades now. For many African countries, Zambia included, mining has contributed to significant economic gains in terms of contribution to the Gross Domestic Product (GDP).\(^1\) Despite of accounting for 75% of all export earnings,\(^2\) and contributing to 26% of the Government revenues, the communities around the mines do not seem to have received socio-economic development which is sustainable beyond the lifespan of the mining activities.\(^3\) It has been acknowledged that resource extraction and production in many parts of Africa has not fostered corresponding economic, social and environmental development and growth for citizens.\(^4\) It is starkly evident therefore that there remains a significant gap between the quality of life of the community whilst the mine is operating and after mining operations cease. Overcoming the age old conflict of the development of resources and the distribution of impacts and benefits is crucial in socio-political and social-economic terms. The World Bank Extractive Industries Review concluded that extractive industry

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1. Damilola S. Olawuyi, Extractives Industry Law in Africa (Springer Nature Switzerland, 2018), 5
3. Tomas Federiksen, ‘Political settlements, the mining industry and corporate social responsibility’ (2018) 165
4. Supra note 1, Abraham Kumah, ‘Sustainability and gold mining in the developing world,’ (2005) 321
investments only foster sustainable development if strong safeguards for environmental, social and human rights aspects, among other conditions are in place. Sustainable development requires net and equitable benefits and the building of social capacity for the affected communities that continue throughout and beyond the closure of a mine.

Adam and Simpasa argue that, the central economic challenge facing Zambia at the time of independence and the central challenge now and in the future, “is to find the right model for the efficient exploitation of its natural resource endowment and the equitable distribution of the rents arising from this exploitation.” Frederiksen also argues that “Zambia’s attempts to develop through natural resource extraction have been repeatedly thwarted by economic mismanagement and countervailing global prices.” Initially various policies such as the Africanisation policy during the colonial era and the Zambianisation policy implemented after Zambia attained independence in 1964, were put in place to ensure that the communities within which the mines operated were developed and that the members of the communities benefitted from the revenues earned from the mines. These benefits included housing, access to health facilities, educational facilities as well as recreational facilities. The collapse in copper prices, however, rendered these policies untenable and in the case of the Kabwe lead-zinc mine, heavy financial losses forced the state to run Zambia Consolidated Copper mines (ZCCM) company to shut down operations. The economy of Zambia experienced a devastating downturn during the 1970’s and a steady decline with per capita income.

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6 Heledd Jenkins, and Louise Obara, ‘Corporate Social Responsibility (CSR) in the mining industry—the risk of community dependency,’ (2008) 5, Gavin Hilson, and Barbara Murck, ‘Sustainable development in the mining industry: Clarifying the corporate perspective,’ (2000) 228
7 Christopher Adam and Anthony Simpasa, ‘The Economics of the Copper Price Boom in Zambia’ in Alastair Fraser and Miles Larmar (eds) Zambia, Mining and Neoliberalism Boom and Bust on the Globalized Copperbelt, (2010) 85
8 Supra note 3
9 Paitience Mususa, ‘Mining, Welfare and Urbanisation; the wavering charac-ter of Zambia’s Copperbelt’ (2012) 571, 576
falling, almost 5% annually from 1974 through the 1990’s.\textsuperscript{10} The heavy national debt burden in the 1990’s led to structural adjustments being imposed on the country by financial backers and as Zambia underwent a change in Government in 1991, it was subsequently influenced by its lenders, in particular the World Bank, to dismantle and privatize its mines.\textsuperscript{11} Privatization proved to have a scarring effect on the communities around the mines. Most of the infrastructure and roads, fell into a state of disrepair and facilities that were previously free such as health, education and recreation, all became fee paying.\textsuperscript{12}

The relevant legislative framework at the time, in the form of The Investment Act, Chapter 385 of the Laws of Zambia, favoured investors as opposed to the communities within which the investment was located. The Investment Act provided investors with general and special incentives such as tax holidays for periods up to 5 years, acquisition of self-employment or resident permits for investments in excess of two hundred and fifty thousand dollars (USD250,000), acquisition of land and provision of essential services. Fraser and Lungu, state that during the period between 1991 and 2004, the labor force in the mining sector was cut down from 56,582 to 19,900 workers during the privatization process.\textsuperscript{13} Development Agreements (DA’s) were also entered into between the Government and the private companies, which bought the mines, and it was subsequently revealed that in these DA’s the mining consortiums were granted generous exemptions and privileges in relation to taxes, the environment and social issues for up to 20 years.\textsuperscript{14} The result was that legacy issues were put in place through the DA’s, as the mining companies would be exempted de facto from any relevant laws that parliament might pass during that period, and from any other amendment to the national legal framework.\textsuperscript{15}

\textsuperscript{10} Supra note 2
\textsuperscript{11} Counter Balance, Challenging the European Investment Bank, The Mopani Copper Mine, Zambia (2010)
\textsuperscript{12} Alastair Fraser and John Lungu ‘For whom the windfalls? Winners and losers in the privatization of Zambia’s copper mines, (2006)
\textsuperscript{13} Supra note 11
\textsuperscript{14} Supra note 10
\textsuperscript{15} Supra note 10
Diverse studies on the effects of mine closure, in the communities within which they operate, have been conducted and suggestions made to alleviate the plight of the members. For instance, Limpit law and Smithen advocate that sustainable development of the communities around the mines should be made a priority during the mine closure process.\textsuperscript{16} Another school of thought emphasizes the need for corporate social responsibility plans to be implemented through designs that focus on social, environmental and economic needs of present and future generations where consultation between the investor, local communities and government takes place in a transparent manner.\textsuperscript{17} Louit et al advocates for community development agreements to be tied in with the mining companies’ investment agreements to ensure enforceability of corporate social responsibility.\textsuperscript{18} Companies that have an extractive industry have also been encouraged to codify laws that will allow for the domestication of the legislative framework on sustainable development.\textsuperscript{19} Bastida and Bustos in citing paragraph 228 of \textit{The Future We Want} emphasize that the role of law and policies in facilitating the economic and social contributions of mining and establishing safeguards is to reduce environmental and social impacts, conserve biodiversity and ecosystems well beyond mine closure.\textsuperscript{20} However it is apparent that Zambia has not codified adequate laws in terms of regulatory and enforcement mechanisms to ensure that sustainable development of the communities is achieved whilst the mines are in operation, and such


\textsuperscript{19} Kendra Dupuy, ‘Community Development requirements in mining laws’, (2014)

development continues to be sustained even after the life span of the mine. This observation will be demonstrated by way of an analysis of the existing legal framework and more particularly the regulation and enforcement process of the same through the key informants at the Ministry of Mines and Minerals Development in the research presented in this article.

An analysis of the legislative framework in place on sustainable development of the mining sector, at both an international and local level in Zambia has been undertaken. The article will also show the effect of the lacuna in the law in terms of community development by way of a case study of the Kabwe lead-zinc mine which was operational in Zambia from 1902 to 1994 when it was closed. The article illustrates the need to fill this gap through legal reforms.

3.0 DISCUSSION

3.1 Sustainable development gaps in Zambia’s mining regime

The information that was obtained from participants through questionnaires and interviews is discussed in the following sections.

The study established that before the closure of the mines, the mining community was doing well with regard to economic performance as there were a lot of employment opportunities and social amenities were accessed with ease. In relation, to the laws and policies in that affect the mining sector in Zambia and particularly the communities in which they operate, it revealed that there were no known laws and policies at the time in place to guide the effects of the Kabwe mine closure. However, laws and policies in Zambia now do exist that guide the mine operations from ‘cradle to grave’. Furthermore, it was also revealed that the effects of the mining closure ranged from former mine employees together with their children opting to go in the rural areas to take up farming as such the number of pupils were reduced in some schools, mine hospital standards reduced as good facilities vanished from the hospital. Unemployment reached its highest level in Kabwe and business opportunities in Kabwe dwindled.
3.1 Unsustainable closure of Kabwe lead-zinc mine

When the Kabwe lead-zinc mine closed many miners were left with houses and their retirement packages. However, this in and of itself was not enough to ensure that the community would continue to develop in a sustainable manner as in fact the opposite happened. This was the scenario that played itself out in the copperbelt and other mining towns in Zambia as Mususa explains that most miners were retrenched in 2003 and they received a house, some cash representing their terminal benefits with little or no prospects of employment. As there were no closure plans in place for the Kabwe lead-zinc mine a lot of legacy issues arose in terms of the environment, economy and health and safety of the community which the government and various stakeholders are still grappling with to date. A study of the abandonment of a uranium mine in Ciudanovita, Romania revealed that there were no procedures in place regarding the security and long term health of the population nor were there any plans to decrease the adverse economic impact on the community in Ciudanovita. Segerstedt and Abrahamson argue that one often-mentioned aim is that after mining activities have ceased, there should be as few footprints as possible in nature and the landscape and in the life of the people living in the area. None of the respondents who answered the questionnaire were in management. The absence of those who were in management is attributed to the fact that they left Kabwe once the operations at the mines began to slow down and eventually cease as there was no closure plan in place. Further the survey suggests that employees in the management cadre were moved away from Kabwe to other operational ZCCM sites. This partly explains the glaring lack of community development activities post-closure of the mine. Consequently, there are negative legacies of social,

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21 Paitience Mususa, ‘“Getting by”: life on the Copperbelt after the privatisation of the Zambia Consolidated Copper Mines: Social Dynamics’ (2010)
22 Merciu George-Laurentiu, Merciu Florentina-Cristina, Cercleux Andreea-Loreta, ‘The assessment of social and economic impacts associated to an abandoned mining site, Case study: Ciudanovita (Romania)’ (2016)
23 Eugenia Segerstedt and Lena Abrahamsson, ‘Diversity of livelihoods and social sustainability in established mining communities’ (2019)
Ruth Hachitapika Chibbabbuka, Jewette Masinja, & Isabel B. Franco

economic and environmental issues which the Government of Zambia is still grappling to solve to this day (2019).

The findings also revealed that 78% of the former miners had not found alternative employment, as at the day of the survey. The respondents indicated that before the closure of the mine, their incomes were adequate, to meet normal household expenses and they were all able to attain a normal income from either formal employment or other business enterprises such as farming, restaurant businesses, marketeers, guest houses and shops. As at the day of survey however, none of the respondents raise income from other ventures. This state of affairs is contrary to what Strongman’s position as he advocates that the expected sustainable development that a mine is to attain in a community would include; establishing and implementing an effective engagement process; improving people’s well-being; assuring the integrity of the environment; improving the local economy through economically viable projects; ensuring acceptable impacts on traditional and non-market community activities; establishing effective institutional arrangements and governance; and achieving a positive net result in the long term with appropriate metrics and periodic reassessments.24

Successful examples of sustainable development of mining communities post closure have been recorded in the following countries as narrated by Strongman25 below.

“Here there were three examples – two from Canada and one from the United States of successful mine closure – where communities have achieved “life after mine closure” First is the Elliott Lake uranium mining operation in Canada, where about 2,000 company housing units have been successfully converted into a successful retirement community. Next is the Island Copper Mine in British Colombia, Canada where there are new wood processing and aquaculture operations. Third, is the Ridgeway gold mine in South Carolina, where the mine introduced a bonus payment system so that it could retain the key

24 John Strongman, ‘Sustainable Mining Development from Concept to Action, Mining and the Community’ (2002)
25 Ibid
workers needed to complete the closure. The Washington DC conference also included two examples of mines where a comprehensive mine closure approach is presently being implemented – these are the Kelian gold mine in Indonesia where the local Rio Tinto foundation will continue to assist the community after mine closure and the Misima gold mine in Papua New Guinea where the mining company has actively supported the community to set up its own mine closure planning task force and to plan for the future after the mine closes”

This reveals that the closure of the Kabwe lead-zinc mine has a negative effect on the community as the benefits that were generated from the mine did not go towards the sustainable development of the community.

Due to the numerous negative effects that unplanned mine closures have had particularly on the communities around the mines, the mining industry has acknowledged that mining companies need to plan for mine closure in the same manner as they apply for an entire operation of the mine. Cheng advocates that planning for the closure of a mining operation should be carried out as part of the due diligence and feasibility process.26 Ensuring the best outcome for the community is one of the many challenges confronting a mining company and its management team as they attempt to optimize shareholder value and stakeholder engagement without leaving any sector out is imperative.27 Equally gaining the trust of the local community and ensuring that a mine closure plan is approved by a variety of stakeholders is essential in addressing sustainability of mining communities.28

The findings also revealed that there is also a general lack of awareness of what sustainable development means. This

26 X Cheng and N Nehring, ‘An investigation into the impact of mine closure and its associated cost on life if mine planning and resource recovery’ (2016)
28 Lavdmaa Dagvadorj, Mamoru Ishikawa, Bolorchimeg Byamba, ‘ Effect of Local Community’s Environmental Perception on Trust in a Mining Company: A Case Study in Mongolia’ (The Superfund 2018), <www.epa.gov> accessed 25th May, 2019
can be attributed to the fact that the concept of sustainable development had not yet been adopted in the mining sector in Zambia at the time. It is as such imperative that advocacy and sensitization is done in the communities adjacent to mining operations through advocacy programmes in collaboration with mining companies, government and non-governmental organizations. Additionally the education system in the country should include the concept of sustainable development so as to have a holistic approach to the dissemination of this vital information to the general citizenry.

Figure 2 shows the above mentioned respondents’ responses on their current formal employment status.

The findings revealed that 62 (78%) of the respondents had not found employment and 17 (22%) had found employment after mine closure. 9 (53%) were in private companies, 5 (29%) were in government and 3 (18%) were in parastatals. This could be attributed to the fact that there was a lack of employment opportunities in Kabwe considering that the mines were the major employer by then. The age of the respondents is another factor as most of them are elderly which could imply that the zeal to look for new employment opportunities is no longer there.
Furthermore, one focus group discussion was held with six former employees of the lead-zinc mine in Kabwe. The focus group discussion revealed that the community adjacent to the mine enjoyed life before the closure of Kabwe lead-zinc as every month some essential commodities such as mealie meal and cooking oil were given to them by the mining company through its super market and within the mining residential area. This information was verified by an officer from the Kabwe Chamber of Commerce who was also a key informant in this research. The officer from the Kabwe Chamber of Commerce stated that every miner was entitled to a bag of mealie meal, a five litre container of cooking oil every month. In addition to that the mining community also received gardening equipment to keep the surrounding environment clean. One female participant aged 64 years stated:

“When the mine was in operation we lived a very good life. Essential goods like mealie meal, cooking oil to mention a few were attained every month end from the mine shop within the community. Water was given free of charge and the recreation centres for adults and the children were in full operation. There was no boring moment in those days.”

Another female participant added that;

“Health facilities were well equipped with all the essential drugs and services and they were provided free of charge and the Mine school had very good facilities and they were free of charge to the mine community.”

In relation to the effects of the closure of the mine on their lives the participants revealed that they stopped receiving all the essential commodities that they were previously privy to, additionally the mine hospital started running short of drugs and all essential services ceased. One female participant had this to say;
“We started experiencing hardships like never before. We had to buy all the commodities now. School fees were introduced in schools for our children. Most of our colleagues started going to the villages to take up farming as a livelihood.”

Another female participant stated that:

“Effects of lead started being felt especially by the children who started getting sick as a result of waste disposals. Furthermore, recreation facilities became non-functional as there was no support to manage them.”

Responses from the key-informants revealed that before the closure of the mine, mine workers were doing well economically as there were; a lot of employment opportunities within the mine and the support service sectors like the education and health sectors; a lot of good facilities for social amenities, recreation and entertainment such as play grounds, mine shops, mine schools, mine hospitals; and the church could undertake any project without many challenges as the people were more than ready to participate. However, all this changed when the mine closed.

All this information gathered from the focus discussion group was verified by six key informants who were interviewed on different dates and they comprised a Chief Engineer at the Ministry of Mines who previously worked for ZCCM, a medical doctor from Kabwe General Hospital, a medical doctor from Kabwe Mine Hospital, and three Council Officers from Kabwe Municipal Council. They in summary stated that before the closure of the mines, mineworkers were doing very fine economically as there were; a lot of employment opportunities; a lot of good facilities for social amenities, recreation and entertainment such as play grounds, mine shops, mine schools, mine hospitals; and the church could undertake any project without many challenges as the people were more than ready to participate. However all this changed when the mine closed.

In explaining the effects of the closure of the mine the key-informants who were eleven in total were comprised as follows: three officers from the Kabwe Municipal Council, one medical Doctor from Kabwe General Hospital, one
church leader from United Church of Zambia, one teacher from a Secondary school, one medical Doctor from Kabwe mine hospital, one officer from Kabwe chamber of commerce and one officer from Kabwe Farmers Association, a Chief Engineer at the Ministry of Mines and Resource Development and a Chief Draftsman at the Ministry of Justice. The key informants were selected using purposive sampling. This method was used to enable the researcher to sample only the people who were relevant in providing information for this study. They stated that:

“Some parents together with their children opted to go to the rural areas to take up farming as there were no employment opportunities in Kabwe as such the number of pupils were reduced in some schools.”

“There was a reduction of turn over from the sales by the farmers as most people could not afford to buy most commodities from the markets because a lot of people in Kabwe had lost jobs.”

“The hospital standards went down because the mine which was the sponsor of the mine hospital had closed down. Most of the special facilities such as essential drugs and services being provided for the mine workers free of charge ceased. There was an increase in the number of cases being diagnosed in patients.”

“Church projects stalled as some members (former miners) went to other towns such as the Copperbelt to look for work. In short membership reduced and church finances crumbled.”

Most of the former miners no longer reside around the mines. Only about 10% of them reside in mining residential areas as was discovered in a census conducted by the Kabwe Municipal Council in assessing the effects of lead contamination for a Zambia Mining and Environmental Remediation Improvement project under the World Bank.

These claims are confirmed by a recent report generated by the Department of Development Planning at the Kabwe Municipal Council for the transformation of Kabwe into a city spanning the period 2016 to 2021. In that report the Kabwe Municipal Council noted the following:
The population growth rate of Kabwe has been on the decline from below 7% between 1969 and 1980 to 0.5% between 1990 to date. Factors responsible for this downward trend include general poor economic performance in the district which has resulted in people moving from the town to other towns and cities and rural areas. Kabwe district’s situation was exacerbated by the closure of the basic supporting industries which further slowed down the population growth. The closure of the Kabwe mine, Zambia Railways, the Mulungushi Textiles and other supporting industries led to a significant economic decline in the district. Kabwe had a number of manufacturing industries including the Zambia-China Mulungushi Textiles plant established with Chinese investment in the 1980s, but after suffering such large loses at the beginning of 2007, the plant as closed to date.29

It is evident that the closure of the Kabwe lead-zinc mine had far reaching negative effects on not only the former mine workers but on the entire community in Kabwe.

The lack of mine closure plan incorporating sustainable development of the mining community negatively impacted not only the members of the community but the development of the entire town of Kabwe. As such it is imperative to ensure that an upward trajectory in terms of development is not only attained but sustained so as to avoid a downward trajectory and causing an entire urban area to change its character from that of a town to a village.30

3.2 Gaps in the legal and regulatory regime in mining

All the respondents from the questionnaire survey indicated that they were not aware of any laws in place to guide the closure of operating mines. However, 17 respondents representing 22% felt that environmental laws could have improved the impact of the mine closure. On the other hand

29 Department of Planning, Kabwe, Transformation of Kabwe into a City: The Kabwe we want tomorrow (2019)
30 Supra note 8
62 respondents representing 78% indicated that they had no idea on what laws could have improved the impact of the mine closure.

Figure 3. Respondents’ responses as to what laws could have improved the impact of the mine closure

The focus group discussion revealed that the participants were not aware of any law or policy that were meant to guide the closure of the mine as one 64 year old participant stated that;

“We were not told of any policy or law that guided the closure of the mine. What we heard was that the mine is closing.”

Three council officers were interviewed as key informants, and revealed that there were supposed to have been laws and policies in place to guide the closure of the mine and disposal of waste, since the lead waste was still affecting the health of the local community especially the children in Kabwe. An officer from the Kabwe Chamber of Commerce stated that;

“Laws that were going to protect the environment were very important during the closure of the mine but unfortunately there was nothing in place and that a deliberate policy was supposed to be put in place to help the former miners start businesses of their own.”
The situation that was pertaining at the time the Kabwe lead-zinc mine was in operation until its closure in 1994, in respect of the law that was in place, was the Mines and Minerals Act of 1976, Chapter 329 of the Laws of Zambia. This particular Act repealed the pre-colonial legislation. Ndulo states that prior to independence mineral rights were held as private property by a few companies and did not develop these mineral resources as such the 1976 Act was enacted to remedy this situation and encourage the development of Zambia’s mineral resources.\textsuperscript{31} The said 1976 Act provided under sections 54 and 55 that a mining company was obligated to develop the minerals in accordance with accepted mining standards that stipulate avoidance of wasteful mining and metallurgical practices in accordance with a “program of development and mining operations.” Ndulo however notes that the 1976 Act did not provide a standard for determining when the mining right holder had breached these obligations.\textsuperscript{32} This observation is in tandem with the occurrence at the Kabwe lead-zinc mine as the law at the time did not adequately provide for a rigorous standard to determine whether any breaches were in existence particularly at the time of the closure of the mine. Consequently there was virtually no measurement of the compliance of the mine to the existing legal framework.

The lack of a rigorous enforcement procedure led to the repeal of the 1976 Act and subsequent enactment of the 1995 Act which is referred to by a key informant from the Ministry of Mines below. According to this key informant from the Ministry of Mines and Mineral Resources Development he stated as follows;

“At the time the Kabwe lead-zinc mine was closed, the mining Act that was in place did not address environmental or CSR issues. The 1995 Act under section 75 provided for Environmental Impact Assessments (EIA) to be done before a mining right could be granted. The EIA process was controlled by the Environmental Council of Zambia (ECZ) created in 1990 by the Environmental Protection and Pollution

\textsuperscript{31} Muna Ndulo, ‘Mining Legislation and Mineral Development in Zambia’, (1986)

\textsuperscript{32} Ibid
Control Act (EPPCA), Chapter 204 of the Laws of Zambia. The 1995 Act also provided for payment of royalties by the mining companies to the government of Zambia. The 1995 Act was repealed and replaced by the 2008 Act which additionally provided that part of the royalties paid from the mining industry should be retained in the community and this process would be done by the Ministry of Mines in consultation with the mining companies. That however the payment of royalties as framed in the 2008 Act was removed in the current Mines and Mineral Resources Development Act of 2015 and as such there was nothing to safeguard the community.”

The key respondent from the Ministry of Justice stated as follows:

“Section 4 (d) and (f) of the 2015 of the 2015 Act indicates that the development of local communities in the area surrounding the mines should be based on the community needs, health and safety. Although there is no legislation for Community Development Agreements (CDA) the law was sufficient in terms of providing for sustainable development and that what was lacking was the enforcement mechanism for the same.”

Echoing the view that sustainable development in the mining sector now relates to the corporate social responsibility of the mining company towards the community that it operates in, Olaleye defined Corporate Social Responsibility (CSR) as

...the decision-making and implementation process that guides all company activities in protecting and promoting international human rights, labour and environmental standards and compliance with legal requirements within its operations and in its relations to the societies and communities in which it operates.33

33 Wole Olaleye, ‘Corporate Governance Practices of South African Mining Companies with operations in South Africa’ in Claude Kabemba and Roger
However, it has been acknowledged that corporate social responsibility is voluntary as companies are not obliged to plough some of their profits into their communities and it is seen as more of a moral obligation than a legal one. To overcome this challenge some scholars have discussed the aspect of CSR being legislated on and being made part of the mining laws and in many contexts a number of countries have adopted this approach to tie mining companies to commitments made to local communities.\textsuperscript{34} Dupuy advocates that the new public regulation approach in adopting community development requirements via legislation so as to address the mining’s impact on communities, goes beyond mitigating the negative effect of mining on the local communities (such as through compensation arrangements and environmental laws) to requiring governments to ensure that mining translates into real, positive social and economic gains for the mining communities.\textsuperscript{35} Zambia is not amongst the countries that has effected community development requirements either by law or agreement. Rather the converse has been obtaining as the type of Development Agreements entered into between Zambia and the mining companies were in fact more favourable to the mining companies than the communities within which the mines operated.

That being said however, other scholars have argued that incorporating CSR in mining legislation in and of itself is not enough but that what is required is for Community Development Agreements to be entered into between the mine, government and local community before a mine begins its operations. A Community Development Agreement (CDA) according to Otto is narrowly defined as a legally binding contract between the holder of an authorization granting the rights to extract minerals, and a community (or communities) that will be affected by the exercise of those rights, that

\begin{itemize}
  \item \textsuperscript{34} Claran O’ Faircheallaigh, ‘Shaping projects, shaping impacts: community-controlled impact assessments and negotiated agreements’ (2017) David Szabowski, "Legal enclosure" and resource extraction: Territorial transformation through the enclosure of local and indigenous law’ (2019)
  \item \textsuperscript{35} Supra note 18
\end{itemize}
addresses matters concerning community development.36 Malunga argues that a CDA is a means of reducing risks in mining business through managing mining community expectations and contributing to development of activities without taking over government obligations.37 Otto additionally states that relying on companies to voluntarily assist in community development is risky as not all companies are good corporate citizens and not all are competent to know how much assistance to offer and so for this and other reasons a good number of governments are now mandating the use of CDAs or other community development tools in their mining legislation.38

In instances where countries have taken a mandatory approach to CDAs, studies have shown however that even where CSR is legislated and CDAs are provided for, the enforcement of the same is lacking as some companies do not adhere to these regulations. In examining the effect of legislated CSR in Nigeria in that countries Mines and Minerals Act 2007, Akinsulore contends that although the Act obligates mining companies to enter into CDAs with the communities within which they intend to operate, there is still a lack of prioritisation of CSR towards these communities by the mining companies and this is due to the fact that the communities are ignorant of the existence of this law and the requirement to enforce it.39 Stretching the argument that mere regulation of CSR is not enough to realise actualization on the ground, Loutit et al, advocate that CDAs can be enforced through the tying of the companies’ investment agreement with the said CDAs as a breach of the CDA would be an automatic breach of the investment agreement with the Country within which it has been granted a licence to operate.40 In consolidating this argument further Loutit et al, propose that laws should also be enacted that deem conditions in CDAs to be conditions of mining authorisations meaning

37 Grain Malunga, ‘The nature of mining contracts’ (2016)
40 Supra note 17
that if the terms of the CDA are not met then the licence to operate will be cancelled. Otto argues however that if the CDA legislation is robust, it can provide a clear roadmap for mandatory processes, approvals, monitoring, and enforcement, all of which are lacking in an unregulated approach to mine-assisted community development.

The preceding discourse reveals that the legislating of CSR is left up to a country as it is not mandatory, but that should a country decide to do so legislating CSR and providing for CDAs in and of itself is not enough and what is required is a mechanism to ensure that effective monitoring and enforcement of the regulations of the mines in terms of CSR is realized. It is proposed that an Ombudsman be created to fulfil this role. It is also apparent that the members of the local communities also need to be made sensitized as to what these CDAs mean for them as a community and the need for sustainable development to be actualized through the said CDAs.

3.3 Addressing sustainability gaps in mine closure in Zambia

3.3.1 Changes that are required to bring Zambia’s laws in line with regional and international standards

The International Council on Mining and Metals (ICMM) through its development principles, assists the mining sector to achieve a more efficient and sustainable performance. The Extractive Industries Transparency Initiative is a global standard that promotes transparency and the management of revenues from natural resources from governments and how they benefit the public. The UN Sustainable Development Goals (SDG’s) set a global aspiration to end poverty, fight inequality and injustice, and tackle climate change by 2030. The International Finance Corporation (IFC) Performance Standards on Social and Environmental Sustainability is a

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41 Ibid
42 Supra note 37
legally independent World Bank department that finances private sector initiatives to promote sustainable economic growth in developing countries and enhance local communities’ livelihoods. Zambia has been a recipient from IFC.\textsuperscript{46} The International Standardization Organization (ISO) supports its members in maximizing the benefits of international standardization so as to meet the UN SDG’s.\textsuperscript{47}

Regionally, the African Mining Vision (AMV) established and adopted in 2009 by the African Union (AU) to promote equitable, broad based development through the prudent utilization of the continent’s natural wealth. It upholds the principle of free, prior and informed consent for mining affected communities, and addresses the social and environmental impacts of mining.\textsuperscript{48} The Southern African Development Community (SADC) Protocol on Mining adopted in 2000 provides a formal framework for cooperation and integration in the region’s mineral industry.\textsuperscript{49}

The international and regional frameworks are all voluntary and as such it is up to member states to make these standards, recommendations and guidelines mandatory through legislation by domesticating them in their local laws. Additionally advocacy in the mining communities of both international and regional frameworks is key as most members of the communities are unaware of the requirements laid out in these frameworks, which hampers effective consultations with mining companies.\textsuperscript{50} Of particular interest is The African Mining Vision (AMV) which the African Union (AU) has expressed to be ‘transparent, equitable and optimal exploitation of mineral resources to underpin broad-based sustainable growth and socio-economic development.’\textsuperscript{51}

The African Union through its shared vision also aspires to among other things attain,

\textsuperscript{46} International Finance Corporation, Performance Standards on Social and Environmental Sustainability, <https:/www.ifc.org> (2012)
\textsuperscript{47} The International Organization for Standardization, (2018) <www.iso.org>,
\textsuperscript{48} Oxfam International, Unpacking the African Mining Vision, (2017)
\textsuperscript{51} African Union, African Mining Vision, (2009)
• a sustainable and well governed mining sector that effectively garners and deploys resource rents and that is safe, healthy, gender and ethnically inclusive environmentally friendly, socially responsible and appreciated by surrounding communities.
• a mining sector that harness the potential of artisanal and small-scale mining to stimulate local/national entrepreneurship, improve livelihoods and advance integrated rural, social and economic development.\textsuperscript{52}

The AMV has provided for its implementation through the following derivative policy instruments: the Country Mining Vision (CMV) and the Africa Mineral Governance Framework (AMGF). The CMV is the mechanism for the national adoption of the AMV which builds national ownership for consultation and dialogue in determining priorities for the mineral sector, identifying rules and responsibilities of all stakeholders and stimulating reforms to national laws, policies and regulations required for mineral based development.\textsuperscript{53} The AMGF is a monitoring tool, with a series of indicators to assess the progress of African countries towards full implementation of the AMV as well as serve as a broad governance instrument for the mineral sector.\textsuperscript{54}

The AMV is quite elaborate in terms of implementation and has good provisions in terms of sustainable development of the local communities. Zambia however has not fully integrated the AMV through the derivative policies but is in the process of doing so.

It is imperative that the local legislation is harmonized with the international and regional frameworks as a number of standards, guidelines and principles have been developed to ensure that the mining sector attains not only the sustainable development goals but ensures that the mining communities also benefit from the mining activities and ultimately are developed in a sustainable manner. For Zambia the first port of

\textsuperscript{52} Ibid
\textsuperscript{53} Supra note 50
call would be to finalize the AMV implementation process in conjunction with the SADC mineral harmonization programme. Further the 2015 Act, needs to outline in detail how the General Principles will be actualized through subsidiary legislation that is regulations or a Statutory Instrument. This may require setting up a legal department in the Ministry of Mines and Mineral Resources to liaise with the Ministry of Justice to not only ensure laws are adequately promulgated but that harmonisation of international, regional and local policies and laws in the mining sector is attained.

Lastly the provision for the sharing of royalties should be reinstated with a clear mechanism of how the sharing of the revenues received will be done especially with regard to the communities around the mines.55 For example, when asked what matters the law should cover in terms of their experience from the closure of the mine the respondents from the questionnaire survey indicated that the laws should cover the disposal of mine wastes from lead.

Nationally, the Constitution of a country is the foundation for all the laws in a country, and in Zambia in particular, the Constitution is supreme thereby taking precedence over any other law that is contrary to it. It is noteworthy that other countries in Africa have not only embedded the principles of sustainable development in their Constitutions but have gone further to state how the principle will be enforced in other pieces of legislation. One such Constitution is that of the Constitution of South Africa (1996)56 that embeds the principle of Sustainable Development under Chapter 2, Article 24 clause (b) which states;

Everyone has the right- to have the environment protected for the benefit of present and future generations through reasonable legislative and other measures that –

(i) Prevent pollution and ecological degradation;
(ii) Promote conservation; and

55 Tomas Frederiksen, ‘Political settlements, the mining industry and corporate social responsibility in developing Countries’ (2018)
56 The Constitution of South Africa, 1996, JUTA Law, South Africa
(iii) Secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

Notably, Chapter 2 is the Bill of Rights which reflects the importance that the people of South Africa have attached to the concept of sustainable development, as being an inalienable right.

Another example is the Constitution of Kenya, 2010\(^57\) which also enshrines the concept of sustainable development as a guiding principle under Article 10 clause (2) sub clause (d). What is of note is that even in the preamble, the concept of sustainable development is embedded as it states, ‘We, the people of Kenya – Respectful of the environment, which is our heritage and determined to sustain it for the benefit of future generations…’.\(^58\) This national guiding value of sustainable development is echoed in Article 42 and Article 69 of the said Constitution. Article 42 not only guarantees the right to a healthy environment but also guarantees the protection of the same for present and future generations. Article 69 charges the State with specific steps that will ensure that the goal of sustainable development of the environment is achieved. For instance under Article 69 clause 1, sub clause (b) states that ‘The State is required to – work to achieve and maintain a tree cover of at least ten per cent of the land area of Kenya.’\(^59\) Article 69, clause (2) goes further in obliging the people of Kenya to co-operate with the State organs and other persons, in all their obligations set out under Article 69 towards protecting and conserving the environment and maintain the ecological sustainable development and use of natural resources.\(^60\)

Zambia’s Constitution however, has not specifically stated in what way sustainable development will be cascaded down into pieces of legislation in the mining sector and be enforced and neither does it state in which particular areas the concept of sustainable development will be most applicable. It is apparent that the principles enunciated in the Africa Mining

\(^{58}\) Ibid
\(^{59}\) Ibid
\(^{60}\) Ibid
Vision have not been incorporated in the Constitution of Zambia or at least been made reference to as one of the foundational policy provisions for the mining law in Zambia.

It is also evident from the above Constitutions that the manner in which the concept of sustainable development is applied and embraced by these respective countries is according to their specific needs. It is clear that sustainable development means different things to different people and nations. Indeed ‘Sustainability as a concept….. evokes different responses to different people.’

Consequently Zambia needs to amend its Constitution to clearly outline therein and various pieces of legislation applicable to what extent it has embraced the concept of sustainable development and give clear guidance as to how the same shall be implemented.

In terms of legislating CSR initiatives through CDAs there are proponents and opponents for this proposition. Early studies show that countries like Ghana that have provided for CSR initiatives through CDAs, expressed concern through various stakeholders that mandating CDAs for the mining sector in Ghana could among other things result in; government abdicating their responsibility for local and regional development and service provision; a feeling of entitlement from stakeholders; mining companies would be obligated to fulfil roles that were the remit of government. However a study in Papua New Guinea revealed that the development of mandatory CDAs through the law provided some successes in addressing the unrest at Bougainville mine as a result of the best practices being institutionalized within the mining law resulting in the mining companies being compelled to follow the laid down procedures. Stakeholders cited the concept of the Development Forum which is provided for in the Papua New Guinea Mining Act of 1992 as an example of best practice regarding engagement and participation and raising performance throughout the sector. Additionally Otto, argues that when compared to approaches that rely

62 Sunrita Sarkar, Alastair Gow-Smith, Tunde Morakinyo, Roberto Frau, Matthew Kuniholm, ‘Mining Community Development Agreements Practical Experiences and Field Studies’ (2010)
63 Ibid
entirely on voluntary actions by companies/projects, statutorily mandated CDAs greatly reduce the risk that sustainable community development will not take place.\textsuperscript{64}

Although arguments for non-legislation of CSR initiatives through CDAs have been propounded due to various experiences and views from stakeholders, it is proposed that the current Mines and Minerals Resources Development Act of Zambia also be amended so as to provide for CSR initiatives to be codified in CDAs. The Nigerian Minerals and Mines Act of 2007, obligates Mining Companies and the Communities within which they are to operate to enter into CDAs.\textsuperscript{65} These CDAs are to be entered into prior to the commencement of the operations of the mine and coerces a mining company to transfer social and economic benefits to the community within which it is to operate.\textsuperscript{66}

CDAs according to Loutit \textit{et al.}\textsuperscript{67} are increasingly becoming more common and present local communities with an opportunity to participate in self-determined development. This is based on the premise that the communities will be well informed of the investor project that is to take place in their community and will be engaged not only by the mining company but by government and other relevant stakeholders to ensure that the members of the community are fully conversant of the impact of the proposed project and can give their input in terms of decision making as far as development of their community is concerned.\textsuperscript{68} Loutit \textit{et al.}\textsuperscript{69} emphasise that in order to make these CDAs enforceable, governments can enact laws that deem conditions in a Community Company Agreement to be conditions of mining authorisations. This in essence means that a breach in the conditions of a CDA can result in the revocation of a company’s license to conduct mining activities in a particular community.

\textsuperscript{64} James Otto, ‘How do we legislate for improved community development? (2017)
\textsuperscript{65} Adedoyin Akinsulore, ‘The Effects of Legislation on Corporate Social Responsibility in the Minerals and Mines Sector of Nigeria’ (2016)
\textsuperscript{66} Ibid
\textsuperscript{67} Supra note 17
\textsuperscript{68} Ibid
\textsuperscript{69} Ibid
Other countries however have adopted alternative documents to the CDA. One respondent asserted that in the Democratic Republic of Congo, Memorandum of Understanding documents are entered into between the Mines and the communities within in which they are to operate, which document outlines the responsibility of the Mines with regard to the community.

It is apparent that an enforcement mechanism needs to be provided for in the laws in addition to CSR initiatives spelt out in the CDAs. It is proposed that a type of Ombudsman system be set up in the Ministry of Mines and Mineral Development under the Mines Safety Department. The Ministry of Mines and Minerals Development is responsible for policy frameworks and guidance in the mineral sector in Zambia and currently operates through the following departments: the Department of Planning and information, the Department of Mine Safety, the Department of Energy, the Department of Geological Survey, the Department of Human Resources and Administration. The Mines Safety Department (MSD) is responsible for monitoring and enforcing compliance to regulations on the conservation and protection of the environment and protection of human health and safety during prospecting, exploration and mining operations in the sector. It is the delegated authorizing agency for issues arising from mining licenses.\footnote{Moore Stephens, ‘Mineral rights to human rights-mobilizing resources from the Extractive Industries for Water, Sanitation and Hygiene, Case Study: Zambia’ (2018)}

The ‘Ombudsman’ is a Swedish word that means representative or agent of the people.\footnote{Financial Ombudsman, (2008) <www.financial.ombudsman.org.uk>} An Ombudsman primarily deals with complaints. They help settle disputes when the consumer has already complained to a business or organization but is not happy with the way the complaint has been dealt with.\footnote{Ibid} This system was adopted in Australia in the year 2000 through Oxfam International by the creation of a Mining Ombudsman. The Mining Ombudsman in Australia was set up to:

- Assist women and men from local and indigenous communities whose human rights are threatened
by the operations of Australian based mining companies;

- Assist women and men from communities that are, or might be affected by a mining operation to understand their rights under international law;
- Help ensure that the Australian mining industry operates in such a way that the rights of women and men from local communities affected by mining are better protected;
- Demonstrate the need for an official complaints mechanism within Australia; and
- Demonstrate the need for enforceable transparent and binding extra-territorial controls that would require Australian mining companies to adhere to universal human rights standards wherever they operate.\(^{73}\)

The process for the complaint system is that the Ombudsman receives the complaint, investigates it by conducting extensive interviews with the local community men, women and youth, civil society organizations, government and company officials. After the investigation process the Mining Ombudsman produces a report and sends the same to all stakeholders for comment and action and undertakes on-site evaluations every 18 months to two years.\(^{74}\)

Unlike the Mining Ombudsman in Australia that acts more of an umpire between the parties to ensure that companies treat local communities in a fair and equitable manner, it is proposed that the Mining Ombudsman in Zambia through set Sustainable Development goals and targets agreed in a Community Development Agreement monitors and regulates the implementation of the same not only through the complaint mechanism but as part of a regulatory and enforcement mechanism process. This suggestion and the practical implementation of the same will require further study.

### 3.3.2 Recommendations


\(^{74}\) Supra note 72
At the government level, there is need for the introduction of an Ombudsman in the mining sector, which will be both a complaint mechanism and an enforcement one as well. The Ombudsman system should be adopted to ensure that sustainable development and CSR initiatives are enforced by way of developing set targets for the mining companies to achieve, in consultation with the local communities and stakeholders, which targets will be monitored by the said Ombudsman. The Ombudsman can be an officer in the Mines Safety Department at the Ministry of Mines and Mineral Resource Development which is the department responsible for regulation of the mining sector. The government, though the Ministry of Education, to include sustainable development in the school curriculum, so as to enable Zambian’s have a change of mindset, from a young age, in order to understand what sustainable development means. The concept should run from primary level all the way to tertiary level.

At the corporate level, there is need for the government to harmonize local laws and policies with the international and regional legal frameworks and policies. This will require that a legal department be set up at the Ministry of Mines and Mineral Development that can be a liaison between the stakeholders in the mining industry and the Ministry of Justice who draft the laws as well as the Ministry of Foreign Affairs that ratify the international agreements.

At the non-governmental organization level, advocacy and campaigns for an awareness of what sustainable development means, and how it can be attained in communities surrounding mining operations needs to be implemented. Additionally, advocacy also needs to be carried out on the need for legal reforms that will provide for inclusion of sustainable measures in the laws and policies that affect the mining sector.

4.0 CONCLUSION

The sustainability of former mining communities is dependent on sustainable development plans and enforcement mechanisms being in place during the mining life cycle. The case study of the state of the former mining community of Kabwe lead-zinc mine brings this to the fore. Attainment of the sustainability of former mining communities can only be
achieved through laws that clearly spell out steps to be taken to ensure that sustainable development is achieved after the closure of the mines. Promulgation of laws in Zambia by way of legal reforms that clearly guide on the achievement of sustainable development post closure of a mine as well as the provision of an enforcement mechanism enshrined in the legal framework can address the current lacuna. Additionally, harmonization of Zambia’s mining laws and policies with existing international and regional legal frameworks and policies will enhance the attainment of this goal.

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