UNIVERSITY OF THE FREE STATE
UNIVERSITEIT VAN DIE VRYSTAAT
YUNIVESITHI YA FREISTATA

UFS
ECONOMIC AND MANAGEMENT SCIENCES
CENTRE FOR DEVELOPMENT SUPPORT

CORPORATE SOCIAL RESPONSIBILITY AND ITS CONTRIBUTION TO SUSTAINABLE DEVELOPMENT IN KHÂI-MA LOCAL MUNICIPALITY IN THE NORTHERN CAPE, SOUTH AFRICA

Submitted in fulfilment of the requirements in respect of the Master's Degree of Development Studies in the Centre for Development Support in the Faculty of Economic and Management Science at the University of the Free State, Bloemfontein.

EMDS7900

Donovan Charles Steenkamp
2018711248

November 2022

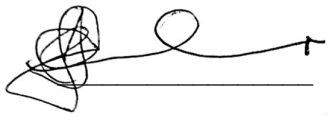
SUPERVISOR: PROF L. MARAIS

CO-SUPERVISOR: DR A. VENTER

DECLARATION

I, Donavan Charles Steenkamp, declare the thesis "**CORPORATE SOCIAL RESPONSIBILITY AND ITS CONTRIBUTION TO SUSTAINABLE DEVELOPMENT IN KHÂI-MA LOCAL MUNICIPALITY IN THE NORTHERN CAPE, SOUTH AFRICA"**, hereby submitted for the Master's Degree in Development Studies at the University of the Free State, is my independent work, and I have not previously submitted similar work for qualification at another institution of higher education.

I further cede the copyright of this thesis in favour of the University of the Free State.



18 November 2022

Name Date

ACKNOWLEDGEMENTS

First I want to thank the Almighty God and his son, Jesus Christ, who make everything in life possible. Through Your Grace I managed all challenges and because of you I was able to finish my degree.

I want to thank my supervisor, Prof L. Marais, and my co-supervisor, Dr A. Venter, both for keeping up with me and helping me set achievable goals. Their guidance and advice were integral in the completion of my dissertation with all its difficulties and challenges.

Many thanks to the Centre for Development Studies, Prof Deidre van Rooyen, and Mr Hlope for their administrative support and guidance. I want to thank the Department of Social Development for giving me a bursary to finish my studies. Thanks to the Provincial Human Resource Unit for their support and all other colleagues who guided and supported me.

Many thanks to my deceased grandparents Anna and Sara, my mother, Mary-Ann, and father, Charles, for raising me in difficult times. To my sister and brothers, many thanks to you for supporting me. To my entire family and all my friends for their continuous support and guidance while doing my dissertation: thank you. Finally, many thanks go to my best friend, Trevor, for their understanding and support.

Through God all things are possible.

ABSTRACT

This study examines the effects of corporate social responsibility (CSR) and sustainable development (SD) on the mining communities in the Khâi-Ma local municipality, Northern Cape province, South Africa. The study utilises a qualitative research method. The researcher conducted structured interviews with key informants, who were selected through purposive sampling. The data was analysed through thematic analysis.

The study explains the role of CSR and SD, and how these relate to each other. The study further provides an overview of the development and evolution of CSR, as well as an investigation into the impact that CSR and SD have on communities within the Khâi-Ma local municipality. It also examines the policy environment related to CSR. The study reviews guiding documents pertaining to the mining sector, such as the Mining Charter (2018) and Social Labour Plan Guidelines (2020).

Further, this research presents interviewees' perspectives on the contributions of CSR and SD in the aforementioned municipality, highlighting both their positive and negative effects. Core findings suggest that CSR and SD need to be introduced holistically to local host communities; therefore, collective planning and decision-making is vital so as to take into consideration community suggestions and contributions. Stakeholders should also indicate a clear understanding of the CSR and SD environment and its contributions to sustainable development.

TABLE OF CONTENTS

LIST OF TABLES AND FIGURES

LIST OF ACRONYMS

ABET	Adult Basic Education and Training
BBL	Broad-Based Livelihood
BEE	Black Economic Empowerment
BMM	Black Mountain Mining
CALS	Centre for Applied Legal Studies
CSI	Corporate Social Investment
CSR	Corporate Social Responsibility
DEA	Department of Environmental Affairs
DME	Department of Minerals and Energy
DMR	Department of Mineral Resources
DMRE	Department of Mineral Resources and Energy
EC	European Commission
ECD	Early Childhood Development
ED/SED	Economic Development/Socio-Economic Development
EIA	Environmental Impact Assessment
ESOPS	Employees Shareholding Association Participation Scheme
GAU	Georg-August-Universität
GDP	Gross Domestic Product
GFSA	Gold Fields South Africa
HDSA	Historically Disadvantaged South African
IDP	Integrated Development Plan
IIED	International Institute for Environment and Development
IISD	International Institute for Sustainable Development
ILO	International Labour Organisation
LED	Local Economic Development
MCSA	Minerals Council South Africa
MDG	Millennium Development Goal
MHSC	Mine Health and Safety Council
MPRDA	The Minerals and Petroleum Resources Development Act No. 28 of 2002
NGO	Non-Governmental Organisation

NQF	National Qualifications Framework
NSDS	National Spatial Development Strategy
PDIs	Previously Disadvantaged Individuals
PGDS	Provincial Growth and Development Strategy
PMG	Parliamentary Monitoring Group
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
RSA	Republic of South Africa
SAHO	South Africa History Online
SAHRIS	South African Heritage Resources Agency
SARW	South African Resource Watch
SD	Sustainable Development
SDG	Social Development Guidelines
SLPGs	Social Labour Plan Guidelines
SMME	Small, Medium, and Micro Enterprises
UN	United Nations
UNGC	United Nations Global Compact
VZI	Vedanta Zinc International

CHAPTER 1: SETTING THE SCENE

1.1. INTRODUCTION

The social impact of mining on communities surrounding and depending on mines, as well how mining affects human development, is significant (Petrova & Marinova, 2012; Ramoshaba, 2019; Myeni, 2021). Studies regarding the effects of industry on communities and their development are by no means recent; in 1996, Burdge and Vanclay (1996: 59) note that local consequences are the consequences to human populations from any public or personal activities that change however individuals live, work, play, relate to one another, organise to satisfy their wants and customarily survive as members of society.

For local communities, mining activities, and the mining companies in operation, may render several community benefits, such as employment opportunities, economic growth, training- and educational opportunities, provision of healthcare services, and infrastructure development (Hosseinpour, Osanloo, & Azimi, 2022). However, the mining industry may also have negative environmental and health impacts on the local communities (IIED, 2002; Sanoh & Coulibaly, 2015; Hosseinpour et al., 2022). Such negative effects include pollution of surface- and ground water sources, soil, and air, land ownership and -disturbance issues (Hosseinpour et al., 2022), an increase in crime and family destruction due to migration, as well as economic- and social inequality (Petrova & Marinova, 2012). These positive and negative effects occur throughout a mining project's lifecycle, and often continue after operations have ended (Gramling & Freudenburg, 1992; Agboola, Babatunde, Fayomi, & Sadiku et al., 2020).

Corporate social responsibility (CSR) comes into play when addressing the consequences of mining for the community, especially where such consequences can hamper human development. Petrova and Marinova (2012) note that, though harmful effects on the environment and infrastructure may only be seen after the physical environment has changed (for example through the building or collapsing of mines and associated structures, pollution, etc.), social consequences can be seen from very early on in the mining lifecycle – as early as from when mining activities are initially proposed. These social effects may include the establishment of groups based on specific interests, protests, fluctuations in property values, economic activities, as well as investment; these evolve along with the mine's lifecycle (Petrova & Marinova, 2012). In order to address such effects, corporate social responsibility (CSR) plays an integral role. The value of CSR is that it helps mining companies understand the expectations and needs of the community, employees, and other interest groups, enhances

and enables better communication between stakeholders, and ensures transparency regarding mining planning and processes by providing valuable information to invested parties (Pons, Vintrò, Rius, & Vilaplana, 2021). Mines' CSR practices should aim to ensure that the mining community will benefit from the extraction and sale of natural resources in long-lasting, direct, pertinent, and maintainable manner (IIED, 2002). Over the last decades, the entire process of incorporating sustainability considerations into development perspectives and corporate policies has changed how the mining industry operates. In other words, a new concern for mining companies is including sustainable development (SD) objectives in their CSR. Indeed, notes Molderez (2021: 116),

> Corporate Social Responsibility is the voluntary act of companies to integrate social and environmental interests into their business approaches, to contribute to sustainable development and to be accountable for their impact on the environment and society.

However, developing and implementing CSR policy as a way to achieve sustainable development cannot occur in isolation, but necessitates collaboration with civil society (Siyobi, 2015; Mostert, Kangwa-Musole, Howard, Madhu, Van den Berg, & Young, 2016). Even though great strides have been made to conceptualise and theorise CSR and SD, the implementation thereof often does not always comply with guidelines, regulation, and legislation aimed at ensuring the aforementioned outcomes. Especially in rural and outlying mining areas, CSR and SD remain challenges that need to be addressed.

1.2. BACKGROUND

During the Apartheid regime in South Africa, surrounding communities were largely ignored by mining companies. Though some mining companies established company towns – according to Littlewood (2014), towns where the mining company is the main provider of employment, and where most of the housing is owned by the mining company –which provided adequate housing for white miners, Black mineworkers were relegated to living in single-sex compounds called 'kampongs' (a Malay word meaning enclosure), with inhuman living conditions (Yousuf, 2017). Indeed, says Leonard (2018), mining in the country continued "without restraint and compromised […] the health of mining workers, and local communities". When South Africa became a democratic state in 1994, the country's new government implemented inclusive political, social, and organisational changes. However, notes Moraka (2016), the mining industry has been slow in implementing these changes. The challenges cited by the industry, that prohibit it from prompt implementation, are contradictory

and unclear legislation, a shortage of employable, skilled previously disadvantages individuals (PDIs), and a dearth of clear guidelines for ensuring sustainability. However, the International Council on Mining and Minerals (2022) advocates for continuous and viable improvements in how mining companies and society relate. The ICMM and the South African Mining Charter (DMR, 2018)[1] both emphasise the importance of stakeholder inclusion in effective mining operations. As its main focus, The Mining Charter (DMR, 2018) encourages sustainable growth in the mining industry, while also attempting to both address and redress past injustices. PDIs are enabled to become involved in the mining and minerals industry; theoretically, this leads to a wider extant skills base, and serves to foster empowerment and individual benefit based on the exploitation of South Africa's natural resources. The Charter further promotes employment creation, along with diversifying the labour force, in an effort to increase both socio-economic wellbeing and social cohesion (DMR, 2018).

The National Framework for Sustainable Development (DEAT, 2008) comprises ten social development principles. These principles are expected to be applied so that mines can do their part in developing the communities they operate in. The principles include, amongst others, the incorporation in the corporate decision-making process of sustainable development considerations, mining companies' contribution to the surrounding communities, economic and institutional development in the mining community, and effective and transparent engagement with society. Mines must play a role in developing communities, and business stakeholders are expected to invest in local communities as part of government regulations; as such, corporations are encouraged to generate viable and continuous development on economic and social levels (Lane & Reggio, 2013; Corrigan, 2019; HRW, 2022).

1.3. CORPORATE SOCIAL RESPONSIBILITY

Riano and Yakovleva (2020) note that CSR comprises, for companies, an ongoing commitment to advance the economy of communities they function in, in an ethical manner, in order to improve workers' and their families' quality of life (*cf.* Holme & Watts, 2001; Molderez, 2021). CSR should contribute to mitigating poverty, the creation of employment, and addressing the community's socio-economic challenges. Mining companies should align their CSR policies with the Government's National Development Plan, local development initiatives, and the United Nations' sustainable development goals (SDGs) (Riano &

[1]Department of Mineral Resources: Broad-Based Socio-Economic Empowerment Charter for the Mining and Mineral Industry (Mining Charter).

Yakovleva, 2020). Such a partnership approach may benefit communities should the parties involved keep their necessary commitments, mentioned earlier (Aslaksen, Hildebrandt, & Johnsen, 2021; OECD, 2002; Abdelhalim & Eldin, 2019). Strengthening these collaborative ties between the role-players is of utmost importance in order to foster better communication and trust.

Corporate Social Responsibility (CSR) programmes are supposed to deal with relations between host communities and the company. However, a substantial body of criticism regarding the implementation and benefits of CSR has emerged. Hilson, Hilson, and Suleman (2019) are concerned that CSR has little effect on these communities' security safety, whether this means food-, housing-, or employment security, physical safety in the community, or safety from crime. According to Kramer and Pfitzer (2016), even if CSR programmes allow for legislative compliance, they are often not supportive and lacking in terms of sustainability planning; they also do not do much for the community's progress towards benefitting from company profits. Lauda (2018) further notes that these programmes sustain the companies' social licence to operate, but do not follow business policy or, oftentimes, legislation.

The MPRDA, or Minerals and Petroleum Resources Development Act No. 28 of 2002 (RSA, 2002), has a crucial impact on mining companies' implementation of policies and regulations in South Africa. Companies, says the MPRDA, need to actively encourage and support Black Economic Empowerment (BEE). The principles for ensuring the promotion of BEE in the mining sector is found in the Broad-Based Socio-Economic Empowerment Charter for the Mining and Mineral Industry, also called the Mining Charter (DMR, 2018). BEE requirements must be an inclusive process. However, is noted that questions persist regarding "whether the Charter fully aligns and integrates with other government policies (specifically […] B-BBEE Codes)". The report goes on the say that there is still uncertainty as to how the Charter instils "regulatory certainty" pertinent to invested stakeholders (Deloitte, 2019: 4).

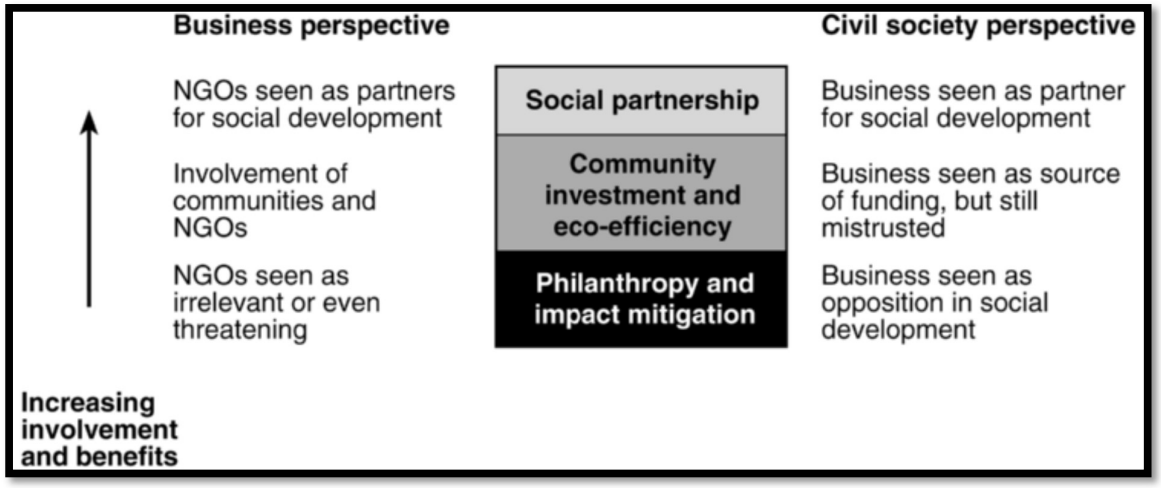
As previously mentioned, mining may have negative environmental and health effects on local communities affected by mining (IIED 2002; Sanoh & Coulibaly, 2015; Hosseinpour et al., 2022; amongst others). The effect of mining on local communities are defined by Burdge and Vanclay (1996) and Carvalho (2017) as the consequences to human populations from any public or personal activities that change however individuals live, work, play, relate to one another, organise to satisfy their wants and customarily survive as members of society.

These impacts can be positive and negative. The former, says Nalule (2020), relate to the creation of employment and revenue; the latter comprise violence, health issues, and gender inequality, Impacts on the community occur throughout the whole lifecycle of a mining project, during phases, and after any operations (Agboola et al., 2020; Gramling & Freudenburg, 1992).

Asfaw, Botes, and Mengesha (2017) posit that non-governmental organisations (NGOs) can play a vital role in aiding the implementation and creation of CSR and SD strategies, especially in developing countries like South Africa. More so than any other mining stakeholders, NGOs are socially positioned to greatly influence CSR development and implementation. This statement, says Asfaw et al., (2017), is premised on the fact that NGOs are seen, in general, as vital stakeholders that represent those interest groups intimately involved in mining companies' operations and planning, and that they are considered by mining companies and society alike as being highly trustworthy. Further, NGOs are regarded as "vindicators of the general society" (Asfaw et al., 2017: 2), acting as agents for environmental and societal protection and change. Though companies do not have fiscal relationships with NGOs, the latter can confront and oppose companies in terms of possible unethical or harmful policies and practices, which may ultimately affect companies' finances. Therefore, by mobilising invested groups and stakeholders to oppose and boycott companies that do not adhere to their social and environmental responsibilities, NGOs are influential in the shaping and implementation of CSR and SD plans (Asfaw et al., 2017).

When mining companies and -communities, along with NGOs, collaborate in terms of CSR and SD implementation, their impact and involvement are perceived to have different outcomes from the viewpoint of the community and business. The following figure illustrates these different perspectives based the integration of these parties and their involvement in CSR and SD (see Figure 1.1 below).

Figure 1.1: Integration of perspectives in CSR and SD



Sources: Adapted from Pinney (2001); O'Riordan & Fairbrass (2014).

From the figure, it is evident that both business and community view social partnership as positive, where communities see companies as social development partners, and companies see NGOs in a similar way. Though companies regard NGOs as positive role-players in community cohesion and -investment, communities often do not trust companies to contribute to these aspects, despite their positive economic contributions. In terms of the mitigation of environmental impacts, as well as philanthropic endeavours, businesses consider NGOs as either being irrelevant, or as constituting a threat to their operations and economic stability; the community, for its part, regards companies as not contributing to social development. Therefore, it seems that, although NGO-, business-, and society integration sounds good in theory, doubts and perceptions may negatively affect the development and implementation of a CSR that ensures sustainable community and economic development.

1.4. PROBLEM STATEMENT

Despite substantial progress being made in terms of how CSR and SD are conceptualised and understood, company practices in these fields often do not comply with the intentions stipulated in policy guidelines and legislation. The remote locations where mining activities generally occur often complicate this lack of achieving sustainable socio-economic community development. This is particularly relevant in the case of Khâi-Ma local municipality, which is a remote mining community. As opposed to comprising various company towns (*cf.* Section 1.2.), this municipality includes resource- and mining towns. The former is defined by Stelter & Artibise (2021) as isolated and often transient communities that develop in areas close to industrial developments focusing on the extraction and/or exploitation of natural resources,

such as mineral mining. The latter refers to communities which may suffer (in)direct impacts – be these social or economic – based on mining activities (ICMM, 2019). In the context of both types of towns in the Khâi-Ma local municipality, little or no research regarding the mining company's corporate social responsibility and contribution to sustainable development has been done. Such research, as undertaken in this study, can inform stakeholders in the area, and those in similar areas, in how to address both CSR and SD challenges as they relate to these types of towns.

1.5. AIMS AND OBJECTIVES OF THE STUDY

The core aim of the current research study is to evaluate the community in the Khâi-Ma municipal area's perceptions of the effects of CSR and SD initiatives they experience. Consequently, the researcher outlines the following objectives:

- To describe stakeholders' cognisance and awareness of CSR and SF initiatives in the Khâi-Ma municipal area;
- To evaluate the perceived effects, both negative and positive, of CSR and SD community initiatives in the Khâi-Ma municipal area; and
- To provide suggestions as to SD initiatives in this local municipality can be improved through CSR.

1.6. SIGNIFICANCE OF THE STUDY

As the community's knowledge regarding CSR and SD-related issues in the area is limited, the current research, this study's significance lies in evaluating community responses to the interview questions are essential. Doing so will explain how interaction between the mining company and its stakeholders has to potential to provide valuable insight into community needs and expectations that could inform better development and planning of CSR and SD programmes to benefit the area. Further significance is premised in the study's investigation into whether the mine's CSR intervention in socio-economic development benefits the local community.

1.7. GLOSSARY OF TERMS

The following terms are commonly used in the study; therefore, it is important to provide their definitions to clarify how they are operationalised in this study.

- **Corporate social responsibility (CSR)** is defined by Carroll and Brown (2018) as business' social accountability regarding what the society they operate in, at a specific

point in time, expects from the business regarding ethical, economic, and legal commitments (also see Carroll, 2021; Brin & Nehme, 2019).

- **Host community**, according to the MPRDA, is "a coherent, social group of persons within a particular mining area of land which the members have or exercise communally in terms of an agreement, custom or law" (RSA, 2002: 3).
- **Ethics** are, according to Chandler (2013), guidelines for behaviour that is moral; this morality is based on definitions of what is right or wrong as embedded in a society or culture, as well as on social mores.
- **Non-Governmental Organisations (NGOs)** is a term used to describe organisations which, rather than being concerned with generating profits or the government's political agenda, address the needs of society (Botha, 2018). It is important not to conflate non-governmental organisations with non-profit organisations: the former is not concerned with generating profit, and is a voluntary effort by citizens, working mainly on national or local level. These are also separate from the state, and do not receive any governmental funding. The latter focuses on service delivery to society, but not for profit, and is not necessarily established by citizens. NGOs and NPOs are also regulated through different legislation (Helmold & Samara, 2019).
- **Sustainable development (SD)** is defined by the Social Labour Plan Guidelines (SLPGs) of South Africa as"[t]he integrating of social, economic and environmental factors into planning, implementation and decision-making to ensure that the mineral and petroleum resources development serves present and future generations" (DMRE, 2010: 5). However, SD is more complex than this. Malan (2021) notes that mining troubles three sustainable development aspects, namely social-, economic-, and environmental issues. The latter refers to the devastating impact mining has on the environment. If resources are to be conserved for future generations, it is pivotal that land rehabilitation is undertaken by mines upon closure. Such rehabilitation efforts would also address social- and economic issues, as job creation and at least a measure of financial security would improve the standard of living for surrounding communities (Malan, 2021). However, even after rehabilitation, the scars of mining are evident in rehabilitated mine dumps (Krause & Snyman, 2014). The Parliamentary Monitoring Group (2013) state that environmental- and economic sustainability are impeded after mine closure. This is due to land often rendered unsuitable for agricultural activities due to the removal of vegetation and siltation, which leads to severe erosion. In stagnant

pools of water dammed up in holes resulting from mining processes, disease thrives, posing risks to people in the area. Dangerous illegal mining activities are sometimes conducted at these sites; further, the unused and scarred land provides no sustainable benefits in the economic sense (PMG, 2013). Krause & Snyman (2014:10) comment that the lack of sustainability could be addressed by CSR, in that CSR can help to create "a regulatory process through which communities are able to constitute themselves into a structure for the purpose of acting as overseers of rehabilitation", thus ensuring increased sustainable development. A detailed discussion of SD can be found in Chapter 2.

- **Transparency** refers to the accessibility and visibility, to outsiders, of an organisation's operational procedures and decisions. Martin-Ortega (2022) posits that increased transparency in these matters has the potential to increase organisational accountability, foster due diligence, and allay the abuse of human rights.
- **Public policy** comprises decisions made by governments to prevent harm to and increase benefits for society based on the establishment of guidelines and/or rules (Cairney, 2019).

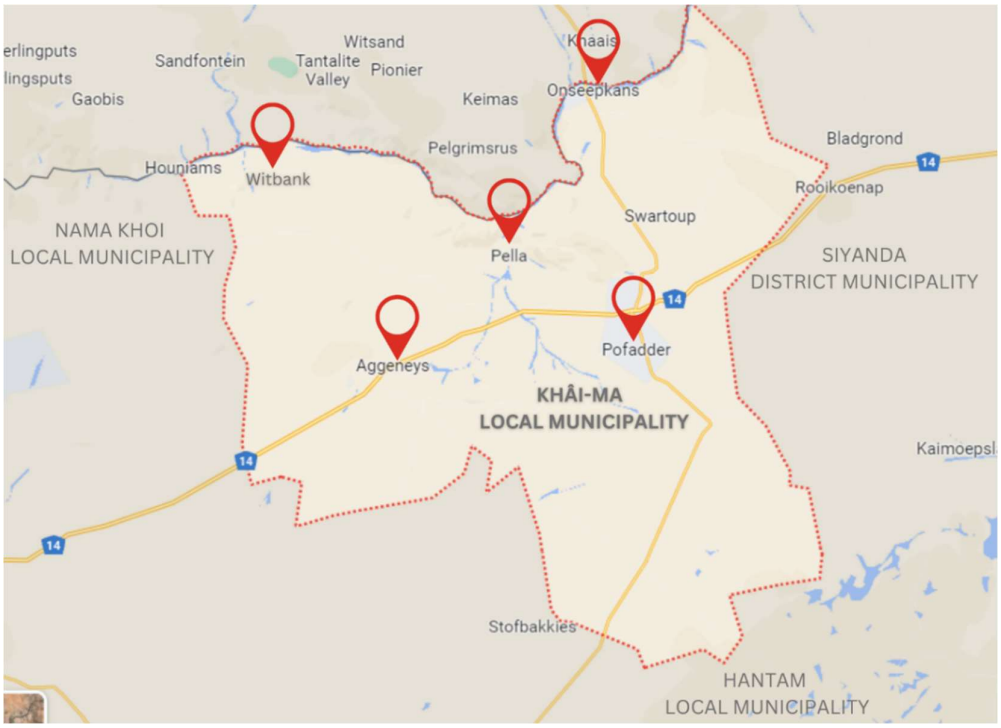
1.8. RESEARCH METHODS

The researcher employs a qualitative approach in this study. Specifically, twelve semi-structured interviews were conducted with relevant stakeholders and informants to ascertain their perceptions of CSR and SD programme implementation in the Khâi-Ma area. Respondents include four municipal officials, two government officials, and two civil society members. According to Bryman (2012), the qualitative approach allows the research access to the lived experience of participants, drawing on their knowledge and interpretation of events and processes. Therefore, this research approach is suitable for this study, as it aims particularly to understand the participants' views on how they experience the mining companies' CSR and SD contributions in the study area.

1.8.1. Background on the research selection study area

The Khâi-Ma local municipality lies in South Africa's Northern Cape province, specifically in the Namakwa district. This district comprises six municipalities, with Khâi-Ma taking up 12% of the district's geographical area. The local seat of Khâi-Ma is the town Pofadder, which is roughly 165km east and 230km west of two other Northern Cape towns, Springbok and Upington, respectively (MSA, 2022; see Figure 1.1).

Figure 1.2: Map of the municipal area



Source: Google Maps (2022)

Khâi-Ma municipality consists of five main towns, namely Pofadder, Pella, Witbank, Onseepkans, and Aggeneys, the seat of Black Mountain Mining (see Figure 1.2 above).

Figure 1.3: Location of mining operations in the study area

Source: Google Maps (2022)

Black Mountain Mining (BMM) started operating in the area more than 40 years ago, and is currently owned by Vedanta Zinc International (VZI), which bought the company from Anglo American in 2011. Vedanta produces copper, lead, zinc, and silver as by-products of their Gamsberg operation (see Figure 1.3 above) (VZI, 2019).

Lerotoli (2013) notes that exploration in the region of the current Black Mountain Mine location commenced in 1929. Only in the 1970s, after decades of random testing, did the Phelps Dodge Corporation launch a diamond-drilling operation. The early 1970s saw the discovery of ore bodies in various locations, namely Swartberg and Noeniespoort se Kop (Broken Hill) in 1971, and Aggeneys Mountain ("Big Syncline") in 1972 and 1973. Of these ore bodies, Broken Hill's showed the most promise, and the richness of the ore was assessed in 1974. Phelps Dodge Corporation then undertook a feasibility study in 1976, investigating the viability of underground mining. The company entered a partnership with Gold Fields S.A. (GFSA) in 1977, thus owning 51% of Black Mountain Minerals' shares (Lerotoli, 2013).

GFSA opted to sell their mining lands in the late 1990s. BMM, along with the emergent Gamsberg zinc deposit, were then procured by the Anglo American Corporation (Lerotoli, 2013). Though geologists saw potential in mining the area, and despite the Broken Hill operations being extended, there was little further exploration; subsequently, Anglo American's mining rights were bought by Vedanta International (Lerotoli, 2013).

For BMM, this signalled a turning point: high-grade minerals were intersected at just over 1 000m underground. Anglo American continued to sell its zinc portfolio to Vedanta as well; the sale was concluded in May 2010. Today, BMM is known for producing copper concentrate, zinc, and lead, with silver being produced through the processing of copper and lead (Lerotoli, 2013).

1.8.2. Research approach and design

i. Qualitative research

The current study employs a qualitative approach, which is based on human perceptions rather than statistical data (Bryman, 2012). This approach is concerned with the expression and interpretation of their lived experience (Bryman, 2008), and is often employed "to answer the *whys* and *hows* of human behaviour, opinion, and experience" (Guest, Namey, & Mitchell, 2013: 1; authors' emphasis). Guest et al. (2013) further note that a qualitative approach is ideally suited to applied research – that is, "[striving] to improve our understanding of a

problem, with the intent of contributing to the solution of that problem" (Bickman & Rog, 2009: x) – which is what this study undertakes. To discover the problem, and in order to contribute to a possible solution, it is important in the qualitative research context that the researcher remains objective. As such, carefully recording the interviewees' responses, accurately transcribing them, and truthfully citing them is of utmost importance.

ii. The case study research design

This research uses the Khâi-Ma local municipality as a case study for investigating issues related to CSR and SD in mining communities. Heale and Twycross' (2018) definition – that a case study is concerned with intensively studying a unit, group of people, or individual – is employed in this study. With a case study, one can investigate a variety of variables and obtain in-depth information pertaining thereto. What makes this type of research design apt for this study is that case studies are employed to "examine complex phenomena in the natural setting to increase understanding of them" (Heale & Twycross, 2018: 7); it also enables the researcher to consider an intricate and broad issue and condense it into more manageable and focused research questions. The researcher should first determine what is known about the research area by surveying literature so as to inform their general understanding of the issue(s) at hand; this aids not only in developing the research question, but also in formulating the data collection instrument.

With this in mind, the case study design is useful in the context of this dissertation. In-depth responses based on individuals' lived experiences will provide rich data. A complex issue – that of CSR and SD in mining communities – can also be narrowed down to specific questions based on the Khâi-Ma local municipality context. In Chapter 2, the review of relevant literature, that informed both the research question as well as the questions asked during the interviews, is presented.

1.9. DATA COLLECTION STRATEGY

In collecting data, the researcher could use different techniques to acquire information from his/her participants (Sapsford & Jupp, 2006). For the purpose of this study, the researcher undertook semi-structured interviews to gather data on stakeholders' perceptions with regards to the research question. This strategy also allows one to observe participants' behaviour and emotions.

Open-ended interview questions were used to collect primary data from the participants. The following main questions were used, in random order, during all interviews for all participants.

- How would you describe the socio-economic situation of the surrounding communities?
- What are the negative and positive effects on the nearby community?
- How would you explain the relationship between the government and the mine?
- What does the mine contribute to the surrounding communities?
- Is there a conflict between the mine and the community? What are the elements of these conflicts?

The researcher obtained informed consent from all participants to participate in the research (*cf*. Addendum B). The interviews were conducted at the participants' offices, and were recorded and transcribed. All interviews were conducted in person, apart from one online interview that took place via Microsoft Teams, and one telephonic interview.

1.9.1. Sampling design

Ames, Glenton, and Lewin (2019) note that qualitative research may amount in a vast volume of data that could be hard to process or analyse. As such, making use of a sampling design allows the researcher to synthetise data into manageable portions. Purposive sampling is the "intentional selection of informants based on their ability to elucidate a specific theme, concept, or phenomenon" (Robinson, 2014: 5243). Instead of first developing a sampling frame, research subjects are purposively selected by identifying responses, concepts, and themes in interviewee responses through a process of reflection and observation. This sampling design allows the researcher to select those respondents whose particular experience or knowledge are highly relevant to the study's research question and objectives (Robinson, 2014). Purposive sampling, says Bryman (2012), intends to test instances/contributions and how these are related to the study questions. These contributions are premised on certain predefined criteria (Bryman, 2012) to ensure that the responses collected are as relevant as possible to the research question. In this study, the researcher interviewed municipal officials, mining officials, government officials, and civil society members, as they deal daily with the host community members, making their feedback imminently relevant.

1.9.2. Interviews with key informants

Interviews allowed the interviewer to explain questions to the respondents, and allowed informants to react in any way they felt necessary. Interviewing allows the researcher to consider both non-verbal and verbal cues from the participants; thus, it is a means of exploring individual information, attitudes, perceptions, and beliefs (Leedy & Ormrod, 2001). The interviews yielded two strong benefits. Firstly, the reasons informing the respondent's replies and reactions could be probed so as to acquire rich feedback and context. Secondly, data collection took place immediately.

For this study, the researcher interviewed key informants from the Khâi-Ma local municipal area to collect valuable data. Semi-structured interviews were designed to allow both researcher and respondent to be more relaxed if any issues needed wider discussion. In a semi-structured dialogue, the interviewer can also repeat or rephrase questions to elicit more complete responses. The questions may be asked to different contributors in a variety of ways, and can be used as a guideline to support the researcher in investigating specific topics (Leedy & Ormrod, 2001).

Interviews are aimed at investigating the respondents' views, beliefs, and lived experience as part of applied research activities. The research participants must provide detailed, designated facts so as to offer a more in-depth perception of the research discussion (Gill, Stewart, Treasure, & Chadwick, 2008). For these reasons, the semi-structured interview process was used in this research.

Based on the questionnaire (see Addendum C), the researcher recruited 12 interviewees, of which six are male and six female. Four respondents are municipal officials, and four are mining officials. The remaining participants are two individuals in the NGO sector and two government officials working in the education sector. One of these interviews took place with three municipal officials at the same time.

1.10. DATA ANALYSIS

Thematic analysis was used to analyse the data. Thematic analysis is premised on the identification of codes and themes, terms that are sometimes used interchangeably (Bryman, 2012). The researcher could formulate themes/codes based on a literature review and formulate their research questions accordingly, or could first conduct interviews and then study the interviewees' responses and identify themes in this way. This can be done by reading through

the responses by reading them ordered by question, by respondent, or by theme gathered from a preceding literature review (Bryman, 2012). The reading and re-reading of interviewees' responses aid the researcher in identifying themes and sub-themes, which may either relate to those, found in extant literature, or might be new themes specific to the context or population.

In order to complete the thematic analysis, the interviews were all digitally recorded, and then carefully transcribed by the researcher. The researcher then thoroughly read through each interview by respondent, and then again by question across respondents. Reading through the responses allowed common issues to come to the fore. The thematic analysis allows the researcher to identify themes based on participants' accounts, which the researcher then groups together into larger codes (Bryman, 2012). Related to the themes, the researcher also identified pertinent quotes from the interviews as these became evident. The coding process took place after both the identification of the themes from the interviews and the literature reviews were completed. The codes are therefore premised both on the thematic analysis and the literature review. The codes also evolved and were restructured as the thematic analysis and literature review progressed.

1.11. RESEARCH ETHICS

The researcher received ethical clearance from the University of the Free States' Ethics Committee before starting the data collection process (see Addendum A). Respondents were only contacted after ethical clearance was granted, and the researcher obtained their informed consent. All interviewees were informed that they could opt to withdraw their participation at any time, and that taking part in the study was voluntary. They also did not have to answer any questions they felt uncomfortable to address.

The researcher took precautions to ensure the respondents' privacy by assigning numbers to the interviews and not using the respondents' names. The interview recordings were also securely stored along with the interview transcriptions. Only the researcher could access the interview data.

Interviewees were assured that their health and safety would not be endangered during the interview process, and that interview responses would not be able to be traced back to specific individuals. This is done to allay any concerns regarding possible workplace repercussions which may result in job losses or unfair treatment.

1.12. LIMITATIONS

It is important that the sample size for a qualitative study is neither too big nor too small. Should it be too big, the information obtained may not be relevant, and carrying out an exhaustive analysis would be costly in terms of time and finances. Financial and time considerations were both limitations in the study, as the researcher depended on a bursary and was constrained by deadlines; therefore, the study is limited to twelve interviews. Should the sample size be too small, data saturation might not occur, factual diffusion might occur, and some responses may be redundant (Onwuegbuzie & Collins, 2007: 289).

One of the most severe limitations in this study was the outbreak of the Covid-19 pandemic in 2020. Participants were loath to meet in person for fear of falling ill. This again had financial and time-related implications. This was exacerbated by the fact that many respondents could not keep appointments on specified dates, resulting in interviews having to be rescheduled. As such, two interviews could not be conducted in person, with one being conducted telephonically and one online.

1.13. CHAPTER OVERVIEW

This mini-dissertation comprises five chapters. In **Chapter 2,** the researcher focuses on defining CSR, discussing its role, and explaining how it relates to SD, particularly in the mining sector. However, an overview of SD separate from the perspective of South African mining is first provided. The literature review further conducted in this chapter will provide evidence to support the need for research investigating CSR's role and impact in the mining sector. Throughout, this evidence will be related to the Khâi-Ma municipal area. **Chapter 3** investigates the South African mining policy environment and its implications for CSR and SD. The description of the history of mining at a global and national level gives further context. The chapter also explains the evolution of mining and sustainable development in South Africa over the last few decades, and draws on specifications outlined in the Mining Charter (RSA, 2018), the White Paper on Mining and Minerals (DME, 1998), as well as social and labour plans as policy documents. The chapter will examine the mining industry's socio-economic and sustainable development contributions.

The research findings of the thesis are presented in **Chapter 4**. These are based on how the host communities, mining officials, and government officials perceive CSR and SD in the mining sector in Khâi-Ma municipal area. This chapter details the participants' responses and the researcher's analyses, while also providing an interpretation of respondents' interactions.

Not only does this chapter elucidate what is achieved through CSR and SD in the Khâi-Ma municipal area, but also how members of the host community can be affected negatively or positively through mining in the area. The participants' perspectives are employed to address the research objectives and-questions in this thesis. To this end, **Chapter 5** concludes the research, highlighting future projections of CSR and SD in the Khâi-Ma area. The study attempts to synthesise the literature and findings from the interviews so as to link them to broader debates in development studies. The study highlights the complexity of CSR and SD as a means for sustainability in the future.

CHAPTER 2: LITERATURE REVIEW

2.1. INTRODUCTION

As this study is concerned with corporate social responsibility (CSR) in relation to mining in South Africa, it is important that the researcher provides an overview of literature pertaining to both of these concerns. Cherry and Sneirson (2011: 10) define CSR as "managing business with equal regards for financial performance, environmental consequences and social impact", and notes that CSR is concerned with the "triple bottom line: people, planet and profit" (2011: 10). However, SD is concerned with planetary conservation and people first and foremost. The planet is the vessel for the people, and the people are the determinants of profit. As such, the triple bottom line for SD should, in fact, read planet, people, profit. When considering the effects of mining to this triple bottom line, it is important to note that such effects can be either positive or negative in nature. Therefore, the way CSR initiatives are developed and employed should be shaped towards addressing, alleviating, or encouraging these effects.

Concerns regarding the environmental impact of mining have become increasingly prevalent during recent decades (Cornelissen, 2014). As such, environmental preservation and protection are now a central concern for this mining industry, which admittedly contributes to destruction of ecosystems, water systems, and soil systems, amongst others. However, the main aim of mining, like any business venture, is generating profit; however, the researcher argues that the main aim should be ensuring sustainable livelihoods through SD. When industry, with its economic-centred approach focusing on profit generation, profit is needed for the establishment and continuation of mining, for the development of local and community economies, and for rehabilitating the environment during and after the mining process. However, it is important that profit-making through industrialised and economic growth (Cornelissen, 2014) should not outweigh environmental and societal benefits. This approach is essential to SD, as it in line with approaches that prioritise ecological or eco-centric, as well as human- and social approaches. It is within this broader context of businesses' responsibilities outside of profit generation that CSR developed. The scale and nature of CSR has evolved significantly and rapidly over the last century.

Against this background, this chapter investigates two general issues, namely the evolution and improvement of CSR, as well as the impact of mining on the environment and communities reliant on mines.

2.2. SUSTAINABLE DEVELOPMENT (SD): AN OVERVIEW

In development studies, SD is of great importance. Development studies "are primarily concerned with global poverty, inequality and other challenges in the 'Global South'" (GAU, 2022: para 1-2); in other words, it investigates the aforementioned challenges in emerging- and developing countries. These countries include all of those where economic development based on, for example, income per capita, life expectancy of denizens, and the level of industrialisation, are not yet on par with countries in the global north (GAU, 2022). Development is, however, not based on economic aspects alone, but also on ecological-, political-, and social aspects. What lies at the core of SD is that development should be, as the name suggests, sustainable. Thus, this development should meet the country and its people's current needs while also making provision for the needs of future generations (IISD, 2022).

When one considers SD, the question that underlies this principle is what one is developing towards, and who one is developing for. As such, SD is more than economic growth, which is related to higher productivity and efficiency (Kurtz, 2022). Often, increased productivity results in the creation of a consumable product, while negating the social wellbeing of the communities that produce these products. Economic growth is, unquestionably, an indicator of development. However, the role of culture and society cannot be ignored. Kurtz (2022) posits that how communities, and specifically production communities, view development, is a much neglected field of study. SD enables communities to contribute their knowledge and skills to establish practical and utilitarian approaches that will benefit current and future communities, in favour of a purely scientific and theoretical approach to development (Kurtz, 2022). SD also has an intergenerational component, as it takes into consideration equity within and across specific generations. This long-term perspective means that not only communities, but also the environment, are valued in terms of development goals. Neither future generations nor the environment they may depend on for survival should be left in a worse condition than it was for previous generations (Burgess & Barbier, 2001). This not only means that economic opportunities should be intergenerational, but also that social welfare should be a priority for current generations, as well as corporations and governmental bodies that affect the community in any way.

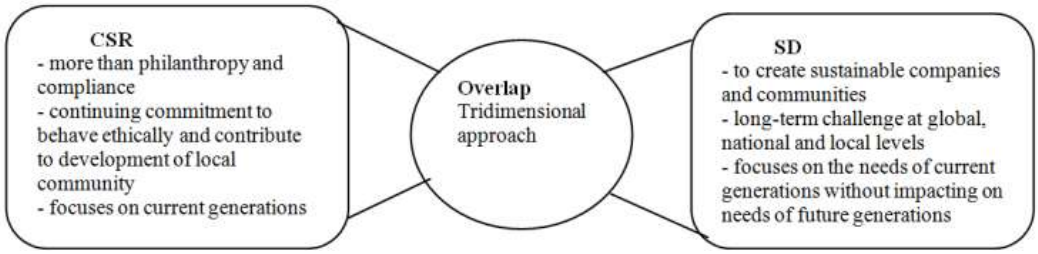
However, Brand (2015) notes that SD currently operates, in many countries, in the form of industrial models, with the focus being on development rather than sustainability. Brand (2015) further states that politically dominant ideals based on Western rationality devalues

the local knowledge (as mentioned in Kurtz, 2022), which means that those who benefit from supposed SD are corporations and governments, and not communities. Barbier and Burgess (2015) posit that the relationship between ecosystems and corporations, as well as ecosystems and communities, and communities and corporations, are vital to SD. Technological advances implemented without consulting communities may lead to the destruction of the environment and impede endogenous growth in communities, while also fostering community dependence on technology and resources. As such, say Barbier and Burgess (2015), SD should take into account how diminishing natural resources affect not only the economy, but also the social- and ecological spheres. Interdisciplinary collaboration between communities, corporations, and government bodies could help incentivise SD, and would lead to the establishment of regulatory bodies to manage sustainable use of natural capital, also within communities.

Blackmore (2012) distinguishes between weak and strong SD. As previously stated, development is often equated with growth in production, trade, and industry. The assumption is that such growth enables communities' wellbeing and prosperity. SD, however, is more concerned with the quality of the growth, rather than the quantity. Some applications of SD, which Blackmore (2012) calls weak, advocate for the quantitative approach. Environmental damage is justified in terms of bettering societal welfare. The aspect of societal collapse upon resource depletion is not considered. In the strong, qualitative SD approach (Blackmore, 2012), non-human life is valued more, and the interplay between communities' continued socio-economic wellbeing and environmental survival is emphasised. More systemic approaches to SD comprise development being recontextualised in terms of life on Earth as a whole. Not only are economic considerations evident in such SD approaches, but also concern for social- and environmental dimensions (Blackmore, 2012). In effect, conserving the environment and ensuring intergenerational social- and economic stability become the moral purview of corporations, government, and communities. Systemic approaches also provide guidance as to how human behaviour needs to adapt in order to ensure sustainability withing these systems.

From the above-mentioned research, three vital components for SD to succeed are identified: community, environment, and economy. Suganthi (2020) notes that CSR can be a beneficial tool to establish a nuanced interplay between these three components in order to ensure SD. However, Suganthi (2020) also notes that research into how CSR can affect SD is limited. Naudé (2012) advocates for a tridimensional approach to integrate CSR and SD, depicted in Figure 2.1. below.

Figure 2.1: Naudé's tridimensional approach to integrating CSR and SD



Source: Naudé (2012: 174).

Naudé (2012) posts that CSR and SD should be simultaneously implemented. This will allow communities and corporations to transcend the boundaries between them. This will also allow corporations to draw on communities' knowledge and skills (*cf.* Kurtz, 2022), and allow communities to voice their specific needs and concerns. As indicated in the figure above, corporations can then meet their ethical and moral obligations to ensure SD for current and future generations. In the next section, I will explain the development of CSR in more detail.

2.3. THE DEVELOPMENT OF CSR

Although it is generally accepted that companies' accountability regarding society and the environment (or CSR) has progressed and evolved, few extant studies consider literature spanning the different eras of CSR development and the evolution of how the concept is understood. Consequently, this chapter aims to investigate these aspects by utilising a novel chronological approach as a tool for providing and overview of literature related to CSR development.

The late 1800s and early 1900s saw the initial creation of welfare schemes aimed at retaining workers and improving their living conditions (Carroll, 2008; Agudelo, Jóhannsdóttir, & Davídsdóttir, 2019). However, during the industrial revolution that spanned the era from 1750 to 1900, not much attention was paid to fair labour practices, safe working conditions, adequate wages, or the wellbeing of labourers (LaMorte, 2017). In fact, child labour was a common practice, with many children even being sold to factories and living on their premises. Because many families and individuals moved from rural to urban areas for employment, builders erected cheap, sub-standard housing on any open land in the proximity of factories. Housing conditions were dismal, crowded, and unsanitary. In the workplace workers were exposed "to many risks and dangers, including cramped work areas with poor ventilation, trauma from machinery, toxic exposures to heavy metals, dust, and solvents" (LaMorte, 2017: para 2).

Increasing levels of urbanisation and industry after 1900 resulted from large-scale production in this era (Agudelo et al., 2019). Consequently, business managers started taking agency for not only generating profit, but also ensuring better work-life balance for workers by the 1920s and early 1930s (Carroll, 2008). When business expansion increased even more during and after World War II, companies realised their responsibilities regarding society, and general discussion surrounding what their duties are came to the fore (Agudelo et al., 2019).

The sections below will discuss how CSR was understood and implemented before the 1950s, and how it continued to evolve and improve over subsequent decades. It will also investigate the implications of CSR currently and in the near future.

2.3.1. CSR before 1950

The relationships between businesses, profits, and society have always been complex. For example, in Ancient Rome, notes Narasimhan (2006), Roman senators expressed their disappointment in those who used taxed contributions to fund their military campaigns rather than to uplift their communities. Centuries later, in 1622, shareholders in the Dutch East India Company lamented how the company's dealings were either not transparent or not confidential, and how the company's management strove to enrich only themselves (Narasimhan, 2006). During the 18th Century**,** the economist Adam Smith's seminal book, *An Inquiry into the Nature and Causes of the Wealth of Nations*, brought to light that companies (particularly management) did not consider the needs and expectations of communities involved in industry, but rather focused purely on generating profits. It was Smith who vocally advocated for the marketplace to allow accessible and transparent participation in business dealings for the community (Tripathi & Bains, 2013). By the 19th century, European and North American corporations reaped large financial dividends from the operations; however, not many of these corporations were concerned with the environment or societal effects of their businesses processes, or with their workforce's wellbeing (Olejniczak-Szuster, 2019; Johnson, Ashoori, & Lee, 2018).

Consequently, corporations faced increasing criticism regarding their exploitation of individuals, societies, and natural resources at the turn of the 20th century. This era saw the establishment of the first labour unions, which advocated for workers' rights; moreover, governments started considering how public welfare and infrastructure could, or should, accommodate the needs or society and labourers (Agudelo et al., 2019). These criticisms and responses were the impetus between the creation of the CSR concept. Researchers studying

CSR, in general, concur that the concept first entered mainstream conversations during the 1930s and 1940s, and that it was operationalised and formalised by 1953 (Bowen, 2013).

2.3.2. CSR (1950s)

The first attempts towards conceptualising and defining CSR occurred in the 1950s. Lee (2007) notes that, during this decade, the primary concern was the transformation of society and business. In 1953, Bowen noted that communities were shocked by companies' callous business practices and exploitation. He therefore designed a set of crucial values that companies should follow in order the address their responsibilities toward the community (Bowen, 1953: 2013).

The decisions a company makes, as well as its employment- and business practices, says Bowen (2013), have a direct influence on the businesses' clients, shareholders, and labourers, as well as on society itself. He mentions that companies have certain social tasks, which include "the obligations of businessmen to make those policies, make those decisions, or follow those lines of action that are desirable in terms of the objectives and values of our society" (Bowen, 1953: 6). Carroll (2008) explains that Bowen was a pioneer in this regard, as not many corporations spoke about or implemented strategies to address the effects their business dealings may have on the aforementioned parties. It was Bowen's theory that set in motion the concept of how businesses respond to society, the cornerstone of CSR. Bowen's intellectual work focuses not only on these responses to society, but also on the standards of accountability businesses should aspire to, therefore establishing him as the "father of Corporate Social Responsibility" (Carroll, 1999: 268).

2.3.3. CSR (1960s)

An increased awareness of companies' accountability toward society, combined with a population boom, increase in industrial pollution, and the reduction of natural resources, were the primary influences behind the understanding of CSR in this decade (Du Pisani, 2006). As a result, social corporate movements started to consider not only the privileges of the labour privileges, individuals, and the broader community, but also issues relating to environmental responsibility (Carroll, 2016).

During this period, CSR was approached as a reaction to these mounting crises and how these would affect the needs of modern society (Davis, 1960; Farcane & Bureana, 2015). For example, Davis (1960) explains how corporations of the time had the reconsider their collective

responsibility as well as their position in society as a result of changes in community support and financial challenges. The consensus was corporations' chief duty was that of its role in the community in terms of morality and economy, and that profits should not only benefit the company, but also those in communities adjacent to the company (Carroll, 2016; Davis, 1960; Farcane & Bureana, 2015).

Frederick (1960) introduced a new corporate accountability theory based on five tenets. These are:

- The company's esteem in terms of profit generation and -sharing;
- Employing the then most recent organisation and administrative concepts in business practice;
- To consider social and historical conventions that informed the current status of society and the role of business in it;
- A businessperson's conduct is a vital societal role and affects society's perception of the business; and
- Fostering the understanding that business accountability does not occur naturally, but is the outcome of conscious efforts.

2.3.4. CSR (1970s)

Thinking around CSR was heavily influenced by the United States recession in the early 1970s. Business could not expand during this time, and consumer prices increased significantly. Additionally, a worldwide shortage of oil prompted an energy crisis in the western world when both the Iranian revolution and the Yom Kippur war encumbered oil exports from the Middle East (Agudelo et al., 2019). These issues did, however, cause the United States government to reconsider the country's dependence on fossil fuels as an energy source, and prompted significant advances in terms of corporations' responsibilities towards communities and the natural environment (Agudelo et al., 2019).

The American non-profit organisation, the Committee for Economic Development (CED), made two significant contributions to CSR development during this time. The first was a policy document titled *A New Rationale for Corporate Social Policy*; this document highlighted that businesses had to become aware of and involved in the collective energy-related and financial struggles of the wider community (Baumol, Likert, Wallich, & McGowan,1970). The second was a publication in *The Journal of Business Corporations* regarding societal tasks, exploring

the inherent opportunities for CSR initiatives in industrial setting of the time (CED, 1971). These two documents clarified that businesses have certain obligations to address the needs of the broader community, and that fulfilling these obligations would lead to increased public approval of these businesses (CED, 1971).

Carroll (2016) also argues that, during the 1970s, the understanding of CSR saw striving to fulfil societal- and financial objectives as a vital tool in how companies could be held accountable (also see Lee, 2008). Therefore, CSR began to consider environmental conservation, labour legislation, as well as issues of worker productivity (Carroll, 2008). These conceptualisations paved the way for the CSR in the 1980s.

2.3.5. CSR (1980s)

In 1980, Thomas Jones provided a conceptualisation of CSR seen through a new lens by proposing that corporate social responsibility should entail businesses being more responsive to community needs and expectations that to those of shareholders. This new definition gave rise to many new critical CSR approaches, seeing companies accepting responsibility for the burden of accountability, and extending their accountability beyond their shareholders to include obligations to clients, their workers, communities surrounding the companies, as well as suppliers (Jones, 1980). He further posited that the behaviour of a business is influenced by CSR, which remains a conscious administrative procedure (Jones, 1980; Carroll, 2008).

During1983, Carroll's work on CSR became more influential – he considered CSR to have various components, including ethical, humanitarian, economic, and legislative aspects (Carroll, 1983). Carroll's belief was that companies' legislative compliance, as well as their profitability, are crucial components in establishing the company's principles and in determining how CSR efforts could benefit surrounding communities through developing capacity, occasion (or opportunities), as well as currency.

The Brundtland Commission further defined sustainable improvement (UN, 1987:12), saying that development trends in the 1980s "[left] increasing numbers of people poor and vulnerable"; the Commission also recognised the effect of industrial development on the environment. Their report also mentions sustainable development, and how this concept should be kept in mind when considering how progress can be maintained presently and in the future. It stipulated that both developing- and industrial nations should have SD as one of its chief aims (UN, 1987). In 1987, the United Nations (UN) adopted the Montreal Protocol (1987), and

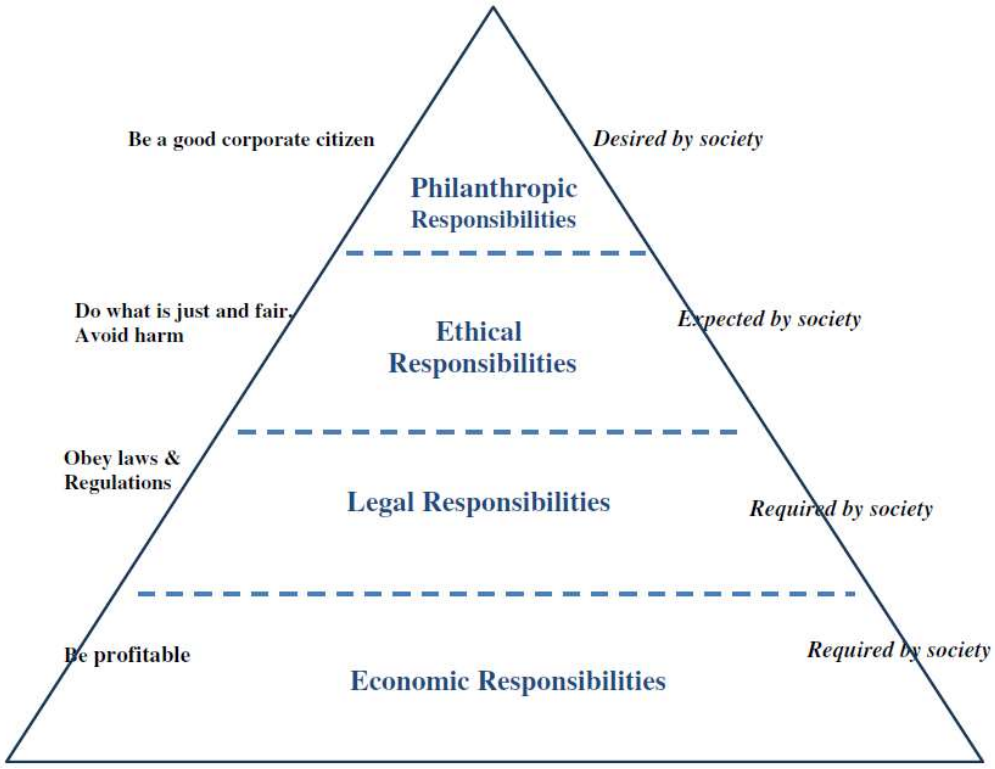
launched the Intergovernmental Panel on Climate Change (IPCC) in 1988. Even though these measures did not directly influence thinking around CSR at that time, it evidenced an increasing awareness of environmental concerns voiced by the global community. This is especially true in terms of how these concerns were framed in terms of environmental protection and sustainable growth and, ultimately, the actions of communities across the world (Amiraslani & Cooper, 2022).

2.3.6. CSR (1990s)

The development of modern CSR concepts and improvements began in the early 1990s following the Cold War and subsequent downfall of the Soviet Union. The end of this conflict had, for the most part, improved the financial standing of many people and countries, especially with an increase in high-risk investments in high-value markets, which saw many benefit is a result (Agudelo et al., 2019). This intensified form of globalisation encouraged the practice of business trust and accountability, and also sharpened the focus of the inclusion of environmental considerations in CSR (Simon, 2009). Carroll explains that, during the '90s, multi-national companies increased the operations thanks to globalisation efforts. This brought these companies in contact with foreign business environments, of which some had robust regulatory frameworks. These global companies provided an influx in new investment opportunities in new markets as competition became increasingly fierce (Carroll, 2015).

In 1991, Carol re-formulated his corporate social responsibility framework and divided it into four levels (see Figure 2.2 below).

Figure 2.2: Carroll's pyramid of CSR



Source: Carroll (2016).

These levels can be briefly defined as follows.

- Economic responsibilities refer to society's expectations that businesses can sustain themselves; this is only achievable when a business generates profit and makes investment attractive to outsiders. In doing so, businesses add value to society by benefitting all business stakeholders (Thacker, 2019).
- Legal responsibilities, says Thacker (2019), relate to the obligations of businesses to obey business legislation, such as health and safety-, labour-, tax-, and competition legislation. These responsibilities are an indicator of how businesses conduct themselves in the local or international marketplace.
- The ethical component of this pyramid comprises "doing the right thing, being fair in all situations and avoiding harm" (Thacker, 2019: para 5). Though this is not an inherent obligation for businesses, it allows companies to be perceived as being just and moral, and increases customer buy-in. Good ethical practices include, for example, the morally correct treatment of employees, staying true to supplier

contracts, and being environmentally conscious in business practice (Thacker, 2019).

- The final layer, that of philanthropic responsibility, occupies the least space in this pyramid. As society becomes increasingly aware of businesses' carbon footprint (their sometimes indiscriminate use of natural resources or the role they play in environmental pollution), businesses are encouraged to 'give back' to the society they rely on for procurement of natural resources (Thacker, 2019).

Carroll and Shaban (2010: 102) summarise the pyramid's levels as "those activities that demonstrate a convergence between the firm's economic objectives and the social objectives of society".

Towards the end of the decade, alternative themes were developed, including those of triple-bottom-line achievements, corporate sustainability, as well as corporate social performance (Srivastava, Dixit, & Srivastava, 2022). The late 1990s saw increased participation in CSR by both NGOs and consumers. Further, aspects of equitable and equal employment started gaining traction, which brought about the establishment of institutions such as the Fair Labour Association, which promotes fair employment conditions and addresses labour issues (ILO, 2019). Finally, the World Business Council for Sustainable Development (1999: 172) put forward their definition of CSR, noting that

> CSRs must act decently towards stakeholders who have a business interest, and commitment act towards financial growth while enhancing the quality of life of the workers and their families as well as the local community and society at large (cited in Watts & Holme, 1999).

In the same year, Kofi Annan, then Secretary-General of the United Nations, addressed the World Economic Forum and "proposed that business leaders […] initiate a global compact of shared values and principles, which will give a human face to the global market". This statement led to global awareness around CSR (UN, 1999: para. 5).

2.3.7. CSR (2000s)

The United Nations proposed their Millennium Development Goals (MDGs) in 2000. After the adoption of the MDGs and the creation of the United Nations Global Compact (UNGC), the European Council (EC) drafted a Green Paper titled *Promoting a European framework for Corporate Social Responsibility* (EC, 2001). This Green Paper clarified concerns regarding social potential and environmental impacts based on business practices (EC, 2001). The EC

followed this up with another document published in 2002, in which it specifically addresses CSR in Europe:

> Corporate Social Responsibility are merely for companies taking responsibilities and actions beyond their legal obligations and economic/business aims. These wider responsibilities cover a range of social and environmental areas – where social means society broadly defined, rather than simply social policy issues—referred to as the triple bottom line approach: i.e. economic, social and environmental (EC, 2002: 1).

Smith (2001) argues that, in the 2000s, corporate policies were adapted based on increased public interest in CSR. From a business perspective, he states that

> CSR refers to the firm's obligations to its shareholders and people affected by corporate policies and practices. According to these obligations, it goes beyond legal requirements and the firm's duties to its shareholders. Fulfilments of these obligations intend to minimise any harm to society and maximise the long-term reimbursement of the company on society (Smith, 2001: 142).

In Table 2.1 below, the definitions and findings described in the preceding sections are summarised.

Table 2.1: The evolution of CSR

Era	Notion	Explanation	Proponent(s)
1950s	Social responsibility of businesspeople	Entrepreneurs must formulate policies, make decisions, or take actions that align with social objectives and values.	Bowen (1953)
1960s to 1970s	The company's social standing	The company's long-term economic benefits can explain some socially responsible business decisions, and the company's socially responsible behaviour will pay off accordingly.	Davis (1960)
	Five basic tenets of CSR	Contributions to the social economy and human resources are very demanding, and companies want to see them use them in many social projects.	Frederick (1960)
	Stakeholder Approach	A responsible company seeks higher profits for shareholders and considers the interests of employees, suppliers, distributors, local communities, and the entire country.	Johnson (1971)
	Three-dimensional model	The concept of the three-dimensional model includes corporate responsibility (that is, economic, legal, ethical and charitable), corporate social aspects (labour standards, human rights, environmental protection and anti-corruption) and corporate behaviour (reactivity, defensive attitude, inclusiveness, and initiative).	Carroll (1979)
1980s to 1990s	Society over stakeholders	Companies should consider themselves more accountable to society at large than to their stakeholders, and business should benefit parties beyond shareholders and owners.	Jones (1980)
	Aspects of CSR	Various aspects affect and shape CSR, such a moral, economic, and legal issues. Companies should ensure compliance with the law to increase community benefits.	Carroll (1983)
	Sustainability	CSR should address environment issues as well as the wellbeing of labourers and should aid in creating environmental and social sustainability for communities.	Brundtland Commission (UN, 1987)

	The CSR pyramid	CSR should address economic-, legal-, ethical-, and philanthropic responsibilities.	Carroll (1991)
	Communities should benefit from CSR	Financial stability and fair labour practices should benefit workers as well as their families and wider communities.	Business Council for Sustainable Development (1999)
2000s	Three domains approach	Three aspects of corporate responsibility: economics, law and ethics.	Schwartz & Carroll (2003)
	Contemporary thought	It is a process of close engagement with stakeholders and integrating social, environmental, ethical, human rights and consumer issues into business operations and core strategies.	European Commission (2001)
	Society over stakeholders	Businesses' responsibility extends to those who are not involved in business policy and legislation, such as customers and their families.	Smith (2001)
	The triple-bottom-line	CSR should take into consideration economic, social, and environmental concerns	European Commission (2002)

Source: Adapted from Yevdokimova, Zamlynskyi, Minakova, Biriuk, & Ilina (2019).

2.4. THE LOCAL EFFECTS OF MINING

Scholars such as Ledwaba and Nhlengetwa (2015), Chuhan-Pole, Dabalen, and Land (2017), and Sonter, Ali, and Watson (2018) posit that, as far as large-scale mining is concerned, the effects on society and the economy are not necessarily well understood. In fact, a prevalent misconception seems to be that the South African gold mining industry is an employer of a great deal of mineworkers; however, despite the gold industry's marked effects on South Africa's export-related income and GDP, this mining industry sector employ only a modest amount of mineworkers (Ledwaba & Nhlengetwa, 2015). There seems to be severe polarity in general perceptions of the mining industry and its socio-economic impacts, with views ranging from all effects being positive, to all effects being negative. Positive views relate mostly the perceptions regarding job creation, national revenue, and skills development. However, negative perceptions posit that the mining industry does not provide as many employment opportunities as it can, and that it has severe health- and environmental consequences (Sanoh & Coulibaly, 2015). For communities involved in and affected by mining operations, the positive and negative sides of the mining coin are critical (IIED, 2002).

Local community impacts are described as the consequences to human populations from any public or personal activities that change however individuals live, work, play, relate to one another, organise to satisfy their wants and customarily survive as members of society (Burdge & Vanclay, 1996; Haddaway et al., 2019). This view is also espoused by Vivoda, Kemp, and Owen (2019). Thus it can be positive and negative. Social impacts due to mining occur throughout the mining lifecycle, from its proposal up to the conclusion of any mining operations (Gramling & Freudenburg, 1992). Where communities bear the brunt of these effects, it cannot be assumed that their experiences will only be positive in nature (Agboola et al., 2020). To investigate the different effects of mining on mining communities, the sections below will discuss the economic-, social-, and environmental consequences of mining, before turning to a discussion of the issues of migration and education. The possible repercussions discussed in these sections are then summarised in Table 2.2.

2.4.1. Economic effects

The mining industry enables communities to enter the local economy through job creation. South Africa's mining industry, when compared to those in other countries, award salaries higher than or comparable to many other countries for site managers, engineers, health and safety officials, and drilling operation directors. Though geologists are by no means the lowest earners in the South Africa mining industry, they still earn far less than their international counterparts. The wage discrepancy is most evident between mine management and quarry workers, the latter of which earn salaries of roughly R8 500 per month, while the former earns between tens and hundreds of thousands of Rands monthly (Casey, 2018). This is where the MPRDA's vision for Black ownership and shareholding (RSA, 2002) becomes increasingly important. Research shows that moving entry-level mineworkers into higher paying positions through localisation schemes, and the provision of in-house training, increase worker earnings. New mines tend to demand higher levels of productivity from smaller, yet extremely highly skilled, workforces (Dietsche, Emsley, Ostensson, & Stevens, 2007).

Additionally, Hilson (2000) emphasises that mines have the potential to have a positive economic impact on local communities. This is because mining companies often develop and maintain essential economic- and social infrastructure in the form of educational- and healthcare facilities, roads, and housing developments. The inflow and outflow process of processed ore and revenue also adds to the provision of income, which also enables the community to develop small business enterprises (Hilson, 2000).

However, despite contributing to financial security for mineworkers and their communities, the social impact of mining is not always positive, and is often complex (Sánchez, Silva-Sánchez, & Neri, 2014). Primary examples of social disruption include, but are not limited to

- Loss of access to traditional hunting-, fishing-, or foraging grounds or the means to do so;
- Decreased autonomy of association;
- Relocation or transfer of local inhabitants;
- Transfer or relocation of affected locals; and
- Lack of respect for or ignorance regarding local customs (McDonald & Figueredo, 2022; Haddaway et al., 2019)

Therefore, many perceptions of the economic effects of mining on mining communities take into account the macroeconomic benefits of trade, while some studies are also cognisant of payment inequality and a lack of mine and mineral resource ownership. The mining sector indubitably contributes significantly to trade and revenue, especially when suitable financial- and legislative frameworks are place. If properly managed, mineral resources can spur on economic growth in communities dependent on mining (McMahon & Moreira, 2014).

However, several challenges remain. These include often unseen effects on traditional cultures and cultural practices, a lack of skill regarding economic management, the prevalence of corruption, and inequality in terms of access to resources. Additionally, environmental- and health consequences also have economic repercussion. Including the community in decision-making processes relating to the construction, management, and processes of the mine could prove valuable in promoting industry and cooperation. Further, the mining industry should focus on national and local regulation of trade in order the ensure economic sustainability (Walser, 2000; Sánchez et al., 2014).

2.4.2. Social effects

Community members are known to voice various social issues related to mine development and operation. For example, members of a mining community studied by Carrington and Pereira (2014) often mentioned the excessive burden mining places on "local human, social and medical services, and infrastructure", a view supported by Archbold, Dahle, & Jordan (2014), as well as Mayer, Olson-Hazboun, and Malin (2018).

Researchers identify a range of social ills that results from mining operations. The IIED (2002) summarise some prevalent social repercussions of mining activities as follows.

- Poor income distribution in mining communities leads to an erosion of traditional social structures. For example, younger mineworkers who had access to more and better education opportunities might earn more than older community members, giving them a higher social standing that undermines the authority of their elders. The payment gap between mine management and workers could also result in violent conflict in the community (IIED, 2002).
- Indigenous communities sometimes need to be relocated elsewhere before mining can commence. As such, communities may lose their homes or land. The disruption of traditional family structures is another prevalent concern. With many migrant workers travelling long distances to seek employment, marriages often fall apart; the aforementioned displacement of indigenous communities could have the same result, as some family members may stay behind to work at the mine while others relocate (IIED, 2002).
- Community health is marked by paradoxical outcomes based on mining activities. While mines often provide basic healthcare facilities for surrounding communities, the very process of mining can cause disease and disability. Exposure to toxins, chemicals, and dust, industrial accidents, as well as the pollution of air and water sources contribute to health crises in mining communities despite the availability of healthcare services. In addition, there is an increasing trends among mining companies to no longer provide healthcare for those residing in mining communities, which necessitates the community's reliance on often inadequate and overburdened public health facilities (IIED, 2002).
- In the same vein, many mining companies no longer make provision for educational facilities or opportunities for those in surrounding communities. Though training opportunities might be available to the mineworkers themselves, their families or dependents often do not have access to quality education. This results in the perpetuation of poverty, as youths who matriculate often cannot afford to continue their education at tertiary level, creating more unemployment. In an effort to make a living, many youths have been shown to resort to crime and sex work (IIED, 2002).

Carrington, Hogg, and McIntosh (2011) posit that, in the Australian context, mining companies unfairly exploit resources to the detriment of surrounding communities. Health-, family-, inequality-, and community destabilisation issues, they believe, are incurred by mining companies transferring the responsibility for the community's education, health, and wellbeing completely onto the community – the mining companies themselves are therefore not held accountable. Cingano (2014) notes that mining companies succeed in diverting attention away from both the long-term and short-term devastation mining can have on communities due to its link to economic prosperity in terms of revenue creation; this unfortunately results in this "highly prosperous movement" continuing to function at will "at the expense of a larger population" (Carrington et al., 2011: 335).

2.4.3. Environmental consequences

The mining sector contributes significantly to waste creation in countries and communities they operate in. In the United States, mining operations that extract fossil fuels, coal, as well as metals and minerals, are blamed for a disproportionate amount of resource inflow and use, as well as inordinately high waste output (Matthews, Amann, Fischer-Kowalski, Bringezu, et al., 2000: 107). The minerals being extracted, along with the mine's size, are key determinants in the generation of waste. Gold- and silver mining are amongst the most wasteful mining sectors, with as much as 99% of extracted ore becoming waste (Fashola, Ngole-Jeme, & Babalola, 2016). In contrast, the amount of waste resulting from iron extraction is relatively small; though as much as 60% of the mined ore is processed into waste, the waste products can be repurposed after being recycled. The recycled waste can be utilised in manufacturing bricks and other products, ensuring sustainability (Thejas & Hossiney, 2022).

The environmental consequences of mining are mainly related to pollution and the effects thereof. Such environmentally damaging effects may result from mining processes itself or from mine closure or -collapse. Pit erosion, falling water pits, acid mine drainage, and other processes pollute the groundwater and soil. This affects agriculture, as it may render produce inedible, and poisons grazing material used by livestock and wild animals, leading to an increase in animal mortality and even extinction. In addition, due to carbon emissions, mining activities damage the atmosphere and air quality. Not only do these types of pollution affect animals and plant life, but human health as well (Carvalho, 2017). Where people rely on groundwater sources for drinking water or fishing, polluted water poses an imminent threat.

Likewise, soil pollution that affects crops and animals could either mean a loss of income or a limitation to hunting activities communities may rely on (Ugya, Ajibade,& Ajibade, 2018).

Further, barren rocks, tailings, and mine waste erode, which further affects water quality. The vast quantity of both liquid- and solid waste often produced by mining activities also contributes to the pollution of water sources (Carvalho, 2017). Chemicals used in the mining process, including arsenic, sulphuric acid, and mercury, even when properly disposed of, pose long-term threats to water quality (Carvalho, 2017). Agboola et al. (2020) note that the circulation of both air and water is affected by mining; erosion causes the aquifer to dewater, and large subterranean voids may result. This also poses a threat of ground collapse and, therefore, human safety.

The mining industry has far-reaching implications for environmental health and security. Mining communities express concerns regarding the use of natural water resources in mining processes, which threatens water availability. Pollution threatens the environment in many different ways, impacting livelihoods and causing sustainability concerns (Anderson & Theodori, 2009; Wynveen, 2011). The creation of vast amounts of mine waste is another central concern. A great deal of mine waste is not recyclable and, even when it is, recycling opportunities and the repurposing of recycled mine waste are not always adequately explored (Twardowska, Stefaniak, & Szczepańska, 2004). Twardowska et al. (2004) proposes four stages in the processing of mine waste, namely:

- The leaching behaviour of mine waste should be analysed, especially where mine waste is exposed to the elements;
- The design and implementation of practices that encourage safe mine waste disposal based on risks identified during the aforementioned assessment should be a continuous process;
- The rehabilitation of mine dumps during and following mine closures should occur; and
- The continuous monitoring of the quality of affected water systems throughout the mine's lifecycle should be a foremost concern, as it ensures that any water quality issues are identified early and can be remediated before such water sources become so degraded that they cannot be rehabilitated.

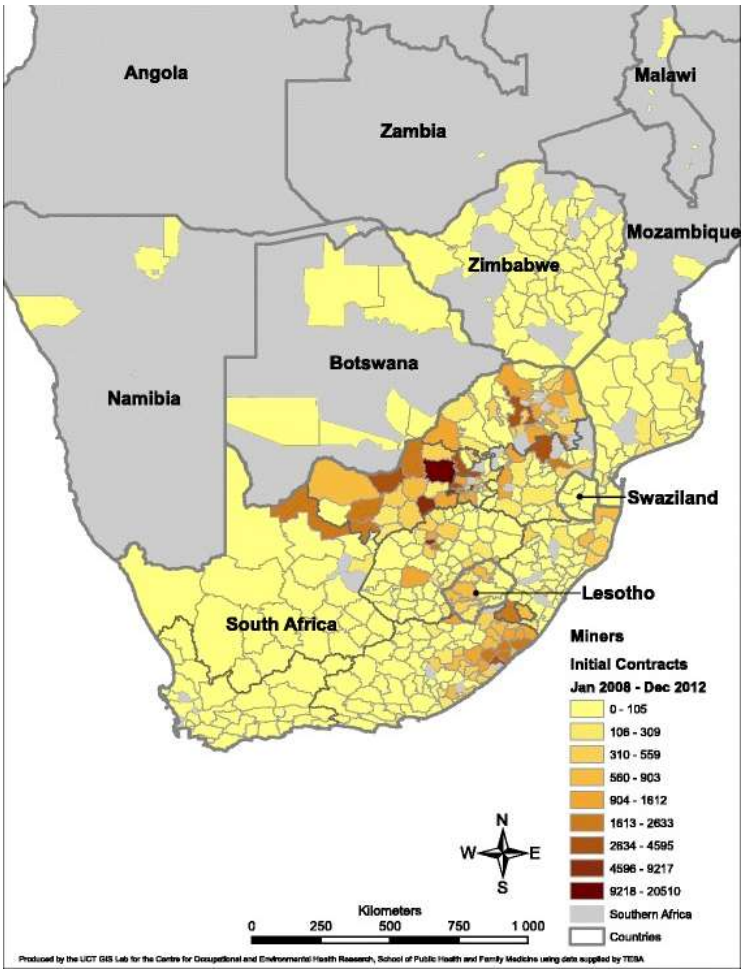
2.4.4. Migration

It is useful, at this point, to provide some definitions of the terms used in a discussion surrounding migration in the context of mining. The South African Resource Watch (2022) provides the following explanations.

- **Migrant** is a term used to refer to individuals who seek better living- or working conditions, which prompt them to move from the area where they have settled to another area.
- **International labour migrants** or **migrant workers** are individuals who were born outside of South Africa, and who crossed international borders in order to gain employment in various economic sectors.
- **Provincial migrant workers** or **internal labour migrants** refer to South African citizens who relocate from one part of the country to another to gain employment (SARW, 2022b).

For the purpose of this dissertation, the term "migrant" is used to include both international- and internal labour migrants. Figure 2.3 below shows the distribution of migrant mineworkers in South Africa between 2008 and 2012.

Figure 2.3: Distribution of migrants to South Africa in the mining sector (2008-2012)



Source: Ehrlich, Montgomery, Akugizibwe, & Gonsalves (2017).

The influx of migrant workers into mining areas is one of the major social effects attributed to mining, as mining represents employment and financial gain. In the international context, one could cite the example of the Grasberg mine (Papua New Guinea), where the local population was initially less than 1 000 people; however, the advent of mining activities in the area saw the population grow to more than 110 000 individuals by 1999 (IIED, 2002). Similarly, and in the same country, the Porgera area's population rose from 4 000 residents in 1990 to more than 18 000 in surrounding the squatter settlements (Anderson, Fraser, & Zandvliet, 2001). With the influx of foreign workers or workers from other areas in the country, land-use disputes and issues regarding access to benefits may arise. At the Grasberg mine, for example, these factors led to violent uprisings in the 1970s and 1990s.

During the Apartheid era in South Africa, the entry of migrant workers took place through what Segatti and Landau (2011) call the "back gate". From neighbouring countries, migrants were

granted entry into the country for limited periods of time. In this way, a "cheap and relatively docile" workforce (2011: 34) was amassed to labour in the mining- and agricultural industries. The migration practices of the time were strictly controlled (SARW, 2002b). Even though this Apartheid labour control system ceased after the 1994 elections, the influx of migrant workers into the country continues to this day (SARW, 2002b). This has various implication for migrant workers; the SARW (2002b: 2) notes that shortcomings in the regulatory and legislative arrangements around migrant labour in general and migrant mineworkers as a vulnerable and marginalised labour sector in particular, create many challenges for migrant mineworkers and their labour and human rights.

An example of how migrant workers are affected can be found in the events at the Lonmin mine in Marikana (North West province) in 2012. Mineworkers, mainly migrants, launched a 'wildcat strike' as a result of low wages and poor living conditions. This kind of strike action occurs when labourers who belong to a union strike without the union's permission. After a week-long strike, which sometimes turned violent, the police intervened. In the ensuing events, 34 mineworkers were killed, 78 were severely injured, and more than 250 were arrested. Though the protest and ensuing massacre brought into focus the struggle of mineworkers, and especially migrant labourers, to earn a decent living wage and have access to humane living conditions and proper housing, the Lonmin mine and government officials were absolved of any responsibility, and Lonmin subsequently fired thousands of mineworkers (SAHO, 2015).

However, it is not only the migrant workers themselves, but communities at large that are affected. Research shows that migrant workers – whether internal or international – are willing to accept lower wages and work in more precarious conditions. From a company's perspective, this makes good business sense. Further, there is a readily available pool of labourers to draw from (SARW, 2002b). Mancini and Sala (2018) note that, when workers from other regions enter a specific area, the demographic composition of the receiving area changes. This gives rise, firstly, to a gender imbalance, as most migrant mineworkers are male. This, in turn, affects social cohesion: an increase in gender-based violence and substance abuse is noted. Local communities often resent migrant workers for 'stealing' jobs local workers are eligible for. As mine housing is scarce, overcrowded, and often unaffordable for migrant workers (DME, 1998), many live in informal settlements surrounding mines, where infrastructure is already overstretched. Rising accommodation costs, vying for access to services and goods, as well as aspects of rising inflation, all affect local communities' physical and emotional wellbeing (Mancini & Scala, 2018). The sudden increase in population may also cause an increase in

pressure on natural resources such as water and water- and electricity supply infrastructure. From the viewpoint of the state and companies, migrants are perceived to pose a security risk and effectively limit the benefits the local communities depend on (Banks, 2009).

2.4.5. Education

According to Banks (2009), large mining companies often aid in establishing educational facilities in developing countries; mining companies are shown to be concerned with providing instructional amenities and education opportunities with direct or indirect contributions from the state. Some mining companies also make available internships and bursaries for further study or skills training (Banks, 2009). The establishment of educational trust funds or foundations also sometimes occur, as is the case with the Raymi Foundation in Bolivia and the Tinto Aboriginal Foundation in Australia, who both fund educational institutions and opportunities in these respective countries (Banks, 2009).

In the South African context, Anglo American Platinum's CSI education projects are available to mineworkers in both the Limpopo and the North West province. Though laudable, Siyobi (2015) notes that the development of the projects took place without the company's consultation with local education authorities. Local communities were also unaware of these projects, or did not understand their purpose. The establishment of infrastructure for these projects at local schools also shows a lack of forethought: where new ablution facilities or science laboratories were built, for example, no running water was available. These facilities were thus largely redundant (Siyobi, 2015).

Since municipalities bear the responsibility of providing communities, including schools, with water and electricity, the example above also shows a lack of cooperation between local government and the company. At times, municipalities struggle to meet this core function, which the company should take into account. In addition, research shows a trend amongst South African mining companies to completely withdraw themselves from any responsibility regarding the provision of education. Instead, they advise mineworkers to rely on local educational facilities, which some municipal locations do not have (IIED, 2002). This increases the burden on the community, and shows a lack of CSR.

2.4.6. Mines, communities, and land-use conflicts

Worlanyo and Jiangfeng (2021) emphasise that almost all mines are situated in rural areas, which implies that mining operations may encroach on arable land as well as natural forests.

Many areas where mines are located also have specific cultural significance to local communities. However, mining companies take the approach that there should be no encumbrances to opening a mine (Worlanyo & Jiangfeng, 2021). Even where mining companies take great precautions to be respectful of the land, the fact remains that many local communities depend on the same land for the livelihoods, including water, shelter, and food (Haddaway et al., 2018). Since companies and communities often have different socio-economic values, ructions related to land-use and rights may ensue. According to Aguilar-González, Navas, Brun, Aguilar-Umaña, and Cerdán (2018), the primary considerations for mining companies in terms of land-use are:

- Fostering a sense of self-determination, or the community's ability to make decisions regarding its future;
- Addressing demands associated with property rights, access to land, and the use of resources;
- Liaising with communities before mining commences regarding the protection of culturally significant sites, arable land, and local hunting- and foraging practices;
- Protection of cultural rights applicable to different cultures, including access to sacred sites, spiritual practices, language, and religion; and
- Addressing concerns related to rights to communal property in lands and territories.

As a matter of course, mines require large tracts of land for excavation purposes. However, unplanned expansion, as well as environmental accidents, may cause the displacement of communities. Conflicts related to land use for mining are most prevalent and intense in developing countries. In some developing countries, residents have obtained the legal right to most of the land. McLeod (2000) cites the example of Fiji, where indigenous landowners believe that they alone own everything below and above local mineral deposits; therefore, 84% of the land potentially earmarked for mineral extraction is considered their land. Establishing mines occasionally incurs the displacement of surrounding communities to other areas. Steyn and Kahle (1998) propose that mining companies make available financial support to such displaced peoples, that they aid in the relocation process, provide housing subsidies, and ensure improved living conditions in areas where the displaced will settle.

Table 2.2. below depicts the various stages, activities, and impacts of developing a mining location from its discovery till the closure of a mine.

Table 2.2: Potential consequences effects of mining on ecology and community

Stages	Activities	Potential Impacts
Discovery	• Geophysical/surveying • Drilling/trenching • Dugout blasting, exploration, site development • Road construction	• Environmental loss/separation • Increased deposit load to surface water • Disturbance to flora and fauna and local communities • The increased command of regional water resources • Fuel spills • Increased road development • Species loss due to hunting
Site grounding/ mineral withdrawal	• Mine construction (vegetation removal) • Mining infrastructure construction (power lines, roads, etc.) • Construction of factory buildings, offices, and buildings • Construction of mine camps • Establishment of waste rock piles • Design of low and high reserves • Transport of grade ore to crusher distribution	• Habitat loss/fragmentation • Chemical contamination of surface and groundwater • Reduction of species • Toxic effects on organisms • Changes in the landscape • Water/electricity demands • Accelerated erosion and drainage • Smoke from explosives • Loss of species due to hunting
Processing/smelting	• Mineral grinding/crushing • Chemical leaching/mineral concentration • Mineral smelting/refining	• Leaks of chemicals and other wastes into surface waters • Emissions of sulphur dioxide and heavy metals • Increased demand for electricity
Transport to final markets	• Final product packing/loading • Product transport	• Noise interference • Dust/smoke in stock
Mine closure/post-operation	• Overseeing/revegetation • Reconstruction • Fenced hazardous areas • Leakage monitoring	• Continuous surface and groundwater contamination • Long-term costly water treatment • Persistent toxicity to organisms • Loss of original vegetation/biodiversity • Abandoned piles/wells causing damage and risks to human health

Source: Reed &Miranda (2007)

2.5. CONCLUSION

Based on the literature reviewed, the dearth in research related to local mining communities' as well as mining staff's perceptions of CSR, particularly within Khâi-Ma local municipality, is evident. The evolution of the CSR concept, and how it relates to SD, has provided some

definitions and recommendations; however, if and how this is implemented in the Khâi-Ma local municipality remains to be discusses. It is critical to the wellbeing of the mining communities in this local municipality that the mining company's CSR initiatives address the local effects of mining discussed in this review, such as economic-, social-, and environmental consequences, amongst others.

When CSR is well regulated and utilised, the mining industry has the opportunity to create a positive legacy in mining communities, especially through the development and implementation of SD programmes. However, since CSR is mainly a top-down approach, there is no single, standardised method of implementation. The local impact of mining on communities is complex. Strong governance and clear CSR policies are required to empower and develop mining communities.

The following chapter discusses mining policy and legislation as it relates to CSR. Further investigation is needed to determine the importance of CSR in mining companies, communities, as well as the environment to ensure sustainable development that will benefit current and future generations.

CHAPTER 3: THE SOUTH AFRICAN POLICY ENVIRONMENT

3.1. INTRODUCTION

South Africa's mining industry is vital to the country's fiscal growth. With its many significant subsectors (the mining of gold, platinum, diamonds, coal, magnesium, and iron ore), it has been the cornerstone of South Africa's economy since the inception of commercial mining during the late 1800s (MCSA, 2019a). However, it has also historically created significant inequalities and excluded Black people and local communities from benefitting from the country's mineral resources and -extraction industry (Moraka, 2016). Since 1994, there have been various attempts to create a more inclusive mining sector that supports regional development and proper relations with local communities.

With the establishment of South Africa's current democratic state, the country's legislators and policy makers embarked on a journey to amend and improve various mining policies. After the establishment of the Constitution of the Republic of South Africa (RSA, 1996) and the 1998 White Paper on Mining and Minerals, one of the most prominent changes was the creation of the Mineral and Petroleum Resources Development Act 28 of 2002 (RSA, 2002). The government then released various mining charters and social and labour plans (SLP) guidelines (DMRE, 2010). These policies, acts, and procedures are aimed at ensuring employment and infrastructure development while simultaneously protecting communities and the environment from land degradation and other adverse effects of mining. Before discussing each policy in turn, I will provide a global overview of the most pertinent information comprising mining policy in South Africa.

3.2. A BRIEF OVERVIEW OF OFFICIAL SOUTH AFRICAN MINING POLICIES

In this section, I will provide a brief legal review on each piece of legislation mentioned above, specifically as they relate to mining and SD. The South African Constitution (1996) is the supreme law by which the country is governed. It cannot be superseded by any other legislation. Legislation under the overarching authority of the Constitution that govern mining in South Africa include, amongst others, the

- Mineral and Petroleum Resources Royalty Act 2008;
- Mining Titles Registration Act 1967;
- Precious Metals Act 2005;
- Diamonds Act 1986;

- Mine Health and Safety Act 1996;
- National Environmental Management Act 1998 (NEMA); and
- National Water Act 1998.

With regards to land use, zoning, specifically pertaining to future prospecting and mining, is regulated by the Spatial Planning and Land Use Management Act of 2013, and also relies on municipal and provincial bylaws (Davies et al., 2018). The mining sector is primarily administered by the Department of Mineral Resources (DMR), which regulates aspects of petroleum- and mineral resources under the Mineral and Petroleum Resources Development Act of 2002 (MPRDA). The DMR is responsible for the regulation of not only existing mining operations, but also environmental management plans and -impact assessments. It also approves financial support for the remediation of land after mine closure, and administers environmental authorisations necessary for prospecting and mining (Davies et al., 2018). In terms of environmental impact and remediation of land, the Department of Environmental Affairs (DEA) is the final appeals authority.

Two main pieces of legislation pertain to mining in South Africa. These are the Mineral and Petroleum Resources Development Act of 2002 (MPRDA) and the Broad-Based Socio-Economic Empowerment Charter for the South African Mining and Minerals Industry, 2018 (called the Mining Charter). The promulgation of the MPRDA (RSA, 2002) marked a significant shift in the country's mining legislation, as it vested all of the country's mineral- and petroleum resources in the state. Therefore, equitable access to resources was granted to all South African citizens (Leyden & Mametse, 2020), which had not been the case under previous governmental regimes. In 2020, several amendments to this Act were published. Among these amendments are mining application lodging- and mining appeal processes. The MPRDA (RSA, 2002: 22) makes provision for consultation between mining corporations and communities, or "interested and affected persons"; however, who these persons are, is not clearly defined. With the amendments, writes Fasken (2022: para 6),

> the definition of *'interested and affected persons'* has been extended to mean a natural or juristic person or an association of persons with a direct interest in the proposed or existing operation or who may be affected by the proposed or existing operation, including but not limited to:
>
> - Mine Communities (as defined in the Amendment Regulations),
> - landowners,
> - the Traditional Council as defined in the Traditional Leadership and Governance Framework Act, 2003),

- land claimants who have lodged claims in terms of the Restitution of Land Rights Act 1994 which have not been rejected or settled in terms thereof,
- lawful land occupier,
- holders of informal rights in terms of the Interim Protection of Informal Land Rights Act 1996,
- the Department responsible for Agriculture, Land Reform and Rural Development,
- the Department responsible for Co-operative Governance and Traditional Affairs,
- the Department responsible for Human Settlements, Water and Sanitation,
- any other person (including on adjacent and non-adjacent properties) whose socioeconomic conditions may be directly affected by the proposed or existing prospecting or mining operation,
- the local municipality,
- civil society, and
- the relevant government departments, agencies and institutions responsible for the various aspects of the environment and for infrastructure which may be affected by the proposed project.

It is of particular interest that the above-mentioned mine communities refer not only to communities in close proximity to mining operations, but also other communities in the local municipality, as well as labour sending areas (Fasken, 2022). The amendments also advocate for meaningful consultation to take place between communities and mining companies. A public participation process is therefore inherent in South African mining legislation. Such consultation processes should also involve regional- and national government.

The amendments further extended their social and labour plan (SLP) objectives. Those who hold mining rights are expected to contribute to the sustainable socio-economic development of surrounding communities and labour sending areas, which are defined as areas where most migratory mineworkers originate from (Fasken, 2022). Social upliftment and SD is therefore crucial goals in benefitting more than just the communities immediately surrounding mining operations. Moreover, the amendments stipulate that SLPs mush be developed based on consultation with communities, and must thereafter be published in at least one official South African language and English. The SLPs should be made available in the general media, at schools, libraries, and municipal offices, and on the Internet. Mining rights holders are required to have three meetings with mining communities on an annual basis, where the outcomes and implementation of SLPs are to be discussed. The minutes and outcomes of these meetings should be included in mining companies' annual reports (Fasken, 2022).

The Mining Charter (DMR, 2018) was published following widespread public discussions mining stakeholders, the Minerals Council South Africa, trade unions, affected communities, and the government. Relating to the MPRDA's (RSA, 2002) stipulation that all South African citizens have access to the country's mineral resources, the Charter addressed the aspect of those disadvantaged by the previous regime. It stipulates that new mining operations should comprise 30% black economic empowerment (BEE) shareholding (Davies et al., 2018). Lane (2018) notes that the Charter focuses on six elements, namely the development of mining communities, employment equity, development of human resources, inclusivity in terms of suppliers, enterprise development, and procurement, ownership, and improved living- and housing conditions. Each of these will be briefly discussed here, and in more detail later on in this chapter.

- Under mining community development, the Charter acknowledges that mining forms part of a larger ecosystem; therefore, mining rights holders should contribute to the host- and surrounding communities' socio-economic wellbeing The Charter ringfences community development, and requires mining companies to comply with development goals 100%. To do so, SLPs are vital, as they speak to sustainable and targeted development. The Charter stresses that SLPs should be developed in collaboration with the affected communities and stakeholders, and should align with international best practices (Deloitte, 2019).
- The goal of the employment equity aspect of the Charter is to fast-track transformation in the mining industry. This includes aligning business plans with BEE planning and codes, career progression plans being formalised, and including women in all levels of the mining industry, based on provincial demographics (Deloitte, 2019). Disabled peoples are also included under employment equity targets. The Charter's equity requirements are depicted in Figure 3.1 below:

Figure 3.1: Employment equity scorecard

SCORECARD

Element Description	Compliance Target (%)	Measure	Weight (%)
Board	HDP	50%	2%
	Of which must be women	20%	2%
Executive management	HDP	50%	4%
	Of which must be women	20%	3%
Senior management	HDP	60%	3%
	Of which must be women	25%	3%
Middle management	HDP	60%	2%
	Of which must be women	25%	2%
Junior management	HDP	70%	2%
	Of which must be women	30%	2%
Employees with disabilities	Employees with disabilities as a percentage of all employees	1.5%	2%
Core and critical skills	HDP	60%	3%

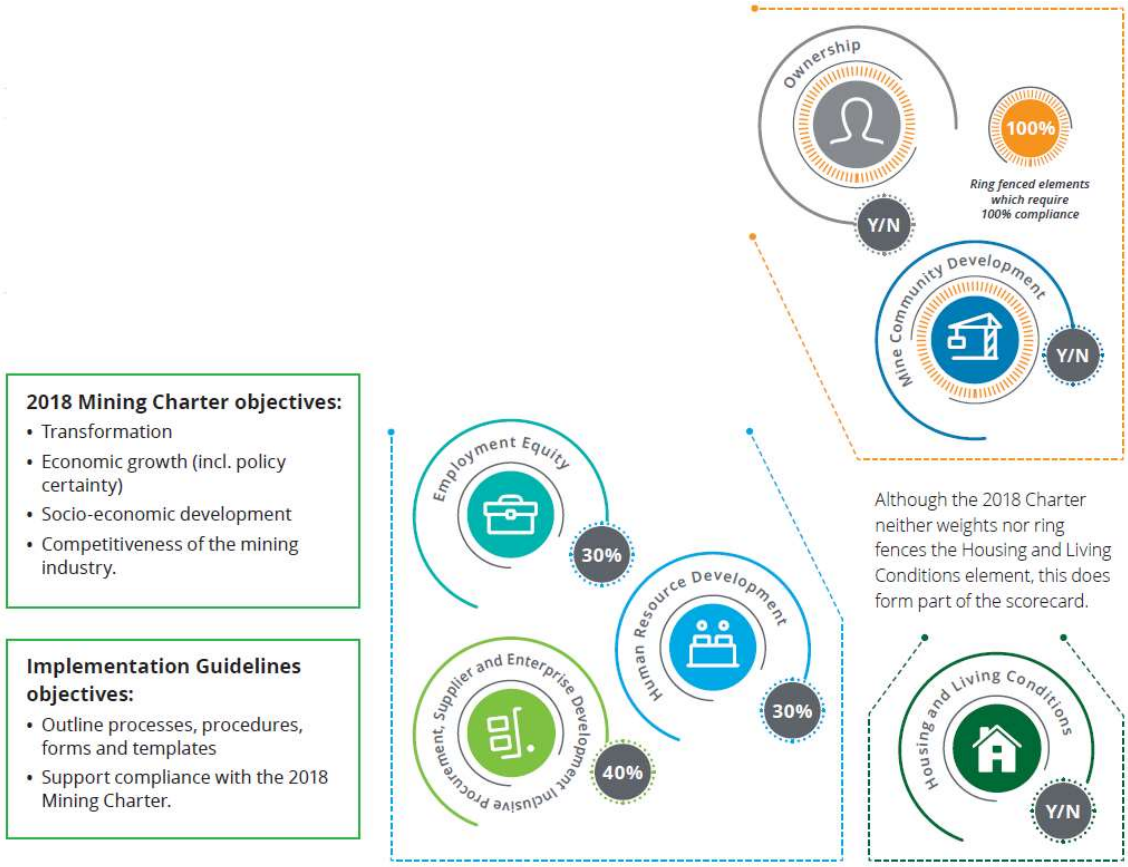
Source: Deloitte (2019: 12).

- Human resource development and skills development are closely linked in the Charter. Five percent of the mining concern's profit should be earmarked for these purposes. Deloitte (2019: 17) notes that "essential skills such as science, technology, engineering, mathematical, literacy and numeracy skills, as well as apprenticeships, bursaries, and artisanal and graduate training programmes" should be considered. Not only should such training be made available to employees, but also to community members who are not employed by the mine.
- Local suppliers, service vendors, and enterprises should enjoy preference in the procurement of goods and services. For example, multinational suppliers should extend a portion of their annual income to obtain goods from local mining companies and -communities. Mineral sample analysis should be entrusted to South African facilities, and mines should aim to obtain food, cleaning services, and other needs from the local community (Deloitte, 2019).
- Community- and employee wellness, development, and productivity can be increased by improved living conditions and housing, states the Charter. This includes the upgrading of hostels to family units, reducing occupants to one per room, and aiding in ensuring home ownership (Deloitte, 2019).

- Finally, ownership has already been alluded to – New mining rights must have a minimum of 30% BEE shareholding, i.e. host community, qualifying employees and BEE entrepreneurs. The aspect of ownership also speaks to the 'once empowered-always empowered' principle. This means that mining shareholders can sell their shares while retaining ownership (Deloitte, 2019).

The Mining Charter's (DMR, 2018) stipulations outlined above are depicted in Figure 3.2 below.

Figure 3.2: The Mining Charter (2018) summarised



Source: Deloitte (2019: 5).

3.3. THE CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA (1996)

The South African Constitution (RSA, 1996) requires the government to engage with its citizens regarding policy and legislation development processes. The Constitution is the country's supreme law, and provides the fundamental pillars on which other mining policy and legislation, such as the Minerals and Mining Policy White Paper (1998), rests. The Bill of

Rights in Chapter 2 of the Constitution (RSA, 1996) provides an overview of fundamental human rights; these include people's rights to economic and racial equality, as well as their right to a safe environment free of pollution.

Several sections in the Constitution has several clauses refer to Black Economic Empowerment (BEE); hence the Constitution starts with "We, the people of South Africa, recognise the injustices of our past" (RSA, 1996: 1). With the legacy of inequality, violence, and suffering left by Apartheid, the government included in the Constitution's preamble an explanation of the importance of improving the quality of life of all citizens. According to the Bill of Rights (1996), all people are equal. The government may take legislative action to protect persons disadvantaged by unfair discrimination and to promote equality. Consequently, the post-apartheid government has passed various acts governing employment equity and the empowerment of PDIs. The Constitution also guarantees a healthy environment and promotes the advancement of sustainable development opportunities (RSA, 1996). However, these principles enshrined in the Constitution require proper and environmentally sustainable use of all of the country's natural resources. In terms of mining, environmental as well as socio-economic stability must therefore be attained through a cost-effective and competitive mining industry (RSA, 1996).

3.4. THE WHITE PAPER: A MINERALS AND MINING POLICY FOR SOUTH AFRICA (1998)

The South African Government approved the new White Paper on Minerals and Mining Policy (DME, 1998) on 23 September 1998. The state organised the Draft White Paper into six main themes, namely:

- Business climate and mineral development;
- Participation in ownership and management:
- People issues;
- Environmental management;
- Regional cooperation; and
- Governance.

These themes will be briefly discussed in the following sections to illuminate its impact on South Africa's mining industry, those involved in the industry, as well as the economic and social impacts of mining.

3.4.1. Business climate- and mineral development

This section of the White Paper has as its focus the establishment of policy that incentivises investment. It includes a section on mineral rights and prospecting related specifically to mineral rights and mobility – that is, to redress the past exclusion of PDIs in benefitting from the spoils of the mining industry and natural resources. The White Paper states that, in order to attract both local and international investors, South Africa needs to compete with other developing and developed countries with active and robust mining sectors. Because of the country's vast mineral deposits, more commodities can be extracted than can be consumed by international and national markets. In this context, the government adopted a macroeconomic strategy; this strategy aims to improve the mining industry's competitiveness, improving the business climate in order to facilitate the expansion of businesses, and securing local and global investments. This would also contribute to the process of economic liberalisation – by benefitting PDIs and local communities – and strengthen the South African economy (DME, 1998).

It is also noteworthy that this section of the White Paper acknowledges the physical and environmental perils of mining. Since most mining projects in South Africa take place long-term and on a large scale, it not only requires significant financial capital, but is also a high-risk industry. Thus, the White Paper notes that it is government's responsibility to put in place legislative and regulatory frameworks that address these safety concerns without placing undue financial strain on the country and its mining industry.

This section of the paper also deals with economic empowerment on various levels: that of the country, the mining industry, as well as PDIs. The latter includes making available employment as well as skills development opportunities that would allow PDIs to benefit from the country's mineral wealth and the extraction thereof. Local and national economies can benefit from the government's adopted macroeconomic approach, but only when this is properly regulated to encourage fair business- and labour practice to ensure its employees and investors' needs are met (DME, 1998).

3.4.2. Participation in ownership and management

As stated earlier, the mining sector, as well as other financial sectors, have a history of excluding Black people. This section of the White Paper aims to address this inequality by promoting ownership and management of mining companies by PDIs. Mines are properties

protected by the South African Constitution (RSA, 1996), and mining rights are awarded by the state; such rights indicate a sizeable economic investment, as they are traceable. Without obtaining of permit that allows mining and prospecting, owners of mineral rights are not allowed to initiate mining activities, or even prospecting action. It is the government's aim that mineral rights be used not only to encourage investment in the country and the industry, but also the benefit all South African citizens (DME, 1998).

As mining was the purview of the white minority under the Apartheid regime, and PDIs did not benefit from the extractive industry or mineral resources, it is now of utmost importance to the government that the country's new market-based economy is open to Black ownership and participation in mining. It is in the interest of all citizens, as well as the government, to promote broader ownership to foster national pride and benefits. Mine ownership and -management thus have to be deracialised to benefit those previously marginalised by the mining sector. As mine ownership and -management require a large capital investment, several financial institutions, including the South African Development Bank and the Industrial Development Corporation collaborate with Black-owned companies, allowing them to invest in existing and emerging mining endeavours and companies. This fosters economic equality and growth.

Black ownership is further strengthened by employee shareholding initiatives, such as ESOPS (The Employees Shareholding Association Participation Scheme) where the government enables mine employees to have a measure of ownership and input into mining activities (DME, 1998). This is done through the coordination of corporate laws and tax legislation to better allow low-income labourers to become shareholders. The Katz Commission's third interim report regarding taxation, cited in the White Paper, notes that it "very much supports the objective of greater employee share ownership in South Africa"; the report continues to say that ESOPS should be use for the benefit of "the entire labour complement of a company [...] particularly employees at the lower level of the organisation" (DME, 1998: 37).

3.4.3. People issues

It is in the nature of mining that it poses risks to people's health as well as the environment. As many individuals depend on mining companies for their livelihood, aspects such as these need to be mitigated by the application of legislative frameworks and governmental policies. As such, the White Paper refers to several "People Issues, which looks at health and safety, housing needs, migrant labour, industrial relations and downscaling" (DME, 1998: 4). There is also

much emphasis on improving relationships among people in the industry and allowing opportunities for human development (DME, 1998).

This section stipulates that safe and healthy work environments at mines should be encouraged by the government, ensuring that mining complies with South Africa's health legislation and -policies. Though, by law, the mining industry has to ensure that mine workers should not be exposed to hazardous substances (such as ores and ore processing chemicals, including platinum, manganese, cyanide, etc.) more than what is advised in the country's occupational exposure limits (OELs), miners are still at risk, especially taking into account prolonged and continuous exposure (Utembe, Faustman, Matatiele, & Gulumian, 2015). Not only this, but also dangers such as rockfalls and mine tunnel collapse, as well as industrial accidents, are of concern. To this end, the Mine Health and Safety Act 29 of 1996 was drafted to "provide the comprehensive legal framework for creating a healthy and safe working environment" (MHSC, 2018: para 3). Whereas, in the past, the focus was on ensuring worker *safety*, this Act and the White Paper broadened its focus to also include mineworkers' *occupational health status* (MHSC, 2018; own emphasis).

Access to housing and humane living conditions is another consideration of this section of the White Paper. In the past, accommodation inequality existed among racial lines, with especially Black mineworkers living in squalid conditions in mine kampongs (*cf.* Section 1.2) or other sub-standard accommodations (DME, 1998). Not only did these living arrangements have consequences for mineworkers' health, but their productivity, as well as social and mental wellbeing, were jeopardises. Thus, the White Paper encourages mining companies to develop accessible and quality housing infrastructure for employees. Especially since many South African mineworkers are migrants or immigrants (see Section 2.3.4), access to accommodation is vital. The Paper stipulates that mine companies should also encourage homeownership so as to develop mining towns' infrastructure (DME, 1998).

Education is another important aspect addressed in this section. Human resource development is not only crucial to the mining industry, but all economic sectors. Since skills shortage is one of the main challenges in the mining- and other business sectors – Thasi and Van der Walt (2020: 243) posit that it has "reached critical proportions" – South Africa's education system should address the acquisition of practical skills as well as academic knowledge. Mining companies should contribute to human resource development by making available skills training opportunities, training related to basic health and safety, as well as Adult Basic

Education and Training (ABET). This is also done in an effort to address skills losses resulting from the legacy of the Apartheid educational system that neglected to education of current PDIs (RSA, 1998).

Though the White Paper contends that the government will gradually diminish its reliance on (im)migrants as mine labourers, the fact is that many mineworkers travel great distances to seek employment (*cf.* Section 2.3.4). The ongoing xenophobia crisis in South Africa is an impetus behind the government's regular revision of the state of migrant labour, so as to mitigate social concerns. The 1996 Labour Market Commission investigated the influx of foreigners into the South African labour forces, and recommended that the mining industry become less dependent on migrant or immigrant labour. It was recommended that a revised policy, premised on one immigration decree applicable to all foreigners entering South Africa, is adopted (DME, 1998). However, the mining industry continues to be reliant on outside labour; of the more than 500 000 mineworkers in South Africa, as much as 40% come from labour-sending countries outside South Africa (SARW, 2022a). According to the White Paper (DME, 1998), governmental regulation should ensure that outside labour levels are balanced in such as a way that the volume of labour from it does not compromise the ability of local labourers to be employed. The Paper advises the creation of frameworks to facilitate creative solutions to such issues, and to ensure high employment standards.

Therefore, it is the government's responsibility to create a regulatory framework that minimises any threats related to people issues, which may also adversely affect the industry's economic viability (RSA, 1998). The state should promulgate legislation and institute policies for the fair and sustainable health and safety practices, access to housing and promotion of homeownership, labour relations, and the balance between local and outside labour.

3.4.4. Environmental management

Following the Constitution's stipulation that each citizen has the right to live in a safe and unpolluted environment, which should be safeguarded for future generations as well(RSA, 1996), the fourth section foregrounds the implementation of environmental management systems. By promulgating and strictly enforcing environmental legislation, the government needs to contribute to mitigating pollution and environmental degradation (RSA, 1998b). Part of meeting society's developmental needs is ensuring that the integrity of the natural environment remains intact. Environmental impact assessments (EIAs) should be a foremost

concern for all mining companies before and throughout the mine lifecycle, as well as after mine closure. In line with the state's SD goals, combining economic opportunities with environmental studies is of utmost importance. The country's natural resources should not only be exploited for economic gain, but also be protected in order to sustain growth. Economically sensible mining practices that ensure South Africa's competitiveness in the global market need to be balanced with environmental preservation and rehabilitation.

According to the White Paper (DME, 1998), the state calls for:

- Sufficient planning, administration, and coordination regarding natural resource use;
- Improved engagement on the part of mining companies with the community regarding the environment, thus ensuring informed and proactive decision-making processes; and
- Effective and manageable environmental impact management methods.

The pollution of waterways, the atmosphere, and soil by the mining industry necessitates the rehabilitation of the natural environment. It is crucial that research focusing on mitigating the effects of pollution, as well as strengthening standards and protocols for environmental management and -impact mitigation, continues.

3.4.5. Regional cooperation

The White Paper's (DME, 1998) fifth section aims to promote cooperation between regional legislature and the government so as to capacitate coordination of different legislative frameworks in the best interest of the country's mineral wealth. This includes instituting basic approaches to achieve the following objectives.

- Without destabilising the country, hindrances to labour movements, goods and services, as well as capital production should be addressed and removed in a systematic fashion;
- To benefit from the country's mineral resources, harmonisation of regional legislation and minerals, including the integration of technical- and industrial standards related to minerals, should be encouraged;
- In order to add value to mining areas, mineral processing across borders should be promoted to aid in the optimal utilisation of available capacity;
- Information on available facilities, processing of minerals, technological developments, geosciences, and expertise should be shared through fostering cooperation between mining regions;

- The capacity of academic departments related to the mining industry at tertiary institutions should be increased so as to develop human resources, including the pooling of resources such as research institutions, -facilities, and -laboratories; and
- Member countries should be kept apprised of any exploration and investment activities or opportunities (DME, 1998).

3.4.6. Governance

Finally, in the last section, the White Paper (DME, 1998) emphasises the competence and efficiency of governmental institutions; governance of the mining sector should be directed at the regulation, support, and promotion of minerals and their extraction. Both companies and individuals involved in the mining industry should have confidence in their interactions with state institutions, and should be assured that decision will be made efficiently and in without undue delays. Governance and decision-making processes should also be transparent and be aimed at staying true to the state's brief, namely the management of the country's natural resources and the regulation of the mining industry so as to maximise benefits and meet national objectives (DME, 1998).

In summation, the minerals and mining sector in South Africa has seen drastic transformation of the past decades. It was necessary to change policies and implement strategies to conserve the environment and ensure racial equality, as enshrined in Chapter 2 of the Constitution (RSA, 1996). However, many challenges remain despite these transformations, including environmental issues, health and safety concerns, and the aspect of migrant labour (RSA, 1998).

3.5. THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT (ACT NO 28 OF 2002) (MPRDA)

With the Minerals Act 50 of 1991 (RSA, 1991), the country introduced new regulations for the mining industry; this Act specifically included sections on environmental concerns. It also provided for the transfer of mineral rights exclusively to private owners. This Act was criticised as the Apartheid government's final effort to ensure the mine ownership remained the purview of the white minority (DMR, 2018; Bello & Harvey, 2015). In response, the post-Apartheid government introduced the Mineral and Petroleum Resources Development Act (from here on in the MPRDA) (RSA, 2002), a democratic mineral dispensation. With this new Act, the Minerals Act of 1991 was repealed; all of the country's mineral rights were transferred to the

South African citizens and the government, stripping these rights from the corporate sector (RSA, 2018). The White Paper (DME, 1998) served as the impetus behind the drafting and ultimate promulgation of the MPRDA (RSA, 2002).

The MPRDA forms the foundation of mining legislation in South Africa. Not only does it focus on the provision of a legal framework for all mining stages – negotiation, prospecting, operation, closure, as well as rehabilitation – but also on the restoration of land prior to, during, and following mining operations. In order to safeguard the natural environment from degradation, and to protect it, the Act allows the Minister of Minerals and Energy to rescind mining rights. As its purpose, the MPRDA has the provision of equal development- and growth opportunities for South Africa's natural resources and assets. The objectives of the Act are to

> 2. (a) recognise the internationally accepted right of the State to exercise sovereignty over all the mineral and petroleum resources within the Republic;
> (b) give effect to the principle of the State's custodianship of the nation's mineral and petroleum resources;
> (c) promote equitable access to the nation's mineral and petroleum resources to all the people of South Africa;
> (d) substantially and meaningfully expand opportunities for historically disadvantaged persons, including women, to enter the mineral and petroleum industries and to benefit from the exploitation of the nation's mineral and petroleum resources;
> (e) promote economic growth and mineral and petroleum resources development in the Republic;
> (f) promote employment and advance the social and economic welfare of all South Africans;
> (g) provide for security of tenure in respect of prospecting, exploration, mining and production operations;
> (h) give effect to section 24 of the Constitution by ensuring that the nation's mineral and petroleum resources are developed in an orderly and ecologically sustainable manner while promoting justifiable social and economic development; and
> (i) ensure that holders of mining and production rights contribute towards the socio-economic development of the areas in which they are operating (DMR, 2018: 12).

Evident from the objectives quoted above is the inclusion of aspects relating the SD and growth in a broader sense. It includes compliance with legislation and policy, while simultaneously promoting the current efforts by the mining industry to address concerns related to socio-economic development, management of the natural environment, as well as issues related to worker health and safety.

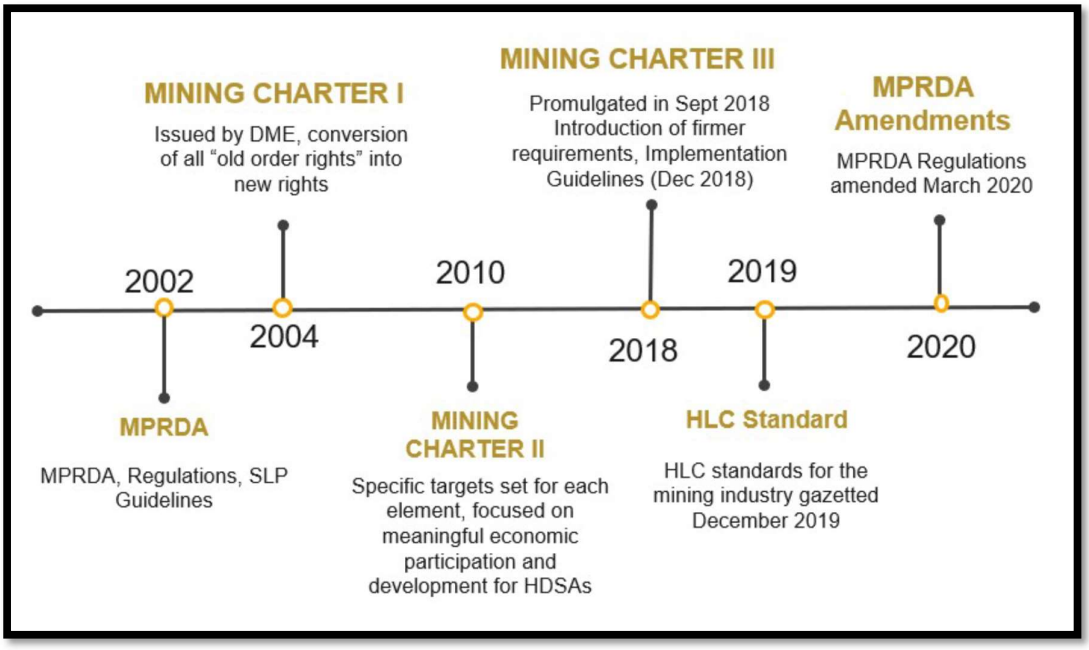
3.6. BROAD-BASED SOCIO-ECONOMIC EMPOWERMENT CHARTER FOR THE MINING AND MINERAL INDUSTRY (THE MINING CHARTER) (2018)

The Mining Charter (DMR, 2018) – otherwise known as the Broad-Based Socio-Economic Empowerment Charter for the Mining and Mineral Industry – concerns itself with the rate of change in the current minerals- and mining industry. Though a variety legislation is in place to regulate this industry (*cf.* Section 3.2), scholars note that changes are slow to be implemented in practice (HRW, 2022; Moraka, 2016; and others). Therefore, regulatory and legislative uncertainty is prevalent; this should be balanced with the effects of the mining industry on economic and social conditions. To investigate this further, the Mining Charter (2018) is discussed in the sections below.

3.6.1. Background

The Charter aims to make valuable contributions to South Africa's mining industry by acting as a principle guiding framework and -instrument in collaboration with the MPRDA (RSA, 2002). The Charter is also concerned with the sustainability of mining operations in the country (DMR, 2018. The following historical timeline outlines the development of the fulfilment of the sustainable mining industry in South Africa (see Figure 3.1 below).

Figure 3.3: Historical South African mining compliance timeline



Source: Adapted from Du Plessis (2021).

As previously discussed, the Apartheid regime prohibited the Black South African majority from obtaining mine ownership or shares, and excluded them from policy and legislation. With the introduction of the Mining Charter on 15 June 2017, the focus shifted specifically on developing the mining industry in such a way that it becomes accessible to PDIs. Not only does the Charter address this aspect, but also mining processes and equality in the industry; it further states that the Minister of Minerals and Energy accepts and adopts the new policy in an effort to compensate for the inequalities and unfairness of the past. It is envisioned that this Charter will guarantee access to and the sustainable use of natural mineral resources so as to preserve it for current and future generations (RSA, 2002).

The Mining Charter (DMR, 2018) drew on the MPRDA (RSA, 2002) as a standard for formulating objectives related to change in the mining industry. These changes speak to not only more efficient mine and minerals management, but also to sustainable social and economic empowerment by promoting local procurement and ownership. Following more than ten years of the Charter's implementation, the progress of the implementation of these changes is monitored annually by the relevant governmental department and the South African Minerals Council (MCSA). The MCSA reports that, despite transformation in the industry, much still needs to be done to ensure equality, as well as access to and preservation of natural resources (MCSA, 2019b); furthermore, different mining companies show vastly different interpretations and degrees of transformation regarding the Charter's specifications. The Charter stipulates that mining companies should comply with certain activities "to protect social, economic and environmental affairs" (DMR, 2018: 21). In 2015, another review was undertaken by the government in an effort to bolster mining sector transformation and the Charter itself. This review considered both economic change and growth, and investigated how legislation could be aligned to ensure that PDIs could meaningfully participate in the mining industry (RSA 2002; DMR, 2018). Finally, diamond- and precious metals sectors in the country was shown to have grown, which is crucial to the minerals industry to become more competitive. The Charter (DMR, 2018) therefore included new provisions related to working conditions in the diamond- and precious metals industry, as well as for junior miners.

3.6.2. Main elements of the Mining Charter (2018)

As noted earlier, the Mining Charter (DMR, 2018) speaks to the historic exclusion of certain South African peoples from the mining industry, as well as discriminatory practices that hindered these individuals and groups. The Charter notes that it aims to redress these practices,

as well as the exclusion, by advocating for Black control and ownership in the mining industry. The empowerment of PDIs and their access to mining are classified under the sub-sections of ownership, human resource development, employment equity, as well as housing- and living conditions, in the Charter (DMR, 2018). Each of these sub-sections are briefly addressed below.

i. Ownership

Effective ownership is defined in the Charter as

> the meaningful participation of Historically Disadvantaged Persons in:
> (i) the unencumbered net value ownership;
> (ii) voting rights attaching to an equity instrument owned by or held for a participant […];
> (iii) economic interest representing a return on ownership […]; and
> (iv) management control of mining operations (DMR, 2018: 12).

The goal of ownership is to maximise Black individuals' or Black-owned companies' contribution to the country's economy, while simultaneously addressing racial inequality inherent in the mining industry. The shareholding threshold stands at 30%; this means that at least 30% of a mining company's shares should be owned by PDIs or Black-owned companies.

Further, this sub-section refers to local businesses benefitting from the Republic's mineral resources by reinforcing the links between the country's economy and the minerals- and mining industry. To this end, the Charter stipulates that 60% of goods procured by mines should be sourced from or manufactured in South Africa. In what the Charter calls "inclusive procurement, supplier and enterprise development" (DMR, 2018: 18), more specifications follow, related not only to procurement of goods and services, but also the setting aside of funds towards local economic enterprise development and empowerment. These specifications are outlined in Table 3.1 below.

Table 3.1: Summary of the Mining Charter's "inclusive procurement, supplier and enterprise development" (DMR, 2018: 22-24)

	Mining goods	**Services**
Total % spend	Minimum of 70% on South African-manufactured goods	Minimum of 80% on services from South African companies
Inclusive procurement	• 21% (goods produced by HDIs) • 5% (goods produced by women-/youth-owned business) • 44% (goods produced by BEE enterprises)	• 50% (services from PDI-controlled enterprises) • 15% (services by companies controlled/owned by women) • 5% (services by youths) • 10% (services by BEE-compliant enterprises)
% of procurement budget reserved for supplier and enterprise development	30%	10%

Source: The Mining Charter (DMR, 2018)

Note: Mining goods are defined in the Charter as "capital goods and consumables used by the [mining] right holder or by a contractor on behalf of the right holder" (DMR, 2018: 13). Services "include[s] but are not limited to mining production services, drilling, mineral trading, mineral marketing, legal, shipping, transportation, information technology services, security, payroll, finance, medical, consulting, cleaning, insurance and any other services which are supplementary to the mine" (DMR, 2018: 15).

Mine owners should therefore identify the products and services available in the community surrounding the mine and, if possible, look for service- and product suppliers within that community (DMR, 2018).

ii. Human resource development

The Charter states that developing human resources is crucial in promoting the mining industry's competitiveness in the local and global markets, as well as to promote continuous change in the industry. The modern mining industry relies on a workforce that it is highly diverse, skilled, and trained; as such, it is the responsibility of mining companies to invest in skills development. This will not only improve the productivity of workers, but also equip them with knowledge and skills applicable in other industrial sectors. Moreover, this addresses the

employment challenges faced by most PDIs, as it fosters entrepreneurial skills which may contribute positively to their livelihoods. Finally, this leads to the diversification of regional economies led by mining (DMR, 2018).

iii. Employment equity

The Charter (DMR, 2018) draws on the South African Employment Equity Act No. 55 of 1998 (RSA, 1998a), which states that workplace equality, fair treatment, and equal employment opportunities are the rights of all employees. This is especially important in relation to the previously mentioned situation of migratory and immigrant workers. Statistics SA report mining job losses in excess of 23 000 between 2012 and 2019, partially due to mineral depletion, or because migrant workers are employed instead of local labourers due to being paid lower wages (DSSA, 2019). These statistics speak, in part, the employment inequity.

Thus, the Charter advocates for mining companies to address this inequity by investigating unfair discriminatory practices. Employment opportunities and skills development opportunities for South African PDIs should take a prominent position in their efforts; mining companies should also work towards achieving social cohesion and a balanced representation, in the workforce, of a variety or occupational- and racial groups. This occupational- and racial diversity will increase mining companies' competitiveness in the financial markets, and will ensure the participation of PDIs in the industry (DMR, 2018).

iv. Housing- and living conditions

In discussing the Charter's (DMR, 2018) specifications regarding living- and housing conditions for the mining industry, the researcher also draws on the Department of Mineral Resources' Housing and Living Conditions Standards of 2019. In order for improved economic and social development in mining communities, mining companies should contribute to the development of housing infrastructure and ensure healthy and humane living conditions for mineworkers (DMR, 2019).

The standards stipulated in this document focus on the right to human dignity and privacy. Adequate provision for these rights is posited to contribute to worker productivity and to accelerate social development through homeownership and the improvement of living conditions (DMR, 2019). As such, mining rights holders should focus on improving living-

and housing conditions for its workers in line with the Housing and Living Conditions Standards (DMR, 2019).

Cronjé (2014) states that there is a dearth of evidence indicating improvement in the living- and housing conditions of South African mineworkers over the last 20 years. Sub-par accommodation is still common, despite the Mining Charter's insistence that mining companies upgrade and expand mine worker accommodation. Some mining companies responded by making available housing grants or by converting old single-sex hostels into family-oriented living spaces. However, the modernisation of mining techniques implies more space needed for mining operations, leading to a reduction in living space; hence, many mineworkers opt to live in informal settlements (Harrison & Rubin, 2016). The availability of housing grants are only moderately successful, say Venter and Marais (2006), and these grants do not necessarily result in better living conditions for miners. Many mining companies do not have rental- our homeowner-focused housing strategies. While some companies erect housing facilities in metropolitan areas to ostensibly mollify governmental expectations, these housing developments do not extend to mining communities in areas immediately surrounding the mines (DMR, 2019). Thus, the onus for housing development could be shared by the mining company and local municipal development schemes.

It is problematic that many of the country's housing policies, specifically those related to mine housing and -settlements, do not provide sufficient guidance or coherent plans. Homeownership remains the main concern of these policies; however, this is not always a financially viable option. If the policy framework is to be practicable, notes Marais (2018), a balance should be truck between ownership rights, permanent residence, migrant housing, as well as rental accommodation. Long-term housing debt is often transferred to individual households or even local governments, resulting in a strain on local-, regional-, and household economies. Government and mining companies should collaborate in order to build infrastructure to address such issues. Housing principles that can accommodate all labourers – safe housing that promotes wellbeing and health – should be the main concern (MCSA, 2018). The Mining Charter does provide sections stipulating the importance of sufficient and sustainable housing as well as living conditions (DMR, 2018); mining companies should work on bettering the living conditions and accommodation of their workers in line with the Housing and Living Conditions Standards (DME, 2009).

Despite the existence of many policies and strategies, a lacuna exists in research pertaining to how communities and mining companies address housing challenges. Consequently, these towns face a perennial struggle to construct and maintain infrastructure and payments pertaining thereto. Marais (2018) notes that current guidelines advocate for property ownership and stability; however, what is most needed is a practical framework that dissuades mining companies from transferring the financial- and infrastructure burden to individual households and local governments.

3.7. THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT 107 OF 1998 (NEMA)

The aim of this Act is to institute decision-making principles for all matters related to South Africa's natural environment through cooperative governance (RSA, 1998b). NEMA proposes guidelines for environmental management plan implementation, and resolves to integrate environmental decisions, procedures, programmes, and policies provided by various organs of state. The main goal of this Act is to promote access to and the preservation of a safe and healthy natural environment. Not only is this Act concerned with the protection of natural resources, but the preamble of the Act states that environmental concerns include wealth- and resource distribution amongst PDIs, addressing previously disadvantaged communities' needs, planning for and implementing SD initiatives. Foremost, the Act states that the preservation of the environment should be done not just to benefit current generations, but also future ones. As such, it is important that environmental legislation and policies "prevent pollution and ecological degradation; promote conservation; and secure ecologically sustainable development and use of resources while promoting justifiable economic and social development" (RSA, 1998b: 3).

It is salient that NEMA is not only concerned with the impact mining has on the environment itself, but also how these impacts affect mineworkers' living- and working environments (RSA, 1998b). As alluded to in Section 3.4.3., many South African mineworkers and communities live in an environment not conducive to good physical and mental health (Utembe et al., 2015; Mpanza, Adam, & Moolla, 2020) due to mining practices that contribute the environmental destruction. These destructive practices violate the basic human right to live in an environment which is not detrimental to their health, as enshrined in Section 24(1)(b) of the Constitution (RSA, 1996).

This Act further addresses sustainable development and mentions that any economic venture, but especially mining, should consider all relevant environmental factors when considering SD initiatives. Therefore, great care should be taken by mining companies to ensure minimal biodiversity losses, as well as ensuring the existing ecosystems are not disturbed. Though such losses and disturbances, mining companies should ensure that they are kept to a minimum and rehabilitated as far as possible (Section 4(a) of NEMA; *cf.* RSA, 1998b). Another important aspect is that the disruption and destruction of landscape with specific cultural significance to South Africa's heritage be minimised or, preferably, avoided altogether. Adherence to NEMA's principles can contribute to the creation and promotion of a sustainable environment in mining locations.

3.8. SOCIAL AND LABOUR PLANS

One way in which the South African government aims to specifically address and redress the country's history of discrimination and equality in the mining sector is through the implementation of social and labour plans (SLPs). The MPRDA (RSA, 2002) declares South Africa's mineral resources as all citizens' heritage; the role of the state, therefore, it to manage the use of these resources so that all citizens may benefit from it. Mining rights are consequently regulated by the Department of Mineral Resources and the state at large. The MPRDA further stipulates that mining companies are obliged to support community and economic developments in the communities where they are situated (RSA, 2002). When applying for mining rights, a mining company should already have SLPs in place. These should explain how the communities surrounding the mine will benefit from mining operations, and should include plans for job creation, improvement of economic and social welfare. Furthermore, SLPs should indicate exactly how mining companies will aid in the development of their operating areas, and how they will contribute the mining sector's transformation (CALS, 2016).

This section will discuss SLPs and how there are affected by specific legislation, namely the MPRDA(RSA, 2002) and the Mining Charter (DMR, 2018).

3.8.1. Background

Development of South Africa's mineral extraction as well as manufacturing sectors is two of the MPRDA's main goals (RSA, 2002). In order to reach these goals, legal guidelines derived from the Mining Charter (DMR, 2018) should be used to create SLPs. Before the state grants

any mining production rights, mining companies should already be able to show their SLPs. These plans need to address aspects such as specific initiatives related to employment equity, development of human resources, living- and housing condition strategies, and programmes aimed at developing the community.

The guidelines provided in the MPRDA allow prospective mining companies to formulate SLPs in line with specific regulations. Firstly, SLPs should provide for increasing the economic status of mining in South Africa. Secondly, Section 2(f) of the Act requires the mining rights owners be involved in active job creation as well as increasing all South Africans' economic and social wellbeing. In the third place, mining companies also need to work at advancing the socio-economic standing of areas where migratory workers originate from, and not only on the immediately surrounding community, as per Section 2(i) of the MPRDA. Finally, it is the responsibility of the mining company to work on mitigating poverty in those communities affected by mining, whether these are communities immediately surrounding the mine or labour-sending communities (RSA, 2002; DMR, 2018).

If these guidelines are to be incorporated in SLPs, it is vital that mining companies must be aware of any integrated development plans (IDPs) that exist in the communities in which they operate. Furthermore, SD should always be considered. Therefore, SLPs need to draw from relevant legislation, IDPs, as well as any SD programmes so as to holistically address any socio-economic issues they may encounter.

3.8.2. Contents of the SLP

The following sections provide a brief overview of which elements an SLP should contain, based on specifications in the Mining Charter (DMR, 2018) as well as in the Social and Labour Plan Guidelines (SLPGs) drafted by the Department of Mineral Resources and Energy (DMRE, 2010).

i. Human resource development programmes

In the SLP Guidelines (SLPGs),it is noted that human resource development programmes should be developed in the line with stipulations in the Mining Charter (DMR, 2018), specifically that development opportunities be made available to employed and unemployed individuals alike. These types of programmes are aimed at teaching and learning, as well as skills development. Staff development should include training in craftsmanship, not only to better equip workers for the mining trade, but also to empower them with skills applicable to

other trades so as to diminish dependence on the mining industry as a source of employment alone. Further, ABET and NQF training opportunities, along with making available bursaries for instruction in critical- and core skills, should form part of these programmes. These training and education opportunities must speak to the demographics of the area in which they occur; moreover, a minimum of 40% of those who benefit from these opportunities should be PDIs (DMRE, 2010).

ii. Community development plans

The SLPGs also stipulate that an important consideration for the mining company should be cooperation and consultation with local government to review and formulate SLPs that are in line with local IDPs. Further, production operations must also liaise with other frameworks aimed at economic development, including the National Spatial Development Strategy (NSDS), the Provincial Growth and Development Strategy (PGDS), and other relevant stakeholders (DMRE, 2010).

On order to empower communities and boost economic and social growth, it is critical the mining companies engage with other stakeholders, including local communities, when IDPs are drafted, in order to address the community's specific expectations and needs. Locally approved projects should be implemented within the scope of the local municipality's operations. As SLPs are valid for five years, these need to be continuously revised and updated (DMRE, 2010).

iii. Housing and living conditions plan

The Mineral Resources Department of South Africa should first approve any housing plans a mining concern might want to employ; such a plan should, in turn, be developed after the company has consulted with both the Department of Housing and Organised Labour and the Department of Human Settlements (DMRE, 2010). Especially where mine closure is involved, issues such as homeownership can become convoluted; as such, temporary housing arrangements, such as rentals, make the mine closure process easier for the company and less traumatic for mineworkers (Marais & Cloete, 2013).

However, even when not linked to possible mine closure or downscaling, companies need to include in their LSPs guidelines for how mineworkers' living conditions can be improved, and how housing can be made cost-effective and sustainable. To this end, important considerations include establishing and maintaining decent living standards, facilitating homeownership, as

well as integrating human settlements in a manner that is socially, economically, and physically accessible and sustainable (DME, 2009).

iv. Employment equity plan

As alluded to Section 3.5.2 (iii) of this thesis, promoting equity in the workplace is a legislative requirement. This means that employers need to provide fair employment and employment-advancement opportunities for people across all races, genders, religions, and sexualities. Not only should this aspect be addressed in SLPs, but these policies should be continuously revised and updated to ensure that workers benefit from any changes or advancements through increases social cohesion and competitiveness in the mining industry. This is one primary reason behind making mine management and -ownership opportunities more accessible to PDIs; the MPRDA decrees that no less than 40% of mine management and/or -ownership be the purview of PDIs .

3.8.3. Synthesis

According to the SLPGs provided by the by the Department of Mineral Resources and Energy (DMRE, 2010), SLPs are considered as long-term strategies aimed at developing both local economic development (LED) activities, and human resources. SLPs are not guidelines established at random; rather, a mining company's SLPs, in line will all the stipulations outlined in the preceding sections, must already be established before they company applies for mining rights. These SLPs need to take into account human resource- and community development, living conditions and accommodation, as well as issues relating to equitable employment throughout the entire mining process: from the prospecting to the post-mine closure stage. SLPs remain valid for five years and need to be regularly evaluated and adjusted. The process of drawing up or amending these plans should be transparent and should be premised on legislation, the needs and expectations of mining communities and other stakeholders, as well as IDPs, LED plans, and SD goals. Any changes need to be communicated to all parties linked to the mining company.

Generally, mining companies must develop and submit an SLP on a five-yearly basis after meeting with stakeholders and the communities surrounding the mine. The mining rights holder need to submit, to the Department of Mineral Resources and Energy, a yearly report on the status of SLPs implementation. Various parties benefit from SLP implementation is many ways.

- Employees and their families benefit from opportunities for education and skills development, employment opportunities, as well as improvements in their living conditions and housing options;
- By including LED projects and focusing on the development of economic enterprises and supplies as well as procurement of goods and services from the community, the larger community reaps the benefits of SLPs;
- The company, when it complies with the MPRDA, benefits from trust relationships with the community, government, and employees; and
- The government also gains benefits from SLPs through partnerships forged and economic growth enables by SLPS, and through the development and transformation of the mining industry that empowers companies and workers.

Adhering to legislation such as discussed above, and by implementing SLPs, companies make greats strides in meeting CSR objectives. This means that the mining company ultimately contributes to the socio-economic development in mining communities and local municipalities.

3.9. CONCLUSION

This chapter focused on analysing legislation related to South Africa's mining industry, namely the MPRDA (RSA, 2002), the Mining Charter (DMR, 2018), and NEMA (RSA, 1998b). By doing so, the researcher also elucidated the history of mining in the country and its related inequalities and exclusions. The chapter also contains a detailed investigation of the South African White Paper on Mining and Minerals (DME, 1998) and relevant sections in the Bill of Rights and the Constitution (RSA, 1996). Most of these legislation and policies contain overlapping themes, such as ensuring the safety and security of mineworkers, allowing for basic human rights such as access to accommodation, fair labour practices, and the sustainable development of mining communities and their economies. The legislation and policies cited in this chapter all inform the Mining Charter (DMR, 2018), which is the main governing measure for the South African mining industry.

Despite legislative transformation and the broad scope of the Mining Charter (DMR, 2018), questions remain regarding how PDIs can be empowered to benefit from the country's mineral resources and its extraction in order to redress the exclusionary and inequitable practices from the past. The problem lies, in part, in a lack of adherence to and application of legislation and

guidelines by mining companies, as well as in the slow pace at which changes are implemented in the mining sector. This indicates that the state should put in place measures to ensure stringent application of legislation, as well a system of ensuring compliance with the legislation by mining companies.

Finally, the chapter highlights the importance of mining companies investing in the economic and social development of both communities immediately surrounding the mine and communities migrant workers come from. It is important that mining companies focus on these aspects as they will be affected even after mine closure so as to enable more sustainable development in these areas. What the chapter also focuses on is the environmental effects of mining, how mining concerns should take care to preserve and rehabilitate the natural environment, and also how negative environmental consequences can lead to the infringement of basic human rights.

CHAPTER 4: RESEARCH FINDINGS

4.1. INTRODUCTION

Chapter 2 analysed the development of CSR and its link to sustainable development. CSR and SD provide a framework for assessing the effects of mining on the host communities. The chapter further explored how CSR and SD can be used to uplift and develop host mining communities. Chapter 3 analysed the mining legislation as it pertains to both SD and CSR.

This chapter discusses the positive and negative impacts of mining by drawing on responses from interviewees from the Khâi-Ma municipal area that typify their lived experience. It focuses on how the respondents view the importance of the mining company's socio-economic development approach, as well as their opinions on how these are applied. The primary themes clarified in this chapter are economic development, environmental consequences, health, housing, human development, conflict and growth, job creation, social challenges, and skills development.

4.2. ECONOMIC DEVELOPMENT

In what follows, respondent's perspectives on the economy and how they perceive local economic development in the study area are provided.

4.2.1. Economic growth

Proponents of CSR argue that mitigating negative societal repercussions and contributing to social development is in the best interest of a business (Holme & Watts, 2001; Holliday, Schmidheiny, & Watts, 2002). Several of the respondents referred to the positive economic effects mining has brought about in the area. Respondents refer to "a massive boom in economic empowerment" when mining started, and that "the company works with its partners, communities, and stakeholders to ensure the area's economic growth" (Interview 5). The economic benefits include women's groups involved in delivering catering- and laundry services to the mine, which boosts the local economy. Respondents also refer to community-based programmes initiated by the mine itself. One interviewee summarises it as follows:

> *"The Khâi-Ma-focused Broad-Based Livelihood (BBL) programme is one flagship initiative to ensure household sustainability. The programme encourages inclusive local economic development by transferring horticulture skills to assist communities towards food security and job creation. The company will develop a sustainable development plan*

to ensure financial well-being in surrounding communities post-mine closure" (Interview 10).

These responses show that the Black Mountain Mining (BMM) is interested in developing the economy and supporting the community's endeavours. This takes place in three ways: through the employees of the companies spending in the vicinity of the mine, through outsourcing some of the peripheral mining activities, and through the company's support for community-based programmes.

However, NPO- and municipal officials refer to instances of conflict related to economic opportunities. For example, one respondent is worried about outside people getting the jobs, and says that "contractors' come with their people to the area, bringing conflict among our communities"(Interview 3).

4.2.2. SMME development

Respondents emphasise the importance of the company's support of local suppliers. BMM appointed a service provider for Enterprise and Supplier Development; this provider promotes the local economy's advancement by connecting SMMEs (small-, medium-, and micro enterprises) to start-up funding and development (VZI, 2019). One interviewee notes that

"We are only concentrating on our contractors that we accommodate that ensure local businesses participate in our projects. There were two companies that we uplifted during our first phase at our Gamsberg project" (Interview 7).

The appointment of the service provider shows BMM's intent to support and develop community SMMEs. This is achieved through mentorship and equipping them with skills and other necessities. Consequently, residents in the local community as well as local SMMEs are empowered to work for contractor companies. When contracts succeed, SMMEs can re-apply for more significant contracts or jobs at the mine, thus creating local job opportunities.

4.2.3. Agriculture

Participants emphasise that BMM should support local farmers as a matter of priority so as to improve the community's livelihoods and address poverty. The company has made great strides in this regard, such as bringing about transformation in the education of farmers to enable them to make informed decisions regarding farming- and business practices. As part of the drought

relief programme, BMM also supplies water and lucerne bales for livestock, and have helped to install water pumps in the communal farming areas. Two respondents said the following.

> *"We have the food gardens in the communities, which are a good thing to produce your vegetables for your household to have the food security that they were assisting in"* (Interview 3).

> *"Support livestock farmers with sustainable water, not trucks that came in, and call it livestock post"* (Interview 5).

These quotes show that the BMM is working towards implementing sustainable development goals and contributes to poverty relief and food security. According to other respondents, the aforementioned support is very helpful in supporting and empowering local farmers.

4.2.4. Infrastructure

Most respondents have a negative outlook regarding infrastructure development, noting that the BMM focuses its development efforts mainly on the mining town, Aggeneys, thus excluding other surrounding towns like Pella, Pofadder, Witbank, and Onseepkans.

> *"So if you say they are not investing in community IDP projects, we might also be wrong. Because they are doing infrastructure in Aggeneys, it is their doorstep community. Still, for us, the doorstep community is the broader Khâi-Ma it is your Witbank, Onseepkans, Pofadder, and Pella are local"* (Interview 6).

The above quote shows an awareness of disparities surrounding infrastructure development, in that equal development cannot be seen in all towns surrounding the mining operations. Though BMM supports critical infrastructure such as roads in Aggeneys, other towns do not benefit from these developments.

Municipal respondents spoke about the negative effect of the implementation of town development and how it affects the economy. They also base their opinions on the fact that development efforts are concentrated in Aggeneys alone, and also notes that the mining company's self-interest is a major concern.

> *"A typical example is the seat of Khâi-Ma Pofadder. Now, if you develop Aggeneys, you go through Khâi-Ma through Pofadder to Aggeneys. It means that at the end of the day, the municipality have to shift their offices to Aggeneys, leaving behind their*

responsibilities. Furthermore, that means that when the municipality's' seat is in Aggeneys, we will not be able to service Onseepkans" (Interview 4).

This respondent's comment paints a potentially grim picture for other towns in this municipal district should the mining company not expand its infrastructure development to towns other than Aggeneys.

Infrastructure investment by BMM also included efforts to support local sports clubs and community clinics, as well as upgrading schools and ECDs. However, some respondents want to see further infrastructure development. One respondent notes: "You know what I want to see the mine do differently if there are sustainable projects like a shopping centre" (Interview1). Another respondent said

"Questions and answers are not attended to so the communities know their benefits. I also want to check on the IDP, and that is why the IDP is not running in a good relationship with the SLP. It is because you have a community that does not inform the IDP in such a way that the SLP can fund the IDP" (Interview 6).

The above quotes show that, though BMM provides some infrastructure support, cooperation between the company, local municipality, national government, and the community is lacking. Building schools and roads should not only be the responsibility of the mining company, but also that of national and local legislators. The merging of IDPs and SLPs requires the integration of projects and funding. As such, and as stated in the SLPGs (DMRE, 2010), mining companies must consult and cooperate with the legislative sector and communities to formulate and review IDPs in municipality and district at large. Further, funding needs to be made available for better housing and living conditions.

It would also seem that BMM needs to intensify its focus on infrastructure development to address skills shortages in the area. Equipping local residents with relevant skills will result in less reliance on outside labourers. The development of such infrastructure should be part of the company's SLP in accordance with the SLPGs (DMRE, 2010). However, this situation also highlights the lack of clear boundaries regarding responsibilities. The government is the main responsible stakeholder for infrastructure development, and local government should also be held accountable for the same. The question of where the responsibilities of the government, municipality, and mine's responsibility starts and ends, needs to be addressed and regulated.

4.3. ENVIRONMENTAL ISSUES

Chapters 2 and 3 both focus on the importance of environmental management in mining operations. The participant's responses show their awareness of the importance of mining's effects on the environment and their territory.

Many policies and legislation in South Africa are aimed at preventing pollution and ecological degradation, promoting conservation, and securing ecologically sound development fostering socio-economic development (see Chapter 2). Respondents take care to note that the mining company does take steps to mitigate environmental damage, such as focusing on the protection of the ecosystems and the creation of a plant nursery.

However, as evidenced by the responses cited below, the community is not unaware of the harmful effects of mining operation. Respondents list several environmental concerns; the most apparent are the impact on biodiversity due to the removal of vegetation, which alters the availability of food and shelter for wildlife. One respondent reflected on the loss of animal species by saying: "Not the same animals were living around there anymore. They had moved away" (Interview 5).

Respondents identify the main environmental concerns: air pollution, water pollution and associated depletion of the underground water supply, and land degradation. They are further concerned about the time required for land rehabilitation. Others were concerned about the effect of environmental damage on the community's health. For example, one respondent expresses concern about the impact of pollution on the health of the mineworker:

> *"Pollution, I think, can impact workers' health as pollution has increased. All the smell and chemicals they work with can have health issues"* (Interview 5).

The Constitution (RSA, 1996) provides that all people have the right to a safe home- and work environment to ensure their health and wellbeing, and also that the environment should be protected for the benefit of present and future generations. From the interviewees' responses, as well as the literature reviewed in Chapter 2, is it evident that mining activities' resultant land disturbance affects not only the natural environment, but also the wellness of the area's inhabitants.

4.4. HEALTH

The Khâi-Ma local municipality has primary healthcare clinics in Pofadder, Pella, and Onseepkans. Although these clinics are functional, they do not have the essential resources to look after patients visiting these facilities (SAHRIS, 2022). Doctors refer patients they cannot help to the provincial hospitals in Springbok, Upington, and Kimberley. Some respondents feel that the mining company can do more to improve the current quality of healthcare in the area. One respondent said

> *"Challenges occur in terms of […] healthcare facilities. The clinic is small, cramped and short-staffed. Since there is an accommodation shortage, it is challenging to fill the vacant position"* (Interview 10).

Many respondents say there has been an increase in the occurrence of HIV/AIDS and TB in the area. Though these are communicable diseases, the prevention and treatment of which fall under the auspices of the government, a lack of education and awareness surrounding the diseases leads to their exponential growth. Three interviewees commented on this aspect, with the respondent cited below summarising this issue as follows:

> *"I do not know the medical name of TB, but they died of a certain kind of TB. They died of tuberculosis because of the air those they breathed in. Furthermore, our ground removal is not what it used to be. You do not see the same plants growing in a particular area again"* (Interview 6).

Another respondent notes that "increased cases, especially HIV/AIDS, tuberculosis, STDS and related diseases, these units have no workers to secure additional staff to deal with the influx of people" (Interview 10). Therefore, in many cases, preventative and health solutions must be provided, and access to quality healthcare services should be ensured. The White Paper (DME, 1998) reflects that government also has a responsibility to promote healthy and safe environments *(cf.* Chapter 3) in line with the national health policies.

It is, therefore, essential for engagements towards integrated services and good communication among stakeholders to find solutions and improve healthcare through innovative programmes.

"Significant concerns about poor communications with BMM management – poor follow-up and resolution of critical issues, including Gamsberg level – registering HIV/AIDs patients and tracing medical records when already understaffed" (Interview 10).

According to interview data, chief complaints related to TB and HIV/AIDS are cramped and understaffed healthcare facilities. Respondents also mention other healthcare challenges resulting from drug- and alcohol abuse. Most respondents indicate that healthcare services in the area are inadequate and understaffed.

As a result of the Leon Commission's 1995 report, titled *Inquiry into Health and Safety in Mines* (Stanton, 1995), parliament passed the Mine Health and Safety Act 1996. It is hoped that this will significantly improve the health and safety profile of the South African mining industry. The government is liable for promoting safe and healthy working conditions at all mines and, following national health policies, ensure that mines deal humanely with the health consequences of work in the mining industry (DME, 1998). Once again, this highlights the question of where the responsibility of the government, municipality, and mining company do or do not converge.

It is evident that the respondents are most concerned about shortages in terms of healthcare infrastructure in, as well as trained medical staff. Further, HIV/AIDS and TB are two of the biggest health challenges in the area.

The mining company's 2019 SLP proposes the following healthcare interventions in the area:

- Ambulance for the communities of Witbank and Pella
- Investigate telemedicine options for remote villages, as provided for in the PGDP
- Pella requested a paid resident doctor Programmes around HIV/Aids, specifically in Onseepkans; develop local skills and talent to fulfil these roles
- Electricity and water upgrade for Witbank clinic; develop significant numbers of locals with maintenance skills
- Provide a more regular doctor to Witbank and increase their access to health care
- Upgrading of current clinic in Onseepkans and mobile clinic for Viljoensdraai and
- Sending More staff in Pofadder's hospital as well as an upgrade of medical equipment (VZI, 2019: 40).

However, as yet, none of these envisioned interventions have come to fruition.

4.5. HOUSING

Mining activities in the Khâi-Ma district have created an influx of people in the area, with a subsequent increase in housing demand. Many people have moved to Pofadder and Pella to find work at the new mine operations. Although BMM promises to develop infrastructure, it has not happened yet. Indeed, challenges related to housing are mentioned in the mine's SLP, which refers particularly to the upgrading of houses in Witbank, Pofadder, and Onseepkans, the development of housing for miners in Pella, as well as building centres for elderly care in Pofadder and Pella (VZI, 2019).

The mine was expected to "give our people houses" (Interview 6). One respondent (Interview 10) listed several expectations about housing from the mines:

> *"New structures for inhabitants without decent shelter, completion or repair of defects of houses not on standard, replacement of clay structures at Pella, serviced residential stands (all communities), accommodation for public officials (SAPS, Education) being deployed in the Municipality's jurisdiction, acceleration of processes on issuing of title deeds on properties."*

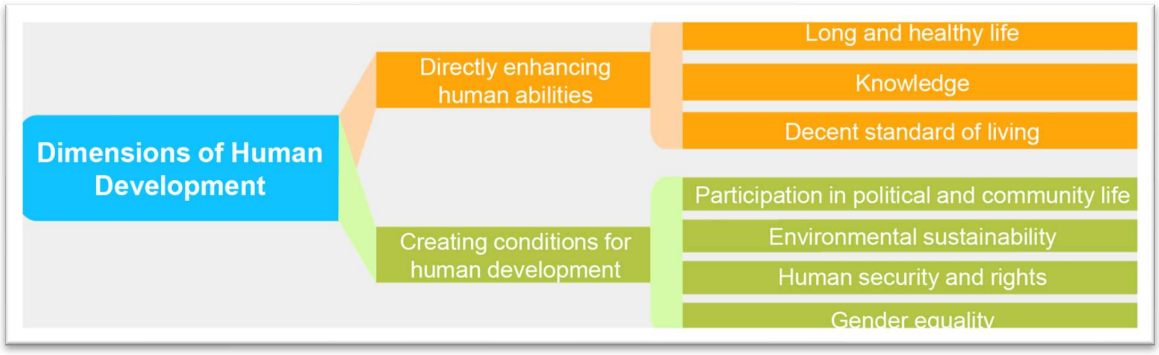
The responses cited show the importance housing creation in the area. Many residents live in informal settlements because of the housing construction backlog and people moving to the area from other provinces looking for job opportunities and housing. Based on the Mining Charter's specifications (DMR, 2018; *cf.* Section 3.6), government urges mining companies to broaden the scope of housing options to abandon Apartheid-era compounds. Some mining companies have upgraded hostels to single-occupant rental apartments and now provide living-out allowances (Cronjé, 2014; Rubin & Harrison, 2016; Marais, Cloete, & Denoon-Stevens, 2018). This is also the case of the BMM mine in Aggeneys – living-out- and travel allowances are available to mineworkers, but come at a cost. These subsidies are only available when the applicant cannot obtain mine housing, or if the mineworker vacates the mining accommodation they currently reside in. Further, to qualify, the employee must be able to prove that the property in another town or district they choose to reside in is their personal property or is leased to them (VZI, 2019). Therefore, if a mineworker can find accommodation elsewhere, but does not own or lease that property, the subsidies are not available to them. As a result, many mineworkers opt to live in informal settlements (Rubin & Harrison, 2016). Venter and Marais (2016) posit that living-out allowances also have limited success, as they do not necessarily contribute to better housing for mineworkers. Though the mining company noted

in 2019 that it will urgently construct housing developments, and purchase additional land to build houses in Pella and Pofadder (VZI, 2019), these developments have not yet materialised.

4.6. HUMAN DEVELOPMENT

Human development has changed how socio-economic development is seen and practised, as outlined in the previous two chapters. The outcomes of human development are not only products or wealth, but also the community's holistic well-being. The UNDP defines human development as allowing people to live lives they value. This entails improving people's quality of life instead of assuming that economic growth will inevitably lead to the same (UNDP, 2015). In order to achieve this, communities should be empowered to take part in decision-making regarding aspects that may directly or indirectly affect them, and that they should take ownership of and responsibility for the products they help to produce. Figure 4.1 below depicts the UNDP's envisioned outcomes of improved human development practices.

Figure 4.1: Dimensions and outcomes of human development



Source: UNDP (2015)

Regarding human development, one respondent says:

> *"The company leverages resources, skills and finances to the communities with social networks and skills development programmes that positively contribute to the social and economic upliftment of the local communities"* (Interview 8).

This shows that measures are in place to build the communities and help them benefit from the local economic opportunities that come with the mining development. Further,

> *"The IDP identifies needs and challenges in the Khâi-Ma district in four categories: essential services and infrastructure, community services, social conditions and economic needs"* (Interview 10).

As pointed out in previous chapters, addressing community needs, expectations, and challenges should be one of the mining company's main concerns. From the response above, it is evident that BMM is aware of and prioritises the community's needs in line with the local municipality's IDP document. It is also noteworthy that the mining company's SLP shows that roughly R86 500 000 is earmarked for human development initiatives, which include women- and youth empowerment programmes, ensuring the social welfare, cultural activities, and health of the community and families, as well as the provision of education opportunities and infrastructure that will allow local economic development (VZI, 2019). The communities will also take part in the decision-making processes surrounding these initiatives, allowing them to take agency for the lives they choose to live.

4.7. CONFLICT AND MIGRATION

The social landscape in the Khâi-Ma district has changed due to the influx of people from other provinces, as well as the comings and goings of contract workers the mine increasingly relies on. According to the IIED (2001), one major impact of mining activity is the migration of individuals to a mining area. The rapid expansion of new mining projects in the vicinity leads to increased migration to the area, and the establishment of informal settlements in the local towns close to the project. Some respondents note that these local settlements contribute to the Khâi-Ma area's social challenges, including HIV/Aids and substance abuse. Conflict arises not only from these challenges, but also as a result of population growth, as is the case at the new Gamsberg mine. The quotes cited below speak to respondent's views on these matters.

> *"There is a conflict between the community and mine because of the influx of other companies that bring their people for work, not those from the area. They do not make use of the people in our community. The mine does not develop or give our young people the opportunity to make a living for themselves"* (Interview 6).

> *"One of the adverse effects is when an operation in your area, many people are coming into that area. The influx of people precisely what does that mean means that, yes, there is an opportunity to empower yourself with job security. However, that influx can also bring social ills"* (Interview 2).

Once again complicating the intersection of government's, the municipality's, and the mining companies' responsibilities, a lack of proper planning regarding the area's development is evident in the lack of infrastructure for housing opportunities, along with poor town planning.

Before development, stakeholders and the mine should engage in development planning and ensure that policies direct them to include developmental projects in the local municipalities' IDPs.

Respondents note that conflict further arises when BMM does not assist the community in addressing social concerns. Interviewees agree that the community is expected not to make complex demands; however, the issue of migration-related conflict is a complex problem, and requires complex solutions and open lines of communication.

4.8. JOB CREATION

Mining development almost always contributes positively towards job opportunities within local communities (Hilson, 2000). The interviewees' responses are categorised based on the different employment aspects they identify as salient.

4.8.1. General employment

In several countries, the mining industry pays comparatively higher wages as compared to other industries. However, with the increase in the employment of contract workers as well as migrants, local communities also experience negative employment results. This is also due to a trend among mines to employ fewer, but more highly skilled, labourers (Dietsche et al., 2007). From the two responses below, the positive and negative sides of the general employment coin are evident.

> *"The positive effects of mining in our area are that they give our family households a positive financial stableness whereby people, not all people's income, are better than before. There is job creation that takes place. People get more money than back what they get from farms"* (Interview 6).

> *"There is still a need for employment in the community. There is a significant need in the community. However, on the other hand, the outside contractors get more opportunities than the local people. I will say that the critical positions of the management are from outside the area"* (Interview 2).

BMM's reliance on contract- and migrant workers is based on two elements. Firstly, these labourers are cheaper to employ, and secondly, a skills shortage amongst locally employable people makes it difficult to fill vacant positions. Though mining in the area can boost and has boosted the local economy through higher employment levels and wages, there is still evident

disparity in terms of who is employed. The quotes show that there are changes in employment opportunities, and that residents may benefit from these. However, the fact remains that not as many local as migrant workers are skilled and subsequently employed.

4.8.2. Contract employment

The mining construction phase makes available a great deal of employment opportunities. It is vital that contractors draw on locals to take part in construction in order to prioritise their financial wellbeing. Respondents agree that mine construction activities create most employment opportunities, but that very few locals are absorbed. When local labourers do work in this area, they only work at these sites for short periods and do not benefit in the long term. This also leads to conflict with the locals, as evidenced by respondents. The locals only have access to these opportunities for short periods, and when contracts end, they return home.

> *"It was outlined currently with Statistics SA that we are sitting with an unemployment rate of 32.6 %, meaning in broader South Africa that job creation is a huge issue and people"* (Interview2).

Respondents emphasise that contractors import their own workforce, which exacerbates unemployment in the local community. Contract work has the potential for large-scale job creation. Even though this is a short-term solution, it addresses unemployment concerns.

4.8.3. Permanent jobs

The respondents take issue with the fact that most permanent positions at BMM are filled by people from outside the community. A lack of skills and professional qualifications in the community contributes to this issue, as local labourers would not necessarily be able to fulfil the roles vacant positions require: "there is severe unemployment and a gap in skills among the youth" (Interview 7). Respondents note that neither the government, local municipality, nor BMM make available opportunities for training and education that could empower local community members to qualify for permanent positions. Aware of the availability of permanent positions, the community is not ignorant of the fact that the skills shortage in the area renders many people unemployable.

4.9. SOCIAL CHALLENGES

With a bigger population come bigger issues. Many workers who enter the community undermine social cohesion and disrupt social leadership structures, family units, and social

control. From corporate and state perspectives, migrants may also represent an increased security risk; further, they might effectively dilute the value of benefits that should go towards developing host communities (Banks, 2009). The following statements from the respondents show the adverse effects that social disruptions have on the local communities in the Khâi-Ma district.

> *"Many of our people have social ills that are brought upon them. They received new salaries, bought alcohol and drugs, did not educate themselves, and you were unemployed for a long time"* (Interview 3).

> *"It will have a social impact; you will have more people coming to the district. Getting more problems like substance abuse. You get more crime. More substances coming into the community can also lead to housing problems. Let me leave it like that. More people come into Khâi-Ma, which can lead to Khâi-Ma's residence if they do not get jobs; riots can happen because they feel they are not getting jobs and feel like an outcast"* (Interview 5).

> *"So I will say it is one thing that makes people fight against each other. The social ills include alcohol abuse, drug abuse, teenage pregnancy early dropouts of school because of the mine. Young people did not finish school because they wanted to be an operator"* (Interview 6).

Substance abuse is one of the most significant problems cited by interviewees. This problem has many causes and outcomes. Speaking to the former, respondents note that youths lack financial management skills, spending their money one substances instead of living essentials. Migrants often bring with them drugs and alcohol they readily sell to minors and community members alike. The outcome of this problem is that many youths resort to crime to sustain their substance abuse habits, with theft and housebreaking being the amongst the respondents' chief complaints. Some youths become involved in the selling of drugs to earn money, perpetuating a cycle of drug influx and -dependence.

Furthermore, the gender disparity caused by the increase in migrant workers result in gender-based violence. This is most prominently seen in the increase in teenage pregnancy due to sexual assault. Not only is rape an emotionally and socially scarring experience, but the resultant birth of children teenage girls are incapable of caring for exacerbates the community's socio-economic precarity; many parents or grandparents are left to care for these babies.

Migrant workers who father these children leave the area once employment is unavailable, leaving the young mothers and children without their support.

4.10. SKILLS DEVELOPMENT

Skills development strategies would support sustainability within Khâi-Ma municipality. It contributes toward promoting local economic development initiatives and allow the community to benefit from these opportunities. Respondents note that BMM should focus on cooperating with the community in this regard.

> *"They must give guidance to the community to be able to support themselves through entrepreneurial skills"* (Interview 5).

> *"Because most of the skills might ah on a skill level local does not have. Furthermore, they are acquiring a higher grade, for instance, grade 12 and our dropouts have grade 10, so that becomes difficult"* (Interview 4).

These sentiments were a recurring theme during the interviews, and relates to the issue that mining companies are not transparent and do not provide enough support for diminishing the skills gap in the area.

CSR strategies encourage employees to take part in training and skills development. Workers are motivated to practise socially responsible management, which is currently not possible. Respondents note that they would like to be members of organisations that respect the individual and invest in their learning. CSR attracts talent for business, the best employees for the best companies, and simultaneously encourages workers to remain in employment.

> *"So that is a positive impact. And then, since the mine started, more people got employed"* (Interview 5).

> *"We do not see those things. You only see general workers at the mine, and we cannot call these development communities. I think they should reach out more to the communities, be more visible, and engage with them. To get a feeling of the communities and what they need. More public participation"* (Interview 5).

> *"They are changing their approach to the community. I think they should reach out more to the communities, be more visible, and engage with them"* (Interview 6).

The area's skills base in the local communities is deficient, adding to the cycle of poverty, disempowerment, and deepening dependency on the state. Respondents recognise the poor common skills base, as available job opportunities open to locals are restricted to general workers. According to some respondents, the education system does not equip learners to become active in the area's vital economic sectors, including mining and agriculture. Another concern is the skills drain to other provinces. Skilled labourers migrate to other areas of the Northern Cape Province, as well as the Western Cape and Gauteng.

4.10.1. Bursary fund

Education and qualifications often determine one's access to employment. Therefore, getting as much education as possible is essential for job security and a better future, as voiced by interviewees.

> *"Because most of the skills might ah on a skill level local does not have. Furthermore, they are acquiring a higher grade, for instance, grade 12 and our dropouts have grade 10, so that becomes difficult"* (Interview 4).

> *"The youth of Khâi-Ma get opportunities to go and study locally and outside the area. Few are successful, and some just drop out for no reason, as the mine gives full bursaries. They must give guidance to the community to be able to support themselves through entrepreneurial skills"* (Interview 5).

Respondents reflect that the Bursary Fund of the mine is perceived to be strictly for students who wish to enter the field of mining engineering. Although the mine also offers an annual work-exposure programme for high school learners in Aggeneys and Pofadder, some of the respondents claim that access to information on the bursaries is restricted. They know these bursaries exist, but do not know the specific details to apply in time to benefit from the bursary schemes from the mine and local solar plants.

4.11. CONCLUSION

Communities in the Khâi-Ma district face several challenges. Though BMM does make available some employment- and training opportunities, the local community feel that they do not benefit enough from these contributions. Further, environmental destruction and its resultant effect on the community's health is a grave concern. The influx of migrant- and contract labours to the site creates tension, and there is a disruption in the community as social

ills arise. The lack of specific skills in the area shows that BMM is not doing enough in terms of educating and/or training community members to empower them towards employment. Most of these issues can be addressed should BMM institute and apply properly planned CSR and SD policies.

The interviewees recognise BMM's efforts to address certain concerns. They cite that women- and youth empowerment programmes are in effect, that the mine aids in local agricultural endeavours, and that they focus on biodiversity protection. However, what is apparent is that many social concerns are left unmitigated. These include high levels of TB and HIV/Aids infections among community members, a sharp increase in substance abuse and associated crime, concerns about employment disparity when it comes to local-, migrant-, and contract workers, and the unequal infrastructure development in the area that benefits only Aggeneys and none of the other towns.

It is, therefore, essential to bring change to the community, and to uplift and empower them. This can be done through establish and employing new frameworks for CSR and SD. Collaboration between the mining company and the community will lead to transparent processes and the inclusion of those who should benefit most from these initiatives.

CHAPTER 5: CONCLUSION, RECOMMENDATIONS, AND FUTURE RESEARCH

5.1. INTRODUCTION

This final chapter presents the conclusions and recommendations relating to the objectives of the research, based on the views expressed by the local mine officials, government officials, and NPO members from the host communities in the Khâi-Ma local municipality. This research focused on community perspectives regarding the expected outcomes of CSR and SD programmes.

By utilising a qualitative approach to investigate how the local participants perceive the links between mining, CSR, and SD, the researcher first provided an overview of extant literature relating to these concepts in Chapter 2. The subsequent chapter focused on exploring legislation pertaining to these aspects, while Chapter 4 integrated interviewees' responses with findings from the literature. The following section outlines the connections between the literature, legislation, and themes identified.

5.2. CHAPTER OVERVIEW

Chapter 1 introduces the background to the study on perceptions of CSR and SD generally, and regarding how these are specifically related to the mining industry in the Khâi-Ma local municipal area. The chapter outlines the research problem, -purpose, and -design. It also speaks to the collection and analysis of data and the ethical considerations inherent therein.

Chapter 2 provides a chronological overview of the historical evolution of CSR both globally and in South Africa. Further, it elucidates the socio-economic and environmental effects of mining on host communities. Finally, the chapter discusses the history of CSR and how it has changed over the past decades, exploring its implications for the mining industry in the near future. It also considers the impact of CSR on local communities.

In Chapter 3, to focus shifted to a discussion of South African legislation and how it intends to promote sustainable development and accountable social responsibility in the South African mining industry. It also investigates guiding legislative- and policy documents aimed at encouraging improvements in the sector. The chapter argues that legislation needs to encourage the mining industry to address issues relating to CSR, and notes that the South African Government has included elements of CSR in legislation. However, it is also important to note that literature cited in this chapter confirms to adherence to CSR protocols are not regulated or monitored.

Chapter 4 drew on data gathered from the various interviews. The chapter is structured around themes the researcher identified during the coding- and thematic analysis processes. The primary themes identified are economic development, environmental consequences, health, housing, human development, conflict and growth, job creation, social challenges, and skills development. Sub-themes were developed by coding to identify words, phrases or sentences that reflect single, specific thoughts, opening up the text to reflect the various core perceptions.

This final chapter presents the conclusions and recommendations of the study, to wit the effects of CSR and SD on communities affected by mining in the Khâi-Ma local municipality. CSR and SD have negative and positive effects on the socio-economic and environmental issues in the area, as outlined below.

5.3. MAIN FINDINGS OF THE STUDY

In this section, the five main findings of the study are discussed.

5.3.1. Mining negatively impacts local communities despite CSR

Chapter 2 emphasises the local impacts and effects on communities where mining activities occur, and outlines the harmful environmental and health issues resulting from mining processes. There is a general consensus amongst scholars that many mining companies do not have much concern for communities and instead focus on production and profits (IIED, 2002; Carrington et al., 2011; Cingano, 2014). Further, the slow pace of transformation in the mining sector may have a negative impact on sustainability (MCSA, 2019b). Local government is heavily dependent on mining companies' SLPS, and trust that these will provide for sustained community progress and development. However, implementation of SLPs is not regulated; therefore, companies are not accountable for negative effects on local communities. If SLPs are not implemented, sustainable development is adversely affected.

The policy environment provides some guidelines for approaching and possibly mitigating the negative impacts that mining has on host communities. The 1998 White Paper (DME, 1998) notes the importance of the health and safety of employees. It also stipulates that employees should have access to decent housing and living conditions (also see the Mining Charter, 2018; RSA, 2002). However, research shows that communities continue to suffer harmful health consequences related to mining (IIED, 2002), that healthcare resources are not readily available to mining communities (Archbold et al., 2014; Mayer et al., 2018), and that living conditions

for mine workers remain scarce, underdeveloped, and under-maintained. These concerns are also raised by respondents (*cf.* Sections 4.4 and 4.5 in the previous chapter).

Furthermore, interviewees cite unemployment and poverty as major concerns, which deepen the sense in communities that mining companies with perceived limitless resources are not doing enough to improve the lives of people within their communities, a sentiment echoed in the research of Cingano (2014), Carrington et al. (2014), and the IIED (2002). They believe that effective partnerships between the community, legislators, and BMM can aid in better CSR and SD. Economically, the host communities also need greater control over the financial benefits of deeds within their area.

One specific concern that comes to the fore is how interviewees perceive the influx of migrant workers and the migrants themselves. The responses were overwhelmingly negative, and focus how social cohesion is undermined, violence increases, and migrants are afforded jobs instead of community members. These issues are also prevalent in the literature reviewed (SARW, 200a & 2002b; IIED, 2001; Mancini & Sala, 2016). Respondents also report that the influx of people from outside the local area is linked to a sharp increase in the prevalence of rise of diseases like HIV/Aids, crime, as well as substance abuse.

Mining companies should be held liable for mitigating these effects, and are legislatively bound to do so (DME, 1998; RSA, 2002; RSA, 2018). Their failure to recognise and address these issues often leads to conflict between them and host communities.

A global change in social standards shows increasing concern with how mining communities are affected by mining operations. The interviewees' responses show that the current climate of human wellbeing and quality of life in the Khâi-Ma districts could be directly linked to how well the mining operation in performs. However, the participants value the CSR and SD initiatives that do exist, though they opine that there is room for improvement. BMM still needs to address the difficulty of responsibility, cooperation, and participation. Unequal power relations need to be recognised so that the people in the community are not left helpless and disempowered. Lastly, more sustainable projects or investments are needed if the community is to benefit from mining operations.

5.3.2. Policy regulations are needed for practical support towards CSR and SD in the mining sector

The literature and legislation reviewed in Chapters 2 and 3 indicate that different factors could influence the responses of government and mining companies to development problems in rural towns. The literature shows the very complex nature of the development of host communities, with scholars constantly seeking new approaches to investigate why specific development trends seem to occur, as well as the circumstances surrounding them (IIED, 2002; Carrington et al., 2011; Cingano, 2014). These trends are apparent despite the continuous focus on social- and economic development of communities of mining towns and factors which influence the response from the government and companies.

According to the literature reviewed, the evolution of CSR over the past decades means that the responsibilities companies have towards communities become increasingly evident. Their decisions on how they operate determine how they develop policies to meet their obligations or social duties towards communities (Davis, 1960; Carroll, 1991; Smith, 2001). South African legislation also encourages companies to meet these obligations, specifically through empowering communities surrounding the companies, empowering PDIs, and supporting equal employment opportunities in an effort the redress the inequalities of the Apartheid era(RSA, 1996; DMR, 2018; Bello & Harvey 2015). The White Paper further stipulates that it the responsibility of the government to ensure frameworks are developed and policies written to safeguard mining companies (DME, 1998).

The BMM does have some CSR and SD initiatives in place, these do not necessarily benefit the entire community. Areas that are addressed include the empowerment of youths and women, agricultural aid, and biodiversity preservation. However, there are major oversights in terms of skills shortages and opportunities to address these, housing, and migrant-related conflict. Though CSR initiatives should benefit all communities affected by mining, respondents note that most development takes place in Aggeneys, leaving other surrounding towns wanting.

5.3.3. ED/SED programmes do not address infrastructure shortages due to mine development

A comprehensive literature review indicated that mining impacts both positively and negatively on the lives of the communities in which mining companies operate. On the positive side, mining creates employment and infrastructure such as roads, clinics, and schools (IIED, 2002;

Mayer et al., 2018). Mining further induces the creation of other industries and small businesses such as transport services, catering, and accommodation establishments (Hilson, 2000; Agboola et al., 2020). The mining industry also contributes to countries' foreign exchange earnings, technological advances, and skills development and -transfer (Sanoh & Coulibaly, 2015; Nalule, 2020). On the other hand, mining can lead to forced relocations (Haddaway et al., 2019; McDonald & Figueredo, 2022), more crime, and a negative environmental impacts, including pollution, dust, erosion, noise, and acid mine drainage (Matthews et al., 2000; Carvalho, 2017; Agboola et al., 2020, amongst others). Many of these adverse effects can lead to discontent amongst the members of host communities, conflict within communities, and between communities and mining companies. Competition leads to the disruption of mining operations and damage to mining equipment and infrastructure, which subsequently harms the profitability of the mining concern and the continuation of such operations.

Regarding the socio-economic factors relating to Khâi-Ma, respondents express similar positive perceptions towards the environment, job opportunities, and socio-economic infrastructure as those noted in the theoretical literature. Negative perceptions of the impact on the economy, health, skills, and social effects were also confirmed. The net CSR and SD obtained similar results for education and housing. However, respondents in the current study perceived the impact of mining on host communities as unfavourable, whereas the perception of the economic impact was positive in the Khâi-Ma study. Perceptions of the environmental effects of mining were also negative at this point.

Data obtained from the interviews further indicate that, at host community level, BMM has been accommodating to their host communities by contributing to socio-economic development at a certain level through CSR and SD policies. There are also signs that developmental projects across the mining area and communities benefit from the mining companies' contributions towards sustainable development. However, BMM did not involve communities in decisions relating to critical environmental matters. Therefore, there is a need for better governance of the CSR and SD policies in order to improve the living standards of the communities and local employees for better socio-economic opportunities that can lead to sustainable development.

5.3.4. Population growth adds to community conflict and undermines social cohesion

Mancini and Sala (2018), the SARW (2002a & 2002b), as well as the IIED (2001) indicate the far-reaching effects of labourer migration to mining communities. With this comes different

adverse effects like more demand for food, water, and already perilously scarce shelter, which local communities rely on for survival. Migrants can pose security risks (Banks, 2009), and host communities may suffer due to being overlooked in favour of migrant workers who are willing to work in perilous conditions for lower salaries (IIED, 2002; Banks, 2009). Cultural barriers can occur as people speak different languages and fear diseases that migrants could bring to their environment (Mancini & Sala, 2018).However; there is a misconception that it is the government's responsibility to reduce migrant labour. It is the responsibility of the mining companies to enforce and uplift the host community and assist with reducing migrant labour (RSA, 2002; DMR, 2018).

In the previous chapter, interviewees note that an influx of people to the area add damage to roads and housing infrastructure. Respondents also comment that the construction phases of new mines in the area contribute to the influx of people from other provinces to the Khâi-Ma local municipality, and include both migrant- and contract workers. Due to the skills shortage in the area, managerial positions at BMM are often filled by people from outside the area. The overburdened health system cannot accommodate the large numbers of people now residing in the area, and housing infrastructure is not adequate, which leads to overcrowding in informal settlements. In turn, social issues such as gender-based violence, theft, substance abuse, and teenage pregnancy are on the rise in the area.

5.3.5. Mines are not transparent about environmental damage

Scholarly sources have much to say about the environmental damage caused by mining. The literature reviewed earlier in this study mention aspects such as the creation of vast amounts of waste that cannot be processed, recycled, or repurposed (Fashola et al., 2016; Thejas & Hossiney, 2022). Mining by-products, as well as chemical and -waste seepage into soil and water systems, endanger both the flora and fauna in mining areas (Carvalho, 2017; Agboola et al., 2020), but also endangers the lives of inhabitants who rely on the land for agricultural-, hunting-, or foraging purposes (Carvalho, 2017; Ugya et al., 2018). The literature further shows that mining practices often do not make provision for environmental sustainability (Twardowska et al., 2004; Anderson & Theodori, 2009; Wynveen, 2011). The South African Constitution, specifically the Bill of Rights (RSA, 1996) enshrines the basic human right to live in an environment that is safe and unpolluted. Legislation such as the White Paper (DME, 1998), the MPRDA (RSA, 2002), and the Mining Charter (DMR, 2018) advocates for the promotion of environmental sustainment through environmentally sage cooperative

governance. This should be done by establishing frameworks for matters relating to mining's effects on the environment.

Based on the responses obtained during the interviews, respondents voiced concern regarding the disappearance of certain animal species, the effect of pollution on the community's health, as well as issues surrounding land rehabilitation. However, some did note that BMM seems to actively work on biodiversity preservation. It can be theorised, therefore, that the relationship between BMM's CSR and SD practices ranges from reactive behaviours and punctual actions to a more significant interaction of social- and environmental approaches. However, the community is not kept appraised of environmental protection- or rehabilitation actions, nor are they aware of the findings of any environmental impact studies. It seems that BMM has no clear plan as to how to address the loss and mortality of fauna in the area, and also has not engaged the community in discussion as to the effects and mitigation of pollution. In this wat, the company is not transparent regarding the environmental consequences of the mine's operations.

The mining industry's environmental impacts are usually experienced locally, making them community issues. Therefore, the various aspects of these impacts should be dealt with locally and with community involvement.

5.4. RECOMMENDATIONS

The following recommendations derive from this research.

5.4.1. CSR policy should address community needs and sustainable jobs

Many companies try to take a generic approach to CSR and SC initiatives. The company must liaise with the local community and -government to ensure that these initiatives meet the needs and expectations of the community, and also that they are in line with SD goals and IDPs. Mining companies must work with civil society organisations and the government to create policies that will empower these communities. CSR and SD must focus on developing novel economic opportunities for entrepreneurs and SMMEs.

5.4.2. Establishing a regional oversight body with relevant stakeholders within the CSR and SD environment

Community forums must be established to benefit and develop the local communities. These forums need to oversee the extant policy regulations and their implementation. This body

should act fairly and consistently, and should comprise members from the private sector (not related to mining), government, civil society, and local mining stakeholders.

5.4.3. Linking mine development and growth with external stakeholders to support community infrastructure development

A formula should be developed to address the community's concern that development and infrastructure are biased toward Aggeneys, leaving other surrounding towns underdeveloped. Local ED/SED programmes should further encourage equipping local labourers with skills so they can enter the labour market, rather than depending on migrant labour. Enhancing local business opportunities and tourism in the area will also be within local municipalities' LED and IDP plans, and will enhance their potential and visibility.

5.4.4. CSR policy should promote housing- and transport subsidies

Incentives must be available for people in the surrounding areas to go to work. The current living-out- and travel allowance are hard to access and require various criteria to be met. Further, respondents note that mine housing and other types of mineworker accommodation is either scarce or in disrepair. BMM should work on satellite mine housing developments for local people who work at the mines. Living-out allowances as well a travel subsidy should be sufficient and awarded fairly. Furthermore, local government should collaborate with public- and private partners to accommodate local communities within an integrative housing environment or housing scheme.

5.4.5. DMR should apply strict environmental regulations

Regular training on environmental impacts by independent contractors and the mine—monthly environmental assessments by independent contractors on water and land. Empower local communities on the importance of environmental sustainability.

I would end with the following table summarising the main findings and their relevance to the literature: The first column will show the main findings from empirical evidence, and the second column will show the relevance to the literature used in the study. Finally, the recommendations will also be incorporated into the main findings.

Table 5.1: Main findings, relevance to the literature, and recommendations

Main findings	Relevance to literature	Recommendations
Empirical evidence shows that there are still negative impacts on local communities despite the development of CSRs.	• "Adding to the negative [are] negative environmental and health impacts" (Sanoh & Coulibaly, 2015). • Mining places an excessive burden on "local human, social and medical services, and infrastructure" (Carrington and Pereira, 2014); also see Archbold, et al. (2014); Mayer et al. (2018). • Communities are impacted by disintegrating traditional family dynamics, possible relocation (IIED, 2002), exposure to toxins and pollutants (Carrington et al., 2011). • Mining companies exploit resources without concern for surrounding communities, which may result in health-, family-, inequality-, and community destabilisation issues (Cingano, 2014).	CSR policy must be developed based on the needs of the host communities to create sustainable jobs.
Despite substantial progress, there is a need for policy regulations for practical support towards CSR and SD in the mining sector.	• "We are embracing corporate responsibility principles, social issue management policies, and the process of taking action in developing systems" (Siyobi, 2015). • National Framework for Sustainable Development's (DEAT, 2008) ten social development principles. • Corporations are encouraged to engender practical and continuous development on monetary and social	A regional oversight body should be established with all relevant stakeholders from different regions within the CSR and SD environment.

	levels by using CSR and SD developments (Lane & Reggio, 2013; Corrigan, 2019; HRW, 2022).	
Mine development creates infrastructure shortages that ED/SED programmes do not address.	• Worlanyo and Jiangfeng (2021):"almost all mines are placed in rural areas […] wherever individuals use the land for agricultural and survival functions". • Aguilar-González et al. (2018) note that programmes should address demands on property rights, liaise with local communities before mining commences to determine needs, clarify matters pertaining to communal property rights. • Providing financial aid to displaced locals (Steyn and Kahle, 1998).	Mine development and growth should be linked to external stakeholders, and community infrastructure development should be supported.
Population growth causes conflict within communities due to a lack of CSR and SD support.	• Mancini and Sala (2018): migrant entry disrupts social cohesion and demographic composition note that, when workers from other regions enter a specific area, the demographic composition of the receiving area changes; further, population increase adds to the burden of already overstretched infrastructure. • Rising accommodation- and living costs and demands for goods and services, that cannot always be met, increase; as much as 40% of South African mineworker come from labour-sending countries outside South Africa (SARW, 2022a).	CSR and SDs should include skills training for locals so as to allow them, instead of migrants, to enter the job market. Infrastructure and housing development should focus on accommodating larger populations from various social and cultural backgrounds.

	• White Paper (DME, 1998): governmental regulation should balance employment levels of locals and migrant workers through policy and legislation.	
Despite considerable efforts to ensure socio-economic development, the mines are not transparent about environmental impacts.	• Environmental damage is caused by, amongst others, pit erosion and acid mine drainage, which leads to air-, soil-, and water pollution, while also affecting water- and air circulation; mining creates huge carbon emissions (Agboola et al., 2020). • Not all mine waste can be recycled, but some recycled waste can be sustainably repurposed (Thejas & Hossiney, 2022). • Pollution affects the community's health and quality of life(Carvalho, 2017) • Chemical seepage poses long-term threats to water quality (Carvalho, 2017) • Twardowska et al.'s (2004) • Four stages for processing mine waste.	DMR should apply strict environmental regulations.

5.5. FUTURE RESEARCH

This study can serve as an entry point for further theoretical research into the interdependence between CSR, SD, and the mining industry, as well as how these affect different communities, such as those in the Khâi-Ma area. Other research could explore the development of CSR and SD specific to the field of mining, or explore the inclusion of stakeholders for integrative decision-making in the mining environment. Qualitative approaches may concentrate on the

socio-economic- and environmental impacts of mining on mining communities, extending the assessment of such effects.

While the aim of this study is to examine the role of mining in this specific location, and its influence on the community, understanding how the community receives, perceives, and respond to those impacts is another possible research avenue.

Stricter regulation of and legislation pertaining to CSR and SD initiatives, as well as how and by whom they are approved, is another notable topic to investigate. Different research frameworks and approaches can also be used to evaluate CSR and SD strategies.

Based on these perspectives, the researcher recommends further research be undertaken around the topic of CSR and SD initiatives and their contributions to a positive collective implementation in the Khâi-Ma municipal area. This research is crucial to ensure that SD and CSR render equal benefits and opportunities to local communities in this area, as well as in other areas affected by mining. Such a study will investigate the causes of the lack of effectively integrated implementation in the Khâi-Ma municipal area and solutions for improving these implementations.

REFERENCES

Abdelhalim, K. & Eldin, A.G. 2019. Can CSR help achieve sustainable development? Applying a new assessment model to CSR cases from Egypt. *International Journal of Sociology and Social Policy*. 39(9/10): 773-795. DOI: 10.1108/IJSSP-06-2019-0120.

Agboola, O., Babatunde, D.E., Fayomi, O.S.F., Sadiku, R., Popoola, P., Moropeng, M.L., Yahaya, A., & Mamudu, A. 2020. A review on the impact of mining operation: Monitoring, assessment and management. *Results in Engineering*. 8(10018). DOI: 10.1016/j.rineng.2020. 100181.

Agudelo, M.A.L., Jóhannsdóttir, L., & Davídsdóttir, B. 2019. A literature review of the history and evolution of corporate social responsibility. *International Journal of Corporate Social Responsibility*. 4(1). DOI: 10.1186/s40991-018-0039-y.

Aguilar-González, B., Navas, G., Brun, C., Aguilar-Umaña, A., & Cerdán, P. 2018. Socio-ecological distribution conflicts in the mining sector in Guatemala (2005–2013): Deep rooted injustice and weak environmental governance. *The Extractive Industries and Society*. 5: 240-254. DOI: 10.1016/j.exis.2018.02.002.

Ames, H., Glenton, C., & Lewin, S. 2019. Purposive sampling in a qualitative evidence synthesis: A worked example from a synthesis on parental perceptions of vaccination communication. BMC Medial Research Methodology. 19(26). DOI: 10.1186/s12874-019-0665-4.

Amiraslani, F. & Cooper, A. 2022. Learning from the past: Lessons from the first United Nations report on problems of the human environment. *Challenges*. 13(44). DOI: 10.3390/ challe13020044.

Anderson, M., Fraser, D., & Zandvliet, L. 2001. Porgera Joint Venture (JPV) gold mining operation [online]. Corporate Engagement Project: Porgera Joint Venture. Draft report. July. Available from: https://www.cdacollaborative.org/wp-content/uploads/2016/01/Placer-Dome-Asia-Pacific-Porgera-Joint-Venture-PJV-Gold-Mining-Operation.pdf.
[Accessed 10 November 2022].

Anderson, B.J. & Theodori, G.L. 2009. Local leaders' perceptions of energy development in the Barnett Shale. *Southern Rural Sociology*. 24:113–29.

Archbold, C.A., Dahle, T., & Jordan, R. 2014. Policing "The Patch": Police response to rapid population growth in oil boomtowns in western North Dakota. *Police Quarterly*. 17: 386-413. DOI: 10.1177/1098611114549629.

Asfaw, T.S., Botes, V., & Mengesha, L.G. The role of NGOs in corporate environmental responsibility practice: Evidence from Ethiopia. *International Journal of Corporate Social Responsibility.* 2(2). DOI: 10.1186/s40991-017-0013-0.

Aslaksen, H.M., Hildebrandt, C., & Johnsen, H.C.G. 2021. The long-term transformation of the concept of CSR: Towards a more comprehensive emphasis on sustainability. *International Journal of Corporate Social Responsibility*. 6(11). DOI: 10.1186/s40991-021-00063-9.

Banks, G. 2009. Activities of TNCs in extractive industries in Asia and the Pacific: Implications for development. *Transnational Corporations*. 18(1): 43-59. DOI: 10.18356 /b5b9aeca-en.

Barbier, E.B. & Burgess, J.C. 2015. Sustainable development: An economic perspective. In: Wright, J.D. (ed.). *International Encyclopedia of the Social & Behavioral Sciences*. 2nd ed. Amsterdam, Netherlands: Elsevier. pp. 823-827.

Baumol, W.J., Likert, R., Wallich, H.C., & McGowan, J.J. 1970. A new rationale for corporate social responsibility [online]. Committee for Economic Development. Supplementary Paper no. 31. Available from: https://www.ced.org/pdf/A-New-Rationale-for-Corporate-Social-Policy.pdf. [Accessed 10 November 2022].

Bello, O. & Harvey, R. 2015. Will South Africa's Minerals Bill take the road less travelled? [online]. South African Institute of International Affairs (SAIIA). Available from: https://saiia.org.za/research/will-south-africas-minerals-bill-take-the-road-less-travelled/. [Accessed 10 November 2022].

Bickman, L. & Rog, D.J. 2009. *The SAGE Handbook of Applied Social Research Methods*. 2nd ed. Thousand Oaks, California: SAGE.

Bill of Rights. 1996. In: The Constitution of the Republic of South Africa. Available from: http://www.constitutionalcourt.org.za/site/constitution/english-web/ch2.html. [Accessed 26 October 2022].

Blackmore, C. 2012. Sustainability. In: Chadwick, R. (ed.). *Encyclopedia of Applied Ethics.* 2nd ed. Amsterdam, Netherlands: Elsevier. pp. 274-280.

Botha, C.E. 2018. The role of the NGO in local government: The case of World Vision in Ubuhlebezwe municipality. Master's in Public Administration. Stellenbosch: Stellenbosch University.

Bowen, H.R. 1953. *Social Responsibilities of the Businessman*. 1st ed. Manhattan, New York: Harper and Brothers.

Bowen, H.R. 2013. *Social Responsibilities of the Businessman*. 2nd ed. Iowa City, Iowa: University of Iowa Press. DOI: 10.2307/j.ctt20q1w8f.

Brand, K-W. 2015. Sustainable development. In: Wright, J.D. (ed.). *International Encyclopedia of the Social & Behavioral Sciences*. 2nd ed. Amsterdam, Netherlands: Elsevier. pp. 812-816.

Brin, P.V. & Nehme, M.N. 2019. Corporate social responsibility: Analysis of theories and models. *EUREKA: Social and Humanities*. 5: 22-30. DOI: 10.21303/2504-5571.2019.001007

Bryman, A. 2008. *Social Research Methods*. 4th ed. Oxford: Oxford University Press.

Burdge, R.J. & Vanclay, F. 1996. Social Impact Assessment: A contribution to the State of the Art series. *Impact Assessment*. 14(1): 59-86. DOI: 10.1080/07349165.1996.9725886.

Burgess, J.C. & Barbier, E.B. 2001. Sustainable development. In: Smelser, N.J. & Baltes, P.B. (eds.). *International Encyclopedia of the Social & Behavioral Sciences*. 1st ed. Amsterdam, Netherlands: Elsevier. pp. 15329-15335.

Cairney, P. 2019. *Understanding Public Policy: Theories and Issues*. London: Bloomsbury.

Carrington, K., Hogg, R., & McIntosh, A. 2011. The resource boom's underbelly: Criminological impacts of mining development. *Australian & New Zealand Journal of Criminology*. 44(3): 335-354. DOI: 10.1177/0004865811419068.

Carrington, K. & Pereira, M. 2014. Assessing the social impacts of the resources boom on rural communities. *Rural Society*. 21(1): 2-20. DOI: 10.5172/rsj.2011.21.1.2.

Carroll, A.B. & Brown, J.A. 2018. Corporate social responsibility: A review of current concepts, research, and issues. *International Journal of Corporate Social Responsibility (Business and Society)*. 360(2): 39-69. DOI: 10.1108/S2514-175920180000002002.

Carroll, A.B. & Shabana, K.M. 2010. The business case for corporate social responsibility: A review of concepts, research and practice. *International Journal of Management Reviews*. 12(1): 85-105. DOI: 10.1111/j.1468-2370.2009.00275.x.

Carroll, A.B. 1983. Corporate social responsibility: Evolution of a definitional construct. *Business & Society*. 38(3). DOI: 10.1177/000765039903800303.

Carroll, A.B. 1991. The pyramids of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*. 34(4): 39-48. DOI: 10.1016/ 0007-6813(91)90005-G.

Carroll, A.B. 2008. A history of corporate social responsibility. In: Crane, A., Matten, D., McWilliams, A., Moon, J., & Siegel, D.S. (eds.). *The Oxford Handbook of Corporate Social Responsibility.* Oxford, United Kingdom: Oxford University Press. pp. 19-46.

Carroll, A.B. 2015. Corporate social responsibility (CSR) is on a sustainable trajectory. *Journal of Defense Management*. 05(02). DOI: 10.4172/2167-1374.1000132.

Carroll, A.B. 2016. Carroll's pyramid of CSR: Taking another look. *International Journal of Corporate Social Responsibility*. 1(3). DOI: 10.1186/s40991-016-0004-6.

Carvalho, F.P. 2017. Mining industry and sustainable development: Time for change. *Food and Energy Security*. 6(2): 61-77. DOI: 10.1002/fes3.109.

Casey, J.P. 2018. Careers in mining: How do salaries compare around the world? [online]. *Mining Technology.* Available from: https://www.mining-technology.com/features/careers-mining-salaries-compare-around-world/. [Accessed 26 October 2022].

Centre for Applied Legal Studies (CALS). 2016. Social and labour plan mining community toolkit [online]. The Social and Labour Plan Series. University of the Witwatersrand, Johannesburg. Available from: https://www.wits.ac.za/media/wits-university/faculties-and-schools/commerce-law-and-management/research-entities/cals/documents/programmes/environment/resources/SLP%20Community%20Toolkit%202%20March%202017.pdf. [Accessed 26 October 2022].

Chandler, D. 2013. Resilience ethics: Responsibility and the globally embedded subject. *Ethics and Global Politics*. 6(3): 147-194. DOI:10.3402-egp.v6i3.21695.

Cherry, M.A. & Sneirson, J.F. 2011. Beyond profit: Rethinking corporate social responsibility and greenwashing after the BP oil disaster. *Tulane Law Review*. 85(4): 983. DOI: 10.2139/ssrn.1670149.

Chuhan-Pole, P., Dabalen, A.L., & Land, B.C. 2017. Mining in Africa: Are local communities better off? [online]. Agence Française de Dévelopment/World Bank. Africa Development Forum. Report. Available from: https://openknowledge.worldbank.org/bitstream/handle/10986/26110/9781464808197.pdf. [Accessed 28 October 2022].

Cingano, F. 2014. Trends in income inequality and its impact on economic growth. Organisation for Economic Co-operation and Development (OECD). Social, Employment and Migration Working Papers no. 163. DOI: 10.1787/5jxrjncwxv6j-en.

Committee for Economic Development (CED). 1971. Social responsibilities of business corporations [online]. June. New York, New York. Available from: https://www.ced.org/pdf/Social_Responsibilities_of_Business_Corporations.pdf. [Accessed 10 November 2022].

Cornelissen, J. 2014. Corporate communications: Theory and practice. *Strategic Direction*. 23(8). DOI: 10.1108/cd.2007.05623hae.001.

Corrigan, C.C. 2019. Deriving social benefits from mining through regulations: Lessons learned in South Africa. *The Extractive Industries and Society*. 6(3): 940-947. DOI: 10.1016/ j.exis.2019.05.017.

Cronjé, F. 2014. Digging for development: The mining industry in South Africa and its role in socio-economic development. South African Institute for Race Relations, Johannesburg.

Davis, K. 1960. Can business afford to ignore social responsibilities? *California Management Review.* 2(3). DOI: 10.2307/41166246.

Davies, C.F., Berman, E., & Pillay, D. Mining in South Africa: Overview [online]. *Thomson Reuters Practical* Law. 1 October. Available from:

https://uk.practicallaw.thomsonreuters.com/w-017-7378?transitionType=Default&contextData=(sc.Default)&firstPage=true. [Accessed 14 February 2023].

Deloitte. 2019. Mining Charter analysis: Finding a happy medium [online]. Value beyond compliance series. April. Available from: https://www2.deloitte.com/content/dam/Deloitte/za/Documents/energy-resources/za_deloitte_mining_charter_May2019.pdf. [Accessed 26 October 2022].

Department of Environmental Affairs and Tourism (DEAT). 2008. A national framework for sustainable development in South Africa [online]. Available from: https://www.gov.za/sites/default/files/gcis_document/201409/nationalframeworkforsustainabledevelopmenta0.pdf. [Accessed 9 November 2022].

Department of Mineral Resources (DMR). 2018. Broad-based socio-economic empowerment charter for the mining and mineral industry (Mining Charter). Notice no. 1002. *Government Gazette*. No. 41934. 27 September. Available from: https://www.gov.za/sites/default/files/gcis_document/201809/41934gon1002.pdf. [Accessed 26 October 2022].

Department of Mineral Resources (DMR). 2019. Housing and Living Conditions Standard for the Minerals Industry, 2019. Notice no. 1590. *Government Gazette*. No. 42899. 11 December. Available from: https://www.gov.za/sites/default/files/gcis_document/201912/42899rg11016gon1590.pdf. [Accessed 26 October 2022].

Department of Mineral Resources and Energy (DMRE). 2010. Social and labour plan guidelines for the mining and production industries (SLPG). Available from: https://gestaltconsult.com/wp-content/uploads/2017/02/Social-and-Labour-Plan-Guidelines-for-Mining-and-Production-Industries.doc. [Accessed 26 October 2022].

Department of Minerals and Energy (DME). 1998. *A minerals and mining policy for South Africa*. White Paper. Available from: https://www.gov.za/sites/default/files/gcis_document/201409/whitepaperminingmineralspolicy2.pdf. [Accessed 26 October 2022].

Department of Minerals and Energy (DME). 2009. Publication of the housing and living conditions standard for the minerals industry. *Government Gazette*. No. 32166. Notice no. 445. 29 April. Available from: https://www.gov.za/sites/default/files/gcis_document/201409/32166445.pdf. [Accessed 26 October 2022].

Department of Statistics South Africa (Stats SA). 2019. Mining industry 2019 [online]. Report no. 20-01-02 (2019). Available from: http://www.statssa.gov.za/publications/Report-20-01-02/Report-20-01-022019.pdf. [Accessed 15 November 2022].

Dietsche, E., Emsley, I., Ostensson, O., & Stevens, P. 2007. Chile country case study. Paper prepared on behalf of the International Council on Mining and Metals, UNCTAD, and the World Bank.

Du Pisani, J.A. 2007. Sustainable development: Historical roots of the concept. *Environmental Sciences*. 3(2): 83-96. DOI: 10.1080/15693430600688831.

Du Plessis, R. 2021. Mining Charter III compliance: Here's what you need to know [online]. Umsizi: Sustainable Social Solutions. Available from: https://umsizi.co.za/mining-charter-iii-compliance-heres-what-you-need-to-know/. [Accessed 10 November 2022].

Ehrlich, R., Montgomery, A., Akugizibwe, P., & Gonsalves, G. 2017. Public health implications of changing patterns of recruitment into the South African mining industry, 1973–2012: A database analysis. *BMC Public Health*. 18(93). DOI: 10.1186/s12889-017-4640-x.

European Commission (EC). 2001. *Promoting a European framework for Corporate Social Responsibility*. Green Paper. DOC/01/9. Brussels. 18 July. Available from: https://ec.europa.eu/commission/presscorner/detail/en/DOC_01_9. [Accessed 10 November 2022].

European Commission (EC). 2002. Corporate social responsibility main issues. MEMO02/153. Available from: https://ec.europa.eu/commission/presscorner/detail/en/MEMO_02_153. [Accessed 10 November 2022].

Farcane, N. & Bureana, E. 2015. History of "corporate social responsibility" concept. *Annales Universitatis Apulensis Series Oeconomica*. 17(2): 31-48. DOI: 10.29302/ oeconomica.2015.17.2.3.

Fashola, M.O., Ngole-Jeme, V.M., & Babalola, O.O. 2016. Heavy metal pollution from gold mines: Environmental effects and bacterial strategies for resistance. *International Journal of Environmental Research and Public Health*. 13(11): 1047. DOI: 10.3390/ijerph13111047.

Fasken Law Firm. 2020. Amendments to the Mineral and Petroleum Resources Development Regulations [online]. Available from: https://www.fasken.com/en/knowledge/2020/04/amendments-to-the-mineral-and-petroleum-resource-development-regulations. [Accessed 9 November 2022].

Frederick, W.C. 1960. The growing concern over business responsibility. *California Management Review*. 2(4). DOI: 10.2307/41165404.

Gill, P., Stewart, K., Treasure, E., & Chadwick, B. 2008. Methods of data collection in qualitative research: Interviews and focus groups. *British Dental Journal*. 204: 291-295. DOI: 10.1038/bdj.2008.192.

Georg-August-Universität (GAU). 2022. Sustainable development studies [online]. Available from https://www.uni-goettingen.de/en/657464.html#:~:text=Sustainable%20Development%20Studies%20are%20primarily,called%20developing%20and%20emerging%20countries. [Accessed 14 February 2023].

Google. 2022. Black Mountain Mining [online]. Map. Available from: https://www.google.com/maps/place/Black+Mountain+Mining+Pty+Ltd/@-29.5136882,18.3914875,8.67z/data=!4m6!3m5!1s0x1c3b0a3adeb6c4db:0x416cf2a701ffc3a0!8m2!3d-29.2424327!4d18.8402747!16s%2Fg%2F1tmwkxw8. [Accessed 9 November 2022].

Google. 2022. Khâi-Ma Municipality [online]. Map. Available from: https://www.google.com/maps/place/Kh%C3%A2i-Ma+Municipality/@-29.1651193,19.1457949,9z/data=!3m1!4b1!4m6!3m5!1s0x1c3b15b738181a39:0x6f40938ce9575440!8m2!3d-29.1905358!4d19.2831531!16s%2Fm%2F0g53zz1. [Accessed 9 November 2022].

Gramling, R. & Freudenburg, W.R. 1992. Opportunity-threat, development, and adaptation: Toward a comprehensive framework for Social Impact Assessment. *Rural Sociology*. 57(2): 216-234. DOI: 10.1111/j.1549-0831.1992.tb00464.x.

Guest, G., Namey, E.E., & Mitchell, M.L. 2013. Qualitative research: Defining and designing. In: Guest, G., Namey, E.E., & Mitchell, M.L. (eds.). *Collecting Qualitative Data: A Field Manual for Applied Research*. Thousand Oaks, California: SAGE. pp. 1-40.

Haddaway, N.R., Cooke, S.J., Lesser, P., Macira, B., Nilsson, A.E., Taylor, J.T., & Raito, K. 2019. Evidence of the impacts of metal mining and the effectiveness of mining mitigation measures on social–ecological systems in Arctic and boreal regions: A systematic map protocol. *Environmental Evidence*. 8(9). DOI: 10.1186/s13750-019-0152-8.

Harrison, P. & Rubin, M. 2016. South African cities in an urban world. *South African Geographical Journal/Suid-Afrikaanse Geografiese Tydskrif*. 98(3). DOI: 10.1080/037362 45.2016.1208588.

Heale, R. & Twycross, A. 2018. What is a case study? *Evidence-Based Nursing.* 21(1): 7-8. DOI: 10.1136/eb-2017-102845.

Helmold, M. & Samara, W. 2019. PM in NGO and NPO. In: Helmold, M. & Samara, W. (eds.). *Progress in Performance Management*. Chicago, Illinois: Springer. pp. 149-154.

Hilson, G. 2002. Small-scale mining and its socio-economic impact in developing countries. *Natural Resources Forum*. 26(1): 3-13. DOI: 10.1111/1477-8947.00002.

Hilson. A., Hilson, G., & Suleman, D. 2019. Corporate Social Responsibility and African mines: Linking the past to the present. *Journal of Environmental Management*. 241: 340-352. DOI: 10.1016/j.envman.2019.03.121.

Holliday, C., Schmidheiny, S., & Watts, P. 2002. *Walking the Talk: The Business Case for Sustainable Development*. Sheffield, United Kingdom: Greenleaf.

Holme, R. & Watts, P. 2001. Making good business sense. *The Journal of Corporate Citizenship*. 2: 17-20. World Business Council for Sustainable Development.

Hosseinpour, M., Osanloo, M., & Azimi, Y. 2022. Evaluation of positive and negative impacts of mining on sustainable development by a semi-quantitative method. *Journal of Cleaner Production.* 366: 132955. DOI: 10.1016/j.clepro.2022.132955.

Human Rights Watch (HRW). 2022. The forever mines: Perpetual rights risks for unrehabilitated coal mines in South Africa [online]. 5 July. Available from:

https://www.hrw.org/report/2022/07/05/forever-mines/perpetual-rights-risks-unrehabilitated-coal-mines-south-africa. [Accessed 9 November 2022].

International Council on Mining and Metals (ICMM). 2014. The role of mining in national economies: Mining's contribution to sustainable development. 2nd ed. [Online]. Available from: https://www.icmm.com/en-gb/research/social-performance/2014/role-of-mining-in-national-economies. [Accessed 26 October 2022].

International Council on Mining and Minerals. 2022. Our principles [online]. Available from: https://www.icmm.com/en-gb/our-principles. [Accessed 8 November 2022].

International Institute for Environment and Development (IIED). 2002. Mining, Minerals and Sustainable Development [online]. Research report. January. Available from: https://www.iied.org/9084iied. [Accessed 9 November 2022].

International Institute for Sustainable Development (IISD). 2022. Sustainable development [online]. Available from: https://www.iisd.org/mission-and-goals/sustainable-development. [Accessed 14 February 2023].

International Labour Organisation (ILO). 2019. Labour standards in global supply chains: How to meet them and become more competitive and sustainable [online]. ILO training module for SMEs and other enterprises. Geneva. Available from: https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/documents/instructionalmaterial/wcms_725761.pdf. [Accessed 9 November 2022].

Johnson, Z., Ashoori, M.T., & Lee, Y.J. 2018. Self-reporting CSR activities: When your company harms, do you self-disclose? *Corporate Reputation Review*. 21: 153-164. DOI: 10.1057/s41299-018-0051-x.

Jones, T.M. 1980. Corporate social responsibility revisited, redefined. *California Management Review*. 2(3). DOI: 10.2307/41164877.

Kay, D. 2011. The economic impact of Marcellus Shale gas drilling: what have we learned? What are the limitations? [online].. A comprehensive economic impact analysis of natural gas extraction in the Marcellus Shale: Working paper series. Cornell University, New York. April. Available from:

http://www.greenchoices.cornell.edu/downloads/development/shale/Economic_Impact.pdf. [Accessed 10 November 2022].

Kramer, M.R. & Pfitzer, M.W. 2016. The ecosystem of shared value [online]. *Harvard Business Review*. October. Available from: https://hbr.org/2016/10/the-ecosystem-of-shared-value. [Accessed 9 November 2022].

Krause, R.D. & Snyman, L.G. 2014. Rehabilitation and mine closure liability: An assessment of the accountability of the system to communities [online]. Johannesburg, South Africa: University of the Witwatersrand. Centre for Applied Legal Studies. Available from: https://www.wits.ac.za/media/wits-university/faculties-and-schools/commerce-law-and-management/research-entities/cals/documents/Rehabilitation%20and%20mine%20closure%20liability.pdf. [Accessed 14 February 2023].

Kurtz, L.R. 2022. *Encyclopedia of Violence, Peace and Conflict.* 3rd ed. Amsterdam, Netherlands: Elsevier.

Lane, A. 2018. 2018 Mining Charter: Finding a happy medium [online]. Deloitte: Energy, Resources & Industrial. Available from: https://www2.deloitte.com/za/en/pages/energy-and-resources/articles/2018-mining-charter.html. [Accessed 14 February 2023].

LaMorte, W.W. 2017. The industrial revolution [online]. Boston University School of Public Health. The Evolution of Epidemiologic Thinking series. Available from: https://sphweb.bumc.bu.edu/otlt/mph-odules/ep/ep713_history/ep713_history4.html#:~:text=Poor%20workers%20were%20often%20housed,metals%2C%20dust%2C%20and%20solvents. [Accessed 15 November 2022].

Lane, A. & Reggio, R. 2013. Mining in Africa: How inclusive solutions can mitigate risk [online]. *Monitor: Deloitte*. Available from: https://www2.deloitte.com/content/dam/Deloitte/us/Documents/strategy/us-consulting-mining-in-africa.pdf. [Accessed 9 November 2022].

Ledwaba, P. & Nhlengetwa, K. 2015. When policy is not enough: Prospects and challenges of artisanal and small-scale mining in South Africa. *Journal of Sustainable Development, Law and Policy*. 7(1): 25-42. DOI: 10.4314/jsdlp.v7i1.2.

Lee, M-D.P. 2007. A review of the theories of corporate social responsibility: Its evolutionary path and the road ahead. *International Journal of Management Reviews*. 10(1): 53-73. DOI: 10.1111/j.1468-2370-2007.00226.x.

Leedy, P. & Ormrod, J. 2001. *Practical Research: Planning and Design*. 7th ed. Thousand Oaks, California: Merill Prentice Hall/SAGE.

Leonard, L. 2018. Mining corporations, democratic meddling, and environmental justice in South Africa. *Social Sciences*. 7(12): 259. DOI: 10.3390/socsci7120259.

Lerotoli, N. 2013. Environmental management programme amendment: Black Mountain Mining – Vedanta resources, Aggeneys, Northern Cape [online]. Royal HaskoningDHV. E00.CPT.000402. Available from: https://minedocs.com/17/Vedanta_Resources_Enviromental_Report_2013.pdf. [Accessed 9 November 2022].

Leyden, P. & Mametse, A. 2020. The unregulated terrain of historic mine dumps in South Africa [online]. 8 July. Available from: https://hsfnotes.com/africa/2020/07/08/the-unregulated-terrain-of-historic-mine-dumps-in-south-africa/#more-1136. [Accessed 14 February 2023].

Littlewood, D. 2014. 'Cursed' communities? Corporate Social Responsibility (CSR), company towns and the mining industry in Namibia. *Journal of Business Ethics*. 120(1). DOI: 10.1007/s10551-013-1649-7.

Mancini, L. & Sala, S. 2018. Social impact assessment in the mining sector: Review and comparison of indicators frameworks. *Resources Policy*. 57: 98-111. DOI: 10.1016/ j.resourpol.2018.02.002.

Marais, L. 2018. Housing policy in mining towns: Issues of race and risk in South Africa. *International Journal of Housing Policy*. 18(3): 335-345. DOI: 10.1080/19491247.2018. 1448153.

Marais, L. & Cloete, J. 2013. Labour migration, settlement, and mine closure in South Africa. *Geography*. 98(2): 77-84. DOI: 10.1080/00167487.2013.12094371.

Marais, L., Cloete, J., & Denoon-Stevens, S. 2018. Informal settlements and mine development: Reflections from South Africa's periphery. *Journal of the South African Institute of Mining and Metallurgy*. 118(10). DOI: 10.17159/2411-9717/2018/v118n10a12.

Martin-Ortega, O. 2022. Transparency and human rights in global supply chains: From a corporate-led disclosure to a right to know. In: Marx, A., Van Calster, G., Wouters, J., Otteburn, K., & Lica, D. (eds.). *Research Handbook on Global Governance, Business and Human Rights*. Research Handbooks on Globalisation in the Law Series. Cheltenham, United Kingdom: Edward Elgar Publishing Ltd. pp. 100-120.

Matthews, E., Amann, C., Fischer-Kowalski, M., Bringezu, S., Hüttler, W., Kleijn, R., Moriguchi, Y., Ottke, C., Rodenburg, E., Rogich, D., Schandl, H., Schütz, H., Van der Voet, E., & Weisz, H. 2000. The weight of nations: Material outflows from industrial economies [online]. Washington, DC: World Resources Institute. Available from: http://pdf.wri.org/weight_of_nations.pdf. [Accessed 10 November 2022].

Mayer, A., Olson-Hazboun, S.K., & Malin, S. 2018. Fracking fortunes: Economic well-being and oil and gas development along the urban-rural continuum. *Rural Sociology*. 83(3): 532-567. DOI: 10.1111/ruso.12198.

McDonald, C. & Figueredo, L. 2022. A framework for comparative assessment of indigenous land governance. *Land*. 11(6). DOI: 10.3390/land11060906.

McLeod, H. 2000. Compensation for landowners affected by mineral development: The Fijian experience. *Resources Policy*. 26(2): 115-125. DOI: 10.1016/S0301-4207(00)00021-0.

McMahon, G. & Moreira, S. 2014. The contribution of the mining sector to socioeconomic and human development [online]. World Bank: Oil, Gas and Mining Unit. Working paper no. 87298. Extractive Industries for Development Series no. 30. Available from: https://documents1.worldbank.org/curated/en/713161468184136844/pdf/872980NWP0Mini00Box385186B00PUBLIC0.pdf. [Accessed 10 November 2022].

Mine Health and Safety Council (MHSC). 2018. Legislation [online]. Available from: https://mhsc.org.za/legislation/. [Accessed 12 November 2022].

Minerals Council South Africa (MCSA). 2018. Housing and accommodation in the South African mining industry: Fact sheet [online]. Available from:

https://www.mineralscouncil.org.za/industry-news/publications/fact-sheets/send/3-fact-sheets/739-housing-and-accommodation. [Accessed 8 November 2022].

Minerals Council South Africa (MCSA). 2019a. A brief history [online]. Available from: https://www.mineralscouncil.org.za/about/history. [Accessed 12 November 2022].

Minerals Council South Africa (MCSA). 2019b. Mining industry transformation progress report for 2019 [online]. Available from: https://www.mineralscouncil.org.za/downloads/send/7-2015/850-mining-industry-transformation-report-2018. [Accessed 12 November 2022].

Molderez, I. 2021. Corporate Social Responsibility and the Sustainable Development Goals (SDGs). In: Filho, L., Azul, W., Brandli, A.M., Lange Salvia, A., & Wall, T. (eds.). *Decent Work and Economic Growth*. Encyclopedia of the UN Sustainable Development Goals. Champagne, Illinois: Springer. DOI: 10.1007/978-3-319-95867-5_7. Pp. 116-128.

Moraka, N.V. 2016. Interpretation of transformation: Perspectives from mining executives in South Africa. *Journal of the South African Institute of Mining and Metallurgy*. 116: 455-463. DOI: 10.17159/2411-9717/2016/v116n5a11.

Mostert, H., Kangwa-Musole, C., Howard, J., Madhu, F., Van den Berg, M., & Young, C-L. 2016. Corporate social responsibility in the mining industries of Namibia, South Africa, and Zambia: Choices and consequences. In: Barrera-Hernández, L., Barton, B., Godden, L., Lucas, A., & Rønne, A. (eds.). *Sharing the Costs and Benefits of Energy and Resource Activity: Legal Change and Impact on Communities*. Oxford, United Kingdom: Oxford University Press/Oxford Academic.

Mpanza, M., Adam, E., & Moolla, R. 2020. Perceptions of external costs of dust fallout from gold mine tailings: West Wits Basin. *Clean Air Journal*. 30(1): 1-12. DOI: 10.17159/caj/2020/30/1.7566.

Muller, S. 2021. How to advance sustainable mining: Still only one Earth – Lessons from 50 years of UN sustainable development policy [online]. Winnipeg, Manitoba: International Institute for Sustainable Development. Available from: https://www.iisd.org/articles/deep-dive/how-advance-sustainable-mining. [Accessed 14 February 2022].

Municipalities of South Africa (MSA). 2022. Khâi-Ma local municipality (NC067) [online]. Available from: https://municipalities.co.za/overview/1170/khai-ma-local-municipality.

[Accessed 9 November 2022].

Myeni, L.W. 2021. The role of social and cultural arrangement of the host communities in mining entry strategies. Master's of Philosophy in Corporate Strategy. Pretoria: Gordon Institute of Business Science, University of Pretoria.

Nalule, V.R. 2020. *Mining and the law in Africa: Exploring the social and environmental impacts*. Berlin, Germany: Springer.

Narasimhan, R. (2006). Practicing the principles [online]. *CSR Bulletin for the ICT Sector*. 1(2): 2.

Naudé, M. 2012. Simultaneous implementation of sustainable development (SD) and corporate social responsibility (CSR) within global business context. *Corporate Ownership & Control*. 10(1): 170-179. DOI: 10.22495/cocv10i1c1art2.

O'Riordan, L. & Fairbrass, J. 2014. Managing CSR stakeholder engagement: A new conceptual framework. *Journal of Business Ethics*. 125: 121-145. DOI: 10.1007/s10551-013-1913-x.

Olejniczak-Szuster, K. 2019. CSR in the activities of Polish enterprises: Results of own research. *Scientific Quarterly: Organization and Management*. 1(45): 37-47. DOI: 10.29119/1899-6116.2019.45.4.

Onwuegbuzie, A.J. & Collins, K.M.T. 2007. A typology of mixed methods sampling design in social science research. *The Qualitative Report*. 12(2): 281-316. DOI: 10.46743/2160-3715/2007.1638.

Organisation for Economic Co-operation and Development (OECD). 2002. Putting partnering to work [online]. Business Partners for Development. Tri-section partnership results and recommendations. Available from: https://www.oecd.org/unitedkingdom/2082379.pdf. [Accessed 9 November 2022].

Petrova, S. & Marinova, D. 2012. *Social impacts of mining at a local community level and the role of CSR for sustainability* [online]. Proceedings of the 32nd Annual Conference of the International Association for Impact Assessment, Portugal, 17 May-1 June. Available from: https://conferences.iaia.org/2012/proceedings.html. [Accessed 14 November 2022].

Pinney, C., 2001. Imagine speaks out: How to manage corporate social responsibility and reputation in a global marketplace – the challenge for Canadian business [online]. Available from: http://www.imagine.ca/content/media/team_canada_china_paper.asp?sectionmedia. [Accessed 10 November 2022].

PMG (Parliamentary Monitoring Committee). 2013. Mine closure, rehabilitation and retention of financial provision (s43) [online]. Available from: https://static.pmg.org.za/130913conversation.pdf. [Accessed 14 February 2023].

Pons, A., Vintrò, C., Rius, J., & Vilaplana, J. 2021. Impact of Corporate Social Responsibility in mining industries. *Resources Policy*. 72: 102117. DOI: 10.1016/j.resourpol. 2021.102117.

Ramoshaba, M. 2019. Host communities' perceptions about mining companies in the Govan Mbeki municipal area, Mpumalanga province. Master's of Business Administration. Polokwane: University if Limpopo.

Reed, E. & Miranda, M. (2009). *Assessment of the Mining Sector and Infrastructure Development in the Congo Basin Region*. New York, New York: Longman.

Republic of South Africa (RSA). 1991. Minerals Act of 1991 (Act 50 of 1991*). Government Gazette.* No. 13253. 22 May. Available from: https://www.gov.za/sites/default/files/gcis_document/201409 /a501991.pdf. [Accessed 26 October 2022].

Republic of South Africa (RSA). 1996. Constitution of the Republic of South Africa (Act 108 of 1996). Pretoria: Government Printer.

Republic of South Africa (RSA). 1998a. Employment Equity Act (Act 55 of 1998). *Government Gazette*. No. 19370. 19 October. Available from: https://www.labour.gov.za/DocumentCenter/Acts/Employment%20Equity/Act%20-%20Employment%20Equity%201998.pdf. [Accessed 26 October 2022].

Republic of South Africa (RSA). 1998b. National Environmental Management Act (Act 107 of 1998). *Government Gazette*. No. 19519. 1 February. Available from: https://www.gov.za/sites/default/files/gcis_document/201409/a107-98.pdf. [Accessed 26 October 2022].

Republic of South Africa (RSA). 2002. Mineral and Petroleum Resources Development Act (Act 28 of 2002). Notice no. 23922. *Government Gazette*. No. 1273. 10 October. Available from: https://www.gov.za/sites/default/files/gcis_document/201409/a28-020.pdf. [Accessed 26 October 2022].

Riano, J.D., Yakovleva, N. 2020. Corporate Social Responsibility. In: Filho, L.W., Azul, A.M., Brandli, L., özuyar, P.G., & Wall, T. (eds.).*Encyclopedia of the UN Sustainable Development Goals*. Responsible consumption and production. Chicago, Illinois: Springer. DOI: 10.1007/978-3-319-95726-5_26.

Robinson, R.S. (2014). Purposive sampling. In: Michalos, A.C. (ed.). *Encyclopedia of Quality of Life and Well-Being Research*. Dordrecht, Netherlands: Springer. pp. 5243-5245. DOI: 10.1007/978-94-007-0753-5_2337 pp 5243-4245.

Rubin, M. & Harrison, P. 2016. An uneasy symbiosis: Mining and informal settlement in South Africa, with particular reference to the Platinum Belt in North West Province. In: Cirolia, L., Görgens, T., Van Donk, M., Smit, W., & Drimie, S. (eds*.). Upgrading Informal Settlements in South Africa: A Partnership-based Approach*. Cape Town: University of Cape Town Press. pp. 145-173.

Sánchez, L., Silva- Sánchez, S., & Neri, A. 2014. Guide for mine closure planning [online]. Brasília: IBRAM, Brazilian Mining Association. Available from: https://ibram.org.br/wp-content/ uploads/2021/02/guia_ingles-1.pdf. [Accessed 26 October 2022].

Sanoh, M. & Coulibaly, M. 2016. Socioeconomic and fiscal impact of large-scale gold mining in Mali [online]. Social Science Research Network (SSRN). World Bank Policy Research Working Paper no. 7467. Available from: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2684217. [Accessed 8 November 2022].

Sapsford, R. & Jupp, V. 2006. *Data Collection and Analysis*. 2nd ed. Thousand Oaks, California: SAGE.

Segatti, A. & Landau, L.B.. 2011. Contemporary migration to South Africa : A regional development issue. Africa Development Forum [online]. The World Bank: Africa Development Forum. Available from: https://openknowledge.worldbank.org/handle/10986/2349. [Accessed: 16 November 2022].

Simon, H. 2009. *Hidden Champions of the 21st Century: Success Strategies of Unknown World Market Leaders*. Bonn, Germany: Springer.

Siyobi, B. 2015. Corporate Social Responsibility in South Africa's mining industry: An assessment [online]. SAIIA: Governance of Africa's Resources Programme. Policy briefing no. 142. Available from: https://saiia.org.za/wp-content/uploads/2015/09/Policy-Briefing-142.pdf. [Accessed 8 November 2022].

Smith, C.N. 2001. Changes in corporate practices in response to public interest advocacy and actions: The role of consumer boycotts and socially responsible consumption in promoting corporate social responsibility. In: Bloom, P.N. & Gundlach, G.T. (eds.). *Handbook of Marketing and Society*. Thousand Oaks, California: SAGE. pp. 140-161.

Sonter, L.J., Ali, S.H., & Watson, E.M. 2018. *Mining and biodiversity: key issues and research needs in conservation science.* Proceedings of the Royal Society B: Biological Sciences. 285. DOI: 10.1098/rspb.2018.1926.

South African Heritage Resources Agency (SAHRIS). 2022. Heritage impact assessment report [online]. Available from: https://sahris.sahra.org.za/sites/default/files/additionaldocs/21466019_draft%20BAReport_Gamsberg_Final%20Draft_17May2022_reduced_App2.pdf. [Accessed 10 November 2022].

South Africa History Online (SAHO). 2015. Marikana massacre 16 August 2012 [online]. Available from: https://www.sahistory.org.za/article/marikana-massacre-16-august-2012. [Accessed 16 November 2022].

South Africa Research Watch (SARW). 2022a. Mapping of mineworkers and the portability of social benefits in the SADC region [online]. Available from: https://www.sarwatch.co.za/wp-content/uploads/2022/06/Mapping-of-Social-Security-Funds-in-SADC-with-cover.pdf. [Accessed 15 November 2022].

South Africa Research Watch (SARW). 2022b. The impact of Covid-19 on migrant mineworkers' human and labour rights in South Africa [online]. Available from: https://www.sarwatch.co.za/wp-content/uploads/2022/05/Updated-Migrant-Labour-report-and-COVID-19-1-1.pdf. [Accessed 15 November 2022].

Srivastava, A.K., Dixit, A., & Srivastava, A.A. 2022. Criticism of the Triple Bottom Line: TBL (with special reference to sustainability). *Corporate Reputation Review*. 25(1): 50-61. DOI: 10.1057/s41299-021-00111-x.

Stanton, D.W. 1995. LEON: Volume 1 (1995) [online]. The Commission Of Inquiry into safety and health in the mining industry. Report. Available from: https://www.dmr.gov.za/Portals/0/Resource%20Center/Reports%20and%20Other%20Documents/2003_Leon%20Commission_Volume%201.pdf?ver=2018-03-13-020431-270. [Accessed 11 November 2022].

Stelter, G.A. & Artibise, A.F.J. 2021. Resource towns in Canada [online]. The Canadian Encyclopedia. Available from: https://www.thecanadianencyclopedia.ca/en/article/resource-towns. [Accessed on 26 October 2022].

Steyn, M. & Kahle, H. 1998. An update on the relocation of local communities at the Tarkwa Mine. In: Mining in Africa '98. Institution of Mining and Metallurgy, Johannesburg. pp. 15–18.

Stokes, D.M., Marshall, B.G., & Veiga, M.M. 2019. Indigenous participation in resource developments: Is it a choice? *The Extractive Industries and Society*. 6(1): 50-57. DOI: 10.1016/j.exis.2018.10.015.

Suganthi, L. 2020. Investigating the relationship between corporate social responsibility and market, cost and environmental performance for sustainable business. *South African Journal of Business Management*. 51(1): a1630. DOI: 10.4102/sajbm.v51i1.1630.

Thacker, H. 2019. Understanding the four levels of CSR [online]. *The CSR Journal*. 12 November. Available from: https://thecsrjournal.in/understanding-the-four-levels-of-csr/#:~:text=Carroll's%20pyramid%20suggests%20that%20corporate,%2C%20Legal%2C%20Ethical%20and%20Philanthropic. [Accessed 9 November 2022].

Thasi, M. & Van der Walt, F. Work stress of employees affected by skills shortages in the South African mining industry. *The Southern African Institute of Mining and Metallurgy*. 120(3): 243-250. DOI: 10.17159/2411- 9717/666/2020.

Thejas, H.K. & Hossiney, N. 2022. Alkali-activated bricks made with mining waste iron ore tailings. *Case Studies in Construction Materials*. 16: e00973. DOI: 10.1016/j.cscm.2022. e00973.

Tripathi, A. & Bains, A. 2013. Evolution of corporate social responsibility: A journey from 1700 BC till 21st century. *International Journal of Advanced Research*. 1(8): 788-796.

Twardowska, I., Stefaniak, S., & Szczepańska, J. 2004. High-volume mining waste disposal. In: Twardowska, I. (ed.). *Solid Waste: Assessment, Monitoring and Remediation*. Amsterdam, Netherlands: Elsevier. pp. 865-909.

Ugya, A.Y., Ajibade, F.O., & Ajibade, T.F. 2018. *Water pollution resulting from mining activity: An overview*. Proceedings of the 18th Annual Conference of the School of Engineering and Engineering Technology, Nigeria, 17-19 July. Available from: https://www.researchgate.net/publication/326925600_Water_Pollution_Resulting_From_Mining_Activity_An_Overview. [Accessed 14 November 2022].

United Nations (UN). 1987. Report of the World Commission on Environment and Development: Our common future ("The Brundtland Report") [online]. Development and International Co-Operation: Environment. Annex to A/42/427. Available from:

https://www.are.admin.ch/are/en/home/media/publications/sustainable-development/ brundtland- report.html. [Accessed 10 November 2022].

United Nations (UN). 1999. Secretary-general proposes global compact on human rights, labour, environment, in address to World Economic Forum in Davos [online]. Press release SG/SM/6881. 1 February. Available from: https://press.un.org/en/1999/19990201.sgsm6881.html. [Accessed 10 November 2022].

United Nations (UN). 2000. United Nations Millennium Declaration [online]. Resolution no. A/RES/55/2. Available from: https://documents-dds-ny.un.org/doc/UNDOC/GEN/N00/559/51/PDF/N0055951.pdf?OpenElement. [Accessed 15 November 2022].

United Nations Development Program (UNDP). 2015. What is human development? [online]. Available from: https://hdr.undp.org/content/what-human-development. [Accessed 15 November 2022].

Utembe, W., Faustman, E.M., Matatiele, P., & Gulumian, M. 2015. Hazards identified and the need for health risk assessment in the South African mining industry. *Human and Experimental Toxicology*. 34(12): 1212-1221. DOI: 10.1177/0960327115600370.

Vedanta Zinc International (VZI). Black Mountain Mining (EDMs) BPK.: Social and labour plan (2019-2023) [online]. MR 517 NC & MR 518 NC. Available from: https://vedanta-zincinternational.com/wp-content/uploads/2022/07/BMM-Social-and-Labour-Plan_2019-2023-Eng.pdf. [Accessed 10 November 2022].

Venter, A. & Marais, L. 2006. Gender and housing policy in South Africa: Policy and practice in Bloemfontein. *Journal of Consumer Sciences*. 34: 69-79.

Vivoda, V., Kemp, D., & Owen, J. 2019. Regulating the social aspects of mine closure in three Australian states. *Journal of Energy & Natural Resources Law*. 37(4): 405-424. DOI: 10.1080/02646811.2019.1608030.

Walser, G. 2000. *Economic impact of world mining*. Proceedings of the International Symposium on the Uranium Production Cycle and the Environment, Vienna, 2-6 Oct 2000. pp. 86-88. Available from: https://inis.iaea.org/search/search.aspx?orig_q=RN:33032900. [Accessed 10 November 2022].

Watts, P. & Holme, R. 1999. Corporate social responsibility: Meeting changing expectations. Conches, Geneva: World Business Council for Sustainable Development.

Worlanyo, A.S. & Jiangfeng, L. 2021. Evaluating the environmental and economic impact of mining for post-mined land restoration and land-use: A review. *Journal of Environmental Management*. 279: 111623. DOI: 10.1016/j.jenvman.2020.111623.

Wynveen, B.J. 2011. A thematic analysis of local respondents' perception of Barnett shale energy development. *Journal of Rural Social Sciences*. (26):1.

Yevdokimova, M., Zamlynski, V., Minakova, S., Biriuk, O., & Ilina, O. 2019. Evolution of corporate social responsibility applied to the concept of sustainable development. *Journal of Security and Sustainability Issues*. 8(3): 473-480. DOI: 10.9770/jssi.2019.8.3(14).

Yousuf, I. 2017. The dark places of capitalism: Mineral rights and the entrenchment of capitalism in South Africa. Master's in Law and Political Justice. Pretoria: University of Pretoria.

ADDENDUM A: ETHICAL CLEARANCE

UNIVERSITY OF THE FREE STATE
UNIVERSITEIT VAN DIE VRYSTAAT
YUNIVESITHI YA FREISTATA
UFS UV

GENERAL/HUMAN RESEARCH ETHICS COMMITTEE (GHREC)

29-Mar-2021

Dear Prof Johann Marais

Application Approved

Research Project Title:
Mining and community

Ethical Clearance number:
UFS-HSD2021/0256/293

We are pleased to inform you that your application for ethical clearance has been approved. Your ethical clearance is valid for twelve (12) months from the date of issue. We request that any changes that may take place during the course of your study/research project be submitted to the ethics office to ensure ethical transparency. furthermore, you are requested to submit the final report of your study/research project to the ethics office. Should you require more time to complete this research, please apply for an extension. Thank you for submitting your proposal for ethical clearance; we wish you the best of luck and success with your research.

Outcome: Approved

Yours sincerely

Dr Adri Du Plessis
Chairperson: General/Human Research Ethics Committee

Adri du Plessis
Digitally signed by Adri du Plessis
Date: 2021.03.29 15:18:21 +02'00'

205 Nelson Mandela Drive
Park West
Bloemfontein 9301
South Africa

P.O. Box 339
Bloemfontein 9300
Tel: +27 (0)51 401 9337
duplessisA@ufs.ac.za
www.ufs.ac.za

ADDENDUM B: INFORMED CONSENT

RESEARCH STUDY INFORMATION LEAFLET AND CONSENT FORM

DATE

April-June 2021

TITLE OF THE RESEARCH PROJECT

Mining and community

RESEARCHERS' (STUDENTS') NAMES

Mr Chipa, MJ CMabolokaJonas@gmail.com

Ms Gabeela, TP ThembelihleGabele498@gmail.com

Mr Steenkamp, DC DSteenkamp.dsd@gmail.com

FACULTY AND DEPARTMENT:

Faculty of Economic and Management Sciences

Centre for Development Support

STUDY LEADER'S NAME AND CONTACT DETAILS:

Prof Lochner Marais MaraisJGL@ufs.ac.za 051 401 2978

WHAT IS THE AIM OF THE STUDY?

To understand the social and economic outcomes of mining activities on surrounding communities and evaluate how mining companies and government attempt to address these consequences.

WHO IS DOING THE RESEARCH?

Master of Development Studies students are doing research towards their dissertations to complete their degrees

HAS THE STUDY RECEIVED ETHICAL APPROVAL?

This study has received approval from the Research Ethics Committee of UFS. A copy of the approval letter can be obtained from the researcher.

Approval number: UFS-HSD2021/0256/293

WHY ARE YOU INVITED TO TAKE PART IN THIS RESEARCH PROJECT?

As key role-players (community leaders, officials from NGO, government officials, mining officials and others), you are best place to reflect on how mining affects local communities and settlements.

WHAT IS THE NATURE OF PARTICIPATION IN THIS STUDY?

Your participation will be through an interview of 30-60 minutes, at a time convenient to you.

CAN THE PARTICIPANT WITHDRAW FROM THE STUDY?

Participation is voluntary and that there is no penalty or loss of benefit for non-participation. Being in this study is voluntary and you are under no obligation to consent to participation. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a written consent form. You are free to withdraw at any time and without giving a reason.

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?

You (or your organization) will receive no direct benefit or compensation for participating in the research, however, the information you have is invaluable to understand the impact

WHAT IS THE ANTICIPATED INCONVENIENCE OF TAKING PART IN THIS STUDY?

No inconvenience is anticipated

WILL WHAT I SAY BE KEPT CONFIDENTIAL?

Your name will not be recorded, anywhere and no one will be able to connect you to the answers you give. Your answers will be given a pseudonym and you will be referred to in this way in the data, any publications, or other research reporting methods such as conference proceedings. The information will only be accessible by the research team. Your answers may be reviewed by people responsible for making sure that research is done properly, including members of the Research Ethics Committee. The anonymous data may be used for other purposes, e.g. research report, journal articles, conference presentation, etc.

HOW WILL THE INFORMATION BE STORED AND ULTIMATELY DESTROYED?

Electronic information will be stored on a password protected computer. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable. Your name, or any other information that may identify you will not be kept after conclusion of the project.

HOW WILL THE PARTICIPANT BE INFORMED OF THE FINDINGS / RESULTS OF THE STUDY?

If you would like to be informed of the final research findings, please contact the researchers

Thank you for taking time to read this information sheet and for participating in this study.

CONSENT TO PARTICIPATE IN THIS STUDY

I, _____ (participant name), confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation.

I have read (or had explained to me) and understood the study as explained in the information sheet. I have had sufficient opportunity to ask questions and am prepared to participate in the study. I understand that my participation is voluntary and that I am free to withdraw at any time without penalty. I am aware that the findings of this study will be anonymously processed into a research report, journal publications and/or conference proceedings.

I agree to the recording of the interview.

I have received a signed copy of the informed consent agreement.

Full Name of Participant:

_____

Signature of Participant: _____ Date:

_____

Full Name(s) of Researcher(s):

_____

Signature of Researcher: _____ Date:

_____

ADDENDUM C: QUESTIONNAIRE

Annexure A: Interview schedule – government officials

1. Explain what the positive effects of mining in your area are. (Get the interviewee to list these and discuss each of the issues in the list in detail)
2. Explain what the adverse effects of mining in your area are. (Get the interviewee to list these and discuss each of the issues in the list in detail)
3. Are you aware that the mine has an SLP? Do you know what the content of the SLP? Provide detail if you know. If you do not know, provide reasons why you do not know.
4. Does the mine have a corporate responsibility programme? Do you know what the criteria are for funding CSR funds? What are the intended benefits to whom?
5. Were the SLP and CSR strategy developed with the community? Explain the process.
6. Were the SLP aligned to the IDP? Give examples?
7. What is the difference between SLP funds and CSR funds?
8. How would you explain the relationship between you (the government department or the sphere you are working at) and the mine/s?
9. In your opinion, what contribution does the mine/s make to the area through their CSR or SLP?
10. What would you like to see the mine/s do differently?
11. Do you think the mine/s focus on community development? Why? Why not? If yes, what do they do and what are the successes?
12. What will happen if the mine would close down? Has a plan been shared with the community?
13. Is there conflict between the mine and the community? What are the elements of these conflicts?

ADDENDUM D: EDITING DECLARATION

Proofreading • Proeflees
Text Editing • Teksredigering
Text Layout • Teksuitleg
Translation • Vertaling

HANTA HENNING
0824482726
HENNINGJG@UFS.AC.ZA

DECLARATION: 17 NOVEMBER 2022

Hereby I, Johanna Gertruida (Hanta) Henning, declare that I completed editing of the research dissertation titled *Corporate Social Responsibility and its Contribution to Sustainable Development in Khâi-Ma Local Municipality in the Northern Cape, South Africa* by D.C. Steenkamp, submitted in fulfilment of the requirements in respect of the Master's Degree of Development Studies (EDMS7900)in the Centre for Development Support in the Faculty of Economic and Management Science at the University of the Free State, Bloemfontein.

The editor was contracted to complete proofreading and language editing, substantive editing, as well as reference editing. Based on the nature of the services performed, the editor cannot be held liable for any of the following:

i. The accuracy of the material contained in the thesis;
ii. The accuracy of material as gathered from sources contained in the thesis;
iii. Any plagiarism that may be present in the thesis;
iv. Any factual errors that may occur in the thesis; and/or
v. Any changes made by the candidate after editing was completed.

A full report of the edited document can be provided upon request.

Hanta Henning

henningjg@ufs.ac.za

ADDENDUM E: TURNITIN SIMILARITY REPORT

EMDS Mini-dissertation

ORIGINALITY REPORT

8%	7%	3%	3%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	scholar.ufs.ac.za Internet Source	1%
2	uir.unisa.ac.za Internet Source	1%
3	www.enviroleg.co.za Internet Source	<1%
4	repository.nwu.ac.za Internet Source	<1%
5	scholar.ufs.ac.za:8080 Internet Source	<1%
6	ujcontent.uj.ac.za Internet Source	<1%
7	open.uct.ac.za Internet Source	<1%
8	conferences.iaia.org Internet Source	<1%
9	Submitted to University of Witwatersrand Student Paper	<1%
10	jcsr.springeropen.com Internet Source	<1%
11	hdl.handle.net Internet Source	<1%
12	mafiadoc.com Internet Source	<1%
13	eprints.qut.edu.au Internet Source	<1%
14	www.africaportal.org Internet Source	<1%
15	wiredspace.wits.ac.za Internet Source	<1%
16	clok.uclan.ac.uk Internet Source	<1%
17	vital.seals.ac.za:8080 Internet Source	<1%
18	www.cliffedekkerhofmeyr.com Internet Source	<1%
19	www.pulp.up.ac.za Internet Source	<1%
20	svai.africa Internet Source	<1%
21	Submitted to University of Bristol Student Paper	<1%
22	www.vedanta-zincinternational.com Internet Source	<1%
23	Submitted to Murdoch University Student Paper	<1%
24	docshare.tips Internet Source	<1%
25	sahris.sahra.org.za Internet Source	<1%
26	www.scielo.org.za Internet Source	<1%
27	Submitted to London School of Commerce Student Paper	<1%
28	gbata.org Internet Source	<1%
29	Gavin Hilson. "An overview of land use conflicts in mining communities", Land Use Policy, 2002 Publication	<1%
30	Riley Mulhern, Margaret Mulhern, Tom Perreault. "Contesting the social license to operate: Competing visions and community exclusion on the Bolivian Altiplano", The Extractive Industries and Society, 2020 Publication	<1%
31	Yegnanew A. Shiferaw. "Analysis of the spatial distribution of under-5 mortality rate in local areas of South Africa", Statistical Journal of the IAOS, 2020 Publication	<1%
32	digital.library.adelaide.edu.au Internet Source	<1%
33	ulspace.ul.ac.za Internet Source	<1%
34	univendspace.univen.ac.za Internet Source	<1%
35	www.mondaq.com Internet Source	<1%
36	www.saflii.org Internet Source	<1%
37	zombiedoc.com Internet Source	<1%
38	Glynn Cochrane. "Anthropology in the Mining Industry", Springer Science and Business Media LLC, 2017 Publication	<1%
39	Janine Ubink, Joanna Pickering. "Shaping legal and institutional pluralism: land rights, access to justice and citizenship in South Africa", South African Journal on Human Rights, 2021 Publication	<1%

40	Submitted to University of Newcastle upon Tyne Student Paper	<1 %
41	Submitted to University of South Africa Student Paper	<1 %
42	Vidette Bester, Liela Groenewald. "Corporate social responsibility and artisanal mining: Towards a fresh South African perspective", Resources Policy, 2021 Publication	<1 %
43	researchspace.ukzn.ac.za Internet Source	<1 %
44	www.dingley.co.za Internet Source	<1 %
45	www.researchgate.net Internet Source	<1 %
46	Submitted to Intercollege Student Paper	<1 %
47	Ralph Hamann. "Mining companies' role in sustainable development: The 'why' and 'how' of corporate social responsibility from a business perspective", Development Southern Africa, 2003 Publication	<1 %
48	ir.uz.ac.zw:8080 Internet Source	<1 %
49	www.assore.com Internet Source	<1 %
50	Submitted to Kenyatta University Student Paper	<1 %
51	Sigismond A. Wilson. "Measuring the effectiveness of corporate social responsibility initiatives in diamond mining areas of Sierra Leone", Resources Policy, 2022 Publication	<1 %
52	Submitted to Taylor's Education Group Student Paper	<1 %
53	liu.diva-portal.org Internet Source	<1 %
54	"Decent Work and Economic Growth", Springer Science and Business Media LLC, 2021 Publication	<1 %
55	Submitted to University of Stirling Student Paper	<1 %
56	pure.manchester.ac.uk Internet Source	<1 %
57	www.gpwonline.co.za Internet Source	<1 %
58	Submitted to CSU, San Jose State University Student Paper	<1 %
59	Submitted to University of the Free State Student Paper	<1 %
60	ir.library.oregonstate.edu Internet Source	<1 %
61	link.springer.com Internet Source	<1 %
62	pt.scribd.com Internet Source	<1 %
63	upetd.up.ac.za Internet Source	<1 %
64	repository.uwtsd.ac.uk Internet Source	<1 %
65	www.tandfonline.com Internet Source	<1 %
66	www.um.edu.mt Internet Source	<1 %
67	Adator Stephanie Worlanyo, Li Jiangfeng. "Evaluating the environmental and economic impact of mining for post-mined land restoration and land-use: A review", Journal of Environmental Management, 2021 Publication	<1 %
68	Submitted to Higher Education Commission Pakistan Student Paper	<1 %
69	Martin Brueckner, Angela Durey, Robyn Mayes, Christof Pforr. "The mining boom and Western Australia's changing landscape: Towards sustainability or business as usual?", Rural Society, 2014 Publication	<1 %
70	Megan J. Cole, Jennifer L. Broadhurst. "Measuring the sustainable development goals (SDGs) in mining host communities: A South African case study", The Extractive Industries and Society, 2020 Publication	<1 %
71	altcoinsrigs.com Internet Source	<1 %
72	cirdi.ca Internet Source	<1 %
73	cnpp.iaea.org Internet Source	<1 %
74	digitalcommons.law.ggu.edu Internet Source	<1 %
75	dokumen.pub Internet Source	<1 %
76	dspace.nwu.ac.za Internet Source	<1 %
77	globaledge.msu.edu Internet Source	<1 %

78	perjournal.co.za Internet Source	<1 %
79	publications.lib.chalmers.se Internet Source	<1 %
80	repository.uinsu.ac.id Internet Source	<1 %
81	www-pub.iaea.org Internet Source	<1 %
82	www.hwb.co.za Internet Source	<1 %
83	www.journalijar.com Internet Source	<1 %
84	www.lccge.bbk.ac.uk Internet Source	<1 %
85	www.scribd.com Internet Source	<1 %
86	"Corporate Social Responsibility and Canada's Role in Africa's Extractive Sectors", University of Toronto Press Inc. (UTPress), 2019 Publication	<1 %
87	Submitted to Curtin University of Technology Student Paper	<1 %
88	Lochner Marais, John R Owen, Tina Kotzè, Petrus Nel, Jan Cloete, Molefi Lenka.	<1 %
	"Determinants of place attachment among mineworkers: Evidence from South Africa", The Extractive Industries and Society, 2021 Publication	
89	Phia van der Watt, Lochner Marais. "Implementing social and labour plans in South Africa: Reflections on collaborative planning in the mining industry", Resources Policy, 2021 Publication	<1 %
90	Phia van der Watt, Lochner Marais. "Normalising mining company towns in Emalahleni, South Africa", The Extractive Industries and Society, 2019 Publication	<1 %
91	Sonwabile Mnwana, Andrew Bowman. "Land, conflict and radical distributive claims in South Africa's rural mining frontier", The Extractive Industries and Society, 2022 Publication	<1 %
92	Sonwabile Mnwana. "Mining and 'community' struggles on the platinum belt: A case of Sefikile village in the North West Province, South Africa", The Extractive Industries and Society, 2015 Publication	<1 %
93	Xose Picatoste, Ernesto Rodriguez-Crespo. "Chapter 61-1 Decreasing Youth	<1 %
	Unemployment as a Way to Achieve Sustainable Development", Springer Science and Business Media LLC, 2020 Publication	
94	apps.who.int Internet Source	<1 %
95	dspace.lib.cranfield.ac.uk Internet Source	<1 %
96	emrbi.org Internet Source	<1 %
97	eprints.hud.ac.uk Internet Source	<1 %
98	eprints.utar.edu.my Internet Source	<1 %
99	erl.ucc.edu.gh:8080 Internet Source	<1 %
100	essay.utwente.nl Internet Source	<1 %
101	hdr.undp.org Internet Source	<1 %
102	ir.canterbury.ac.nz Internet Source	<1 %
103	ir.msu.ac.zw:8080 Internet Source	<1 %
104	library2.smu.ca Internet Source	<1 %
105	mistra.org.za Internet Source	<1 %
106	oer.calebuniversity.edu.ng Internet Source	<1 %
107	ojbe.steconomiceuoradea.ro Internet Source	<1 %
108	scholar.sun.ac.za Internet Source	<1 %
109	studenttheses.uu.nl Internet Source	<1 %
110	web.madritel.es Internet Source	<1 %
111	www.cbd.int Internet Source	<1 %
112	www.drdgold.com Internet Source	<1 %
113	www.eskom.co.za Internet Source	<1 %
114	www.hrw.org Internet Source	<1 %
115	www.hst.org.za Internet Source	<1 %

116	www.mdpi.com Internet Source	<1 %
117	www.polity.org.za Internet Source	<1 %
118	www.researchprotocols.org Internet Source	<1 %
119	www.rsmompatidm.gov.za Internet Source	<1 %
120	www.sahrc.org.za Internet Source	<1 %
121	www.visiteasterncape.co.za Internet Source	<1 %
122	www.westerncape.gov.za Internet Source	<1 %
123	www.yumpu.com Internet Source	<1 %
124	Lochner Marais, Anri de Lange. "Anticipating and planning for mine closure in South Africa", Futures, 2021 Publication	<1 %
125	Peter Leon. "Whither the South African Mining Industry?", Journal of Energy & Natural Resources Law, 2015 Publication	<1 %
126	Suzanne Dansereau. "Win-win or new imperialism? Public-private partnerships in Africa mining", Review of African Political Economy, 2005 Publication	<1 %
127	Áron Szennay, Cecília Szigeti, Norbert Kovács, Dániel Róbert Szabó. "Through the Blurry Looking Glass—SDGs in the GRI Reports", Resources, 2019 Publication	<1 %
128	"Climate Change Litigation: Global Perspectives", Brill, 2021 Publication	<1 %
129	Bernard Kengni, Hanri Mostert. "Regulation and remediation of the impacts of mine wastes on land and water in South Africa", Journal of Energy & Natural Resources Law, 2021 Publication	<1 %
130	Roman Grynberg, Fwasa K. Singogo. "African Gold", Springer Science and Business Media LLC, 2021 Publication	<1 %
131	Submitted to University College London Student Paper	<1 %
132	Submitted to University of Liverpool Student Paper	<1 %
133	Submitted to Richfield Graduate Institute of Technology Student Paper	<1 %
134	Submitted to University of Hull Student Paper	<1 %

Exclude quotes	On	Exclude matches	< 5 words
Exclude bibliography	On		