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Experiences of Thabazimbi Resident Mine Employees Regarding the Perceived Effects of Mining Activities within their Community. The case of Amandelbult Mine in Limpopo, South Africa

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UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Experiences of Thabazimbi Resident Mine Employees Regarding the Perceived Effects of Mining Activities within their Community. The case of Amandelbult Mine in Limpopo, South Africa

A research report presented

to

The Department of Social Work

School of Human and Community Development

Faculty of Humanities

University of the Witwatersrand

In partial fulfillment of the requirements

For

the degree Master of Arts in Social Work

(Occupational Social Work)

By

MASHIATSHITI JOHANNA DITSHEGO

September 2023

DECLARATION

I hereby declare that this research report is my own original and unaided work and that I have correctly referenced all the sources utilized. This research report has not been submitted previously for any degree or examination.

MASHIATSHITI JOHANNA DITSHEGO Date

JMD 16.09.2023

_____ _____

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ABSTRACT

South Africa's mining industry has historically been at the heart of the nation's economy also taking into consideration the country's high-ranking spot as one of the leading naturally rich resource countries within the world. In reality, the mining industry has played a key part in contributing to the country's economic growth, and it remains South Africa's most watched financial segment. However, the mining industry has experienced a major turmoil, since it also brings along socially unintended circumstances within the communities that they operate in, for example an increase of informal settlement, spontaneous mine closures, and the perpetuation of fights inside traditional houses. As much as there are several studies done within the South African mining sector, studies looking into the experiences and perceived effects of mining activities in communities where these mining companies operate are very limited within the South African literature in Occupational Social Work. Therefore, this qualitative study sought to close this gap, as it aims to explore the experiences of Thabazimbi Resident Mine Employees Regarding the Perceived Effects of Mining Activities within their Community. The study was qualitative in nature, with a case study used as the research design. The target population was mine employees residing in Thabazimbi. Purposive sampling was used to recruit (10) mine employees and (2) key informants in the community to be participants for the study, with a semi-structured interview guide employed as a research instrument. Data for the study was collected using face-to-face individual interviews. Thematic analysis was used to analyse the findings. Findings indicate that mining activities had both positive and negative experiences for the resident employees. Thabazimbi resident employees suggested some recommendations that can be implemented to mitigate the negative effects that they raised in the findings. Recommendations are made in relation future research.

Key words: Experiences, Mining, Mining Activities, Social Labour Plans, SMMEs Amandelbult Mine, Limpopo Province - South Africa

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CHAPTER ONE

INTRODUCTION TO THE STUDY

1.1 Introduction

Within the South African context, the mining sector has been perceived as an economic development hub for the country, due to its ability to raise revenue and to create employment. Even though factories and other companies may be large employers, mining remained the biggest operation in South Africa as one mine can employ thousands of people. Leonard (2018) argues that during apartheid, the mining industry worked without restrictions, and as a result the biology and the well-being of nearby communities was disregarded which is still happening to this date. Apartheid gave mining businesses licenses that resulted in enormous environmental obliteration, which included degradation of the environment and affected the well-being of workers and encompassing communities. This was the case as the government never took into consideration the damage caused to communities affected by mining as a result of overlooking the process of compliance screening, lack of authorization and lack of coordination.

Stoddard (2018, as cited by Rüttinger, n.d.) claims that because of mining, communities in the area have suffered from the dust caused by rock blasting, the contamination of water and on top of that, environmental consequences just to mention a few. Mining communities are still faced with forced relocation as part of mining site expansions which many residents oppose (News24 2015 as cited by Rüttinger, n.d.). The well-being and state of welfare of some of the mining communities in South Africa are still unacceptable. The level of unemployment and poverty is no different from communities without mines. Thabazimbi is one of such communities situated just on the outskirts of Amandelbult mine in Limpopo province of South Africa.

Amandelbult (AMB) Complex is a fully developed and established site on the North-Western limb of the Bushveld Complex in Limpopo Province of South Africa. The Complex's location is the Thabazimbi Local Municipality (TLM) within the Waterberg District Municipality approximately 40km south of Thabazimbi, 15km north of Northam and 100km north of Rustenburg. The bordering Moses Kotane

Local Municipality (south of the Complex), within the Northwest Province's Bojanala District Municipality is a labour sending municipality to the AMB Complex. It is also impacted as it hosts the Baphalane Ba Mantserre community who forms part of the Baphalane Ba Ramokoka Traditional Authority (BBR TA).

In addition to this link with AMB Complex, some MKLM communities are vulnerable to road safety on the R510. The towns of Thabazimbi and Northam lie north and south of Amandelbult Complex respectively. The R510, a major road which extends from the N4 in the south to the Botswana border near Lephalale in the north connects these two towns. A railway line from Lephalale passes through a mining area which also connects to the Tussenin siding (Social Management Plan, 2021-2025).

Amandelbult Complex is a Platinum Group Metals (PGM) mining company with chromite by-product and consists of two mines that is Tumela and Dishaba and the Amandelbult Concentrator. The mining and surface rights are held by Rustenburg Platinum mines Ltd (RPM) which is a wholly owned subsidiary of the Anglo-American Platinum Corporation Limited. Each mine has its own management team operating and reporting independently. A joint operations structure manages common support functions including Social Performance.

Tumela mine operates under a mining right covering 110 square kilometres (km2). Its infrastructure includes a vertical shaft and some raise-bore and decline shaft systems. Both the Merensky and UG2 horizons are mined. The current life-of-mine (LoM) extends to 2034 but the implementation of future projects could extend LoM significantly. The Dishaba mining right is 31 km2 in size. Merensky and UG2 are mined through infrastructure which comprises of a vertical shaft, one raise-bore shaft and four decline shafts. Dishaba's LoM extends to approximately 2058 (Social Management Plan, 2021-2025). Amandelbult Complex employs approximately 13 675 permanent staff and contractor employees on-site. South African based employees are sourced from some 140 local municipalities, with the Moses Kotane and Thabazimbi municipalities contributing around 11.1% and 35.5% respectively. According to its Social and Labour plan, the provincial distribution of the workforce is: 35% North West, 32% Eastern Cape, 11% SADC and 10% Limpopo. These numbers are contested (Social Management Plan, 2021-2025).

1.2 Statement of the problem and rationale for the study

A sector which is peppered with severe challenges which are related to housing, water, land, as well as environmental challenges is the mining sector. According to South African Human Rights Commission's (SAHRC) 2018 report, as cited in Rall, 2018) a scorching claim were made on the harm which mining is causing which subsequently poses a threat to human rights. Furthermore, the Commission's report revealed that the government is aware of the harm caused to mining affected communities, and that this is caused by respective government departments' failure to screen for compliance, lack of authorization, and lack of coordination. The impacts of poverty and social ills within mining communities remains questionable to this date. Very little is being done to advance the social well-being and to add to the welfare of the communities surrounding the mine operations.

Although the mining charter, section 100(2) stipulates the following objectives: " (a) to encourage fair access to the nation's mineral resources for everyone in South Africa; (b) to utilize and expand the current skills base for the empowerment of Historically Disadvantaged South Africans (HDSA) and to serve the community; and (c) to foster employment and improve the social and welfare of mining communities and labour sending areas of the Mineral and Petroleum Resources Development Act, 2002 ("MPRDA")", there has been little improvement in restricted communities. However, most of the mining communities are still being confronted by the same challenges experienced sometime before mining started in their communities (Vegter, 2019) and in some cases these situations have worsened to include loss of land for their subsistence together with the manifestation of diseases.

Social challenges faced by mining communities comprise of high unemployment rate, poor health, abject poverty, social ills with the likes prostitution which arise because of mining, mushrooming of informal settlements and the increased influx of migrants within communities (Monaledi, 2018). Mining activities have resulted in the surrounding communities suffering from the effects of rock blasting dust, water contamination and other environmental consequences. In relation to that Stoddard (2018, as cited by Rüttinger, n.d.) noted that, Anglo American Platinum estimated that unemployment in the platinum belt region is close to 80%, adding to the people's dissatisfaction hence this challenge remains a thorny issue within the mining

communities. Related studies in literature such as (Mostert et al., 2016; Ololade and Annergan, 2013; Mnwana and Capps, 2015 as cited in Bongwe et al., n.d and Rall and Pejan, 2019) highlights that most of these challenges around mining communities which began because of mining operations are still present within these communities.

In support to the above statement, residents surrounding the Mogalakwena mine staged protests in 2015 demanding more jobs, increased mining rewards and more social and infrastructure development within the area including roads and improved water supply (News24 2015 as cited by Rüttinger, n.d.). Another major source of contention has been the forced relocation of communities as part of mining site expansions which residents oppose. The displacement of the residents of Ga-Pila and Motlhotlo in the Mogalakwena mine remain a cause of conflict (News24, 2015 as cited by Rüttinger, n.d.). Strikes and protests resulted from inadequate management of conflict. Mining-affected communities across South Africa have alluded that mines should respect and value the customary rights of the individuals whose livelihoods was centred on the land for generations even if they lack a formal or written title deed, (South African Human Rights Commission, 2018).

To add on, even though there seem to be studies around mining and mining activities, there seemed to be a gap in studies that looked at the perceived experiences of Thabazimbi resident employees on the effects of mining activities in their community especially within the lens of Occupational Social Work. Therefore, this study was of significance as it attempts to close this gap in literature within this discipline of Occupational Social Work. In addition, it is anticipated that the findings of this study may initiate debates within the area of occupational social work pertaining to the perceived experiences of Thabazimbi resident employees on the effects of mining activities in their community. Finally, it is anticipated that findings from this study will add to occupational social work knowledge regarding the perceived experiences of resident employees on the effects of mining activities in their communities. In addition, this study may result in the strengthening of programmatic interventions and development of guidelines to deal with the effects of mining activities within mining communities. Recommendations are made in relation to future research and the development of guidelines for programmatic interventions.

1.3 Definition of Key Concepts of the Study

1.3.1 Thabazimbi Community

Thabazimbi IDP (2010/11), noted that, Thabazimbi Municipality is located in the South-western part of the Limpopo Province and has Botswana as its international neighbour and a mere two (2) hour drive from Tshwane. Thabazimbi is known as "mountain of iron" which is the Tswana name for this peaceful productive town, referring to the highly lucrative iron ore reef first discovered in the Municipality in 1919. Moreover, Cairncross et al., (2016) mentions that Thabazimbi is located on the South-western part of the Limpopo Province and has Botswana as its international neighbours. Thabazimbi means the "mountain of iron" which is also the Tswana name for this peaceful productive town and it refers to the highly profitable iron ore reef first sighted within the Municipality around 1919. For this study, Thabazimbi local municipality's definition will be adopted.

1.3.2 Experiences

Hohr (2012) notes that, experience is claimed in terms of feeling, "enliving" and conceiving. However, Biaett and Richards (2020) argue that experience is an inherent process that happens within the person who obtains the experience and Rotha and Jornet (2014 p.106) claim that experience is not something that is held by or belongs to any individual but it rather means "there are transactions in and across space and time within irreducible person-in-setting units; and it is perfused with affect that is not only the result of mental constructions." Biaett and Richards' definition will be adopted for this study.

1.3.3 Community

Cawood (2004) illustrates what the meaning of a community by clearly stating that it is a group of people which is socially coherent who have rights or interests in an area which is specific. This is usually land which the members have and exercise collectively and this is in terms of an accord, customs or by laws. The Local Government Municipal Systems Act (2000) states that "community" means a body of persons which comprises of (a) the inhabitants of the municipality; (b) civic organisations and non-governmental organisations, the private sector, labour

organisations or bodies which are immersed in local affair within municipality. Jewkes and Murcott (1996) refers to a community as "a group of people residing in a specific geographical area who have common values, cultural patterns and social problems together with an awareness of belonging to a group that causes them to interact more intensely with one another than they would with outsiders in a similar context". For this study, Jewkes and Murcott' s (1996) definition will be adopted.

1.3.4 Social Labour Plans (SLP)

Mineral and Petroleum Resource Development Act of 2002 (MPRDA) 'hereafter referred to as 'The Act' refers to Social and Labour Plan (SLP) forms an integral part of any mining right granted in terms of the Mineral and Petroleum Resources Development Act (MPRDA) and mining right holders are required to submit a new SLP every five (5) years with further commitments for all elements until a closure certificate has been issued in terms of section 43 of the MPRDA. This definition will be adopted for this study.

1.3.5 Small, Medium and Micro enterprises (SMMEs)

The DTI (2008), denotes that, SMMEs encompasses a very broad range of firms, some of which includes formally registered, informal and non-VAT registered organisations. Moreover, (Small Enterprise Development Agency (SEDA) 2016) illustrates that, SMMEs includes formally registered and informal businesses. These businesses range from medium-sized enterprises, such as established family businesses with a workforce of over 100 people to informal microenterprises. Small Enterprise Development Agency (SEDA) 2016 definition was adopted for this study.

1.3.6 Mining activities

Haddaway et al., (2019) contend that mining activities include searching, surveying, building, operation, caring, enlarging, abandoning, closing and repurposing of a mine which can have a significant impact on the social and environmental systems in a wide range of positive and negative as well as direct and indirect ways. Again, the Work Health and Safety (Mines) Act 2013 No 54 refers to " (i) mining undertakings at the mine as the processing of the unearthed materials are carried out in connection with those mining activities at a site or in the vicinity of a site at which these mining activities are carried out." For this study, the definition by Haddaway, Cooke,

Lesser, Macura, Nilsson, Taylor, and Raito will be considered for this study.

1.4 Scope of the Study

The geological location of the study was limited to Amandelbult Mine in Limpopo province of South Africa between the towns of Thabazimbi and Northam and within the North-western Limb of the Bushveld Complex. The mine runs under a mining right occupying a total area of 141km². Amandelbult complex mine is one of the Anglo-American Platinum operations and it produces platinum group of metals (PGM). The mine is situated between two municipalities, that is Moses Kotane local municipality and Thabazimbi local municipality. Amandelbult complex also exhibits itself as a much-preferred location for the study as it has the needed sample for the study and also operates within the host community of Thabazimbi.

1.5 Overview of the Research Design and Methodology

The study employed a qualitative research design with the use of a case study and was exploratory in nature. The criteria used to come up with the research participants were Amandelbult mine employees working for Anglo-American Platinum at Thabazimbi, in Limpopo province of South Africa. Purposive sampling was used to recruit 10 participants from Amandelbult and 2 key informants from the community that is a school principal and church pastor were included in data gathering project for the study. These participants were drawn from the complex on condition that they are permanent employees and have more than 12 months at work. Participants were drawn from different departments including the Supply Chain Department, Human Resource Department, Corporate Affairs Department, Protection Services Department, Finance Department, Transport Department and general workers. The research tool used was a semi-structured interview schedule and this was administered through face-to-face individual interviews. Responses were analyzed using thematic data analysis.

1.6 Limitations and delimitation of the study

As part the limitations to this study during data collection were the adherence to the Covid-19 rules at the study setting. However, the researcher had to use an open place to allow air circulation in a bid to comply with COVID-19 regulations.

- With the shift-working participant, it was difficult to get them during the normal working hours of the day and the researcher was compelled to collect data even over the weekend and after hours considering the work schedule of participants and to accommodate these participants.

- Given the sensitivity of the topic to participants, some of them provided socially desirable answers, however, participants were assured that there is no right or wrong answer and that the information that they gave was treated with strictest confidentiality and anonymity.

- All the participants who took part in the study did not agree to be audio-recorded during the interviews which was a limitation as this might have led to loss of important and critical data. To curb this, the researcher endeavoured to take as much notes as possible and to capture the exact words of the participants.

1.7 Organisation of the report

Chapter one of the report provided a summary and introduction of the study. Chapter two of the research report focuses on the review of literature and explores how mining activities impact the communities which they operate in and investigates the legislations that guides mining within host communities. The research design and methodology are explored in chapter three of the report while chapter four brings to light the presentation, analysis and discussion of data collected during the study. Chapter five presents the main findings, conclusions and recommendations of the study.

CHAPTER TWO
REVIEW OF THE LITERATURE AND THEORETICAL FRAMEWORK

2.1 Historical Overview of Mining globally and in South Africa

Mines, like any other business can prosper if they can match consumer demands for cost and quality. They can in a sense attract representatives if they adequately compensate their employees and build their encompassing communities. Mining has the potential to be a foundational industry that supports many people, enterprises, and businesses, and even entire towns and cities. It has a far greater impact than irrelevant industry data can show. It is the single largest contributor to financial yield in the whole country (Vegter, 2019). This highlights that besides the welfare of their own employees, mines have a corporate social responsibility (CSR) shown by their determination to work using methods that protect and improve the environment and society they operate in.

Mining has a long history that spans ages, and this is supported by Alexandra and Berger (2020) who illustrate that emergence of mines began with the new stone age era which occurred at around 40000 BC as the first trails of underground mining in Africa was detected. Just like the civilisation of humans, mining has its origins in Africa. The Lion Cavern, which is in Swaziland, is the oldest mine in archaeological record and has radiocarbon dating which puts it at 43,000 years of age. Gold also came to be at the centre of human interest from as early as before 6000 BC, at a time of the ancient Nubian and Egyptian empires. Copper, iron and bronze were also pivotal for the making of weapons as well as maintaining power structures and empires from the copper age going onwards (Alexandra and Berger, 2020) and in industrialised states the role of minerals is now to help grow the economy through funds from trading.

The role of mining and minerals in contemporary states is clearly explained by Alexandra and Berger (2020) who states that mining from its origins was linked with trade and trading networks. It grew to become a global activity which is crucial to the creation of wealth, maintaining of power structures as well as human progression. It is not accidental that whole ages are linked with minerals from the bronze to iron to nuclear ages. Gold, bronze, copper, silver, lead, coal, zinc, iron, potash, salt, oil,

uranium and tin are among the most vital of the minerals that were mined from the earth. Mining is presented as a foundational critical activity that complements the history of humans all through the ages.

Another very important mineral to the economies of industrialised states is the diamond. In the Southern African region, the discovery and mining of diamonds according to McKechnie (2018) started 150 years ago thus establishing the foundation of development of the central and modern economies in the southern region of Africa. Since the finding of the secondary diamond placer and primary bearing kimberlite deposits in the 1860s and 70s in the then Cape colony of the Orange Free State, Southern Africa has persisted as the pre-renowned diamond-manufacturing region in the world**.** McKechnie (2018) further provides a historical account on the development of mines and mining activity in South Africa. The first mine established in South Africa began its undertakings in 1852 and it was a copper project which became the keystone of the town of Springbokfontein in the Northern Cape province (McKechnie, 2018) thus revealing the significant function of mines and mining activity in the development of several settlements and towns. McKechnie (2018) adds that in 1864 commercial coal mining began in South Africa with the creation of a mine in Eastern Cape and Shigley (2017) argues that diamonds were discovered in early 1867 in South Africa on the land which belonged to a poor Boer farmer Daniel Jacobs which was not very far from a small and isolated settlement of Hopetown on the Orange River in the Cape of Good Hope Colony.

Diamonds were discovered in large quantities on the Bultfontein farm in 1870 which is located 20 miles southeast of the river diggings which came to be known as “dry diggings.” At future stage the diamonds were said to be coming from the upper eroded and disintegrated areas of a volcanic pipe. These discoveries triggered a diamond rush with many of people from all walks of life and from beyond the South African borders to claim pieces of land to search for diamonds in the Cape Colony and in a period of 20 years several rich deposits of diamond were discovered which became the famed diamond mines of South Africa (Shigley, 2017). The events of latter half 19th century show that South Africa as a nation has many different minerals and show that minerals are a pull migration factor because they resulted in a lot of human movement.

In addition to the coal and diamonds, other minerals like platinum were also sighted within South Africa. Hans Merensky was the first person to discover platinum in South Africa which resulted in a platinum boom in the country specifically in the province of Limpopo (Wagner, 1973). Hans Merensky the well-known geologist was among the first Europeans to explore at Phalaborwa in an area close to the Kruger National Park boarders. Merensky studied and mapped the zone and went on to obtain a permit to survey the area for mineral deposits. Old copper operations on the Loolekop hill drew Europeans to survey the region which subsequently led to the establishment of mines in the 1930s and 1940s to extract apatite and vermiculite. The Phalaborwa Mining Company was established in 1956 to develop the significant low-grade copper resource held by the carbonatite and foskorite. By 1964 large-scale open-pit copper began in the country and many different minerals and metals such as palladium, silver, uranium, nickel, baddeleyite gold, and magnetite have subsequently been extracted in the country (Southwood and Cairncross, 2017). To regulate mining and mining activities in South Africa several laws and policies were introduced, and the next section will discuss these.

2.2 Legislative and Policy Framework Guiding the Mining Industry globally and in South Africa

The mining sector is one of the regulated sectors with the aim of guiding its operations and protecting the environment. Travis, Hudson, Fox and Plumlee (1999) highlighted below sections as some of significant federal laws that authorize and direct environmental regulation of mining in the United States. These statutes set forth how the Environmental Protection Agency (EPA) of United States and other federal agencies are to control mining operations. There may be laws that apply to mining operations like the Safe Drinking Water Act (SDWA) of 1974.

The National Environmental Policy Act (NEPA) of 1969 moulds procedures for reviewing and revealing the environmental effects of federal choices and activities such as approving the development of new mines on federal lands. Concerned parties employ the NEPA-established procedures to make sure that environmental factors are considered when making federal decisions. Mining operations that demand federal permission are covered by NEPA.

The Clean Air Act of 1970 (CAA) of United States (US)- this law allows for the creation of laws to combat airborne pollution that may be risky to natural resources or human health. The regulations that are created under the (CAA) of the United States (US) are some of the efforts done to reduce urban air pollution, such as emission restrictions on automobiles. The Resource Conservation and Recovery Act (RCRA) of 1976, which aims to manage hazardous wastes from generation to disposal while preventing their release into the environment. The Clean Water Act of 1977 (CWA), which permits laws covering the discharge of harmful and harmless impurities into the country's surface waters. The CWA aims to protect all surface waters and in the long run, to eliminate all hazardous discharges.

Unlike the federals laws stated above, New South Wales (NSW) Resources Regulator (2019), the Department of Planning and Environment's Resources and Geoscience Division and the New South Wales Resources Regulator (NSW-RR) are part of the New South Wales structure that supports the state's mineral industry. In order to defend and sustain the industry, its workers, the community and the state, the New South Wales Resources Regulator is responsible for the reception and evaluation of grievances, reports of alleged Mining Act violations and safety incident notifications; delivering information and advice about safety and other regulatory commitments; checking the integrity and compliance of applicants for grant renewal and transfer title applications and conducting inspections.

In South Africa mining legislation is primarily controlled by the Mineral and Petroleum Resource Development Act of 2002 (MPRDA) 'hereafter referred to as 'The Act'. The Act is governed by the following objectives:

- “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 of the Republic of South Africa, 1996 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 arc operating."

The act clearly stipulated and acknowledged that South Africa's mineral and petroleum assets belong to the nation and that the state is the guardian of these minerals. It also upholds the state's commitment to protect the environment for the benefit of both the present and future generations to safeguard ecologically sustainable development of mineral and petroleum resources and to encourage social and economic development. The act recognises further the requirement to uphold rural and local development and the need to socially uplift communities which are affected by mining (MPRDA, 2002).

It reiterates the state's obligation to reorganise and to bring about just access to South Africa's mineral and petroleum reserves. According to this act the state should be devoted to eliminating all forms of inequitable systems in the mineral and petroleum industries. Bearing in mind the state's responsibility in the Constitution to take jurisdictive procedures to compensate for past racial discrimination and indorsing the state's assurance to guarantee the security of tenure in respect of mining prospects and operations.

The state is currently implementing this act as most mining companies has Social Labour Plans (SLPs) and Corporate Social Investment (CSIs) within the communities they are operating. Nonetheless, partial monitoring and evaluation is done, allowing corruption to thrive, hence there is still abject poverty, social ills, and high unemployment rate within most host communities.

The act must be considered with the National Environmental Development regulations promulgated as an Act in 1998 (NEMA) which is the fundamental law that controls the environmental-related components of mining (Cawood, 2004). Therefore, law and policies on mining in South Africa are also concerned with the environment in which mining operations take place.

The White Paper on Minerals and Mining Policy for South Africa (1998) states that the mining sector of South Africa is backed by a vast and varied resource base and has been the pillar of the South African economy since its inception. It is believed that the enactment of the Mine Health and Safety Act of 1996 is going to have broad bearings on the trade in the areas of safety and health as well as human resource development. The changes of labour legislation, the establishment of employment equity legislation and the reorganisation of the environmental regulatory system created a dynamic context for this policy review. In November 1995 a discussion document on Minerals and Mining Policy for South Africa was published and extensive written comments were received. The laws and policies of mining also state that mining activities must benefit the communities of operations and the next heading focuses on the benefits and challenges of mining activities within communities.

2.3 Benefits and Challenges brought by Mining Activities within Communities

Since mining is the pillar of the economy of South African there is a department that was specifically created to oversee the sector. Thus, within the South African context the Department of Mineral Resources (DMR) regulates mining activities and holds mining companies accountable for their operations in different communities. This is controlled by the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) (MPRDA) whose goal is to enhance South Africa's mining and production industries along with other things. The Act calls for the tendering of a

Social and Labour Plan as a necessary condition for the awarding of mining or production rights to guarantee successful transformation in this regard.

Those applying for mining and production rights need to create and apply detailed personnel development programs, mine community skills development plan, bursary, and internship strategies, accommodation and living conditions policy, employment equity policies and procedures to protect jobs and handle scaling back and shutdowns following the social and labour plan (MPRDA, 2002). These requirements prove that mining activities are intended to benefit the communities and this study investigates that.

According to Ladzani and Seeletse (2012, as referenced in Kabir, 2015), huge corporations dominate the social responsibilities of corporate activity in South Africa. Apart from corporate bodies, the country's dark history of apartheid plays a significant role in driving Corporate Social Responsibility (CSR) in South Africa. Although poverty and imbalance have persisted in the country since the dawn of democracy, corporates in South Africa and government have made huge strides in relation to social development using radical economic transformation and the social participation of commercial organisations. However, there is an absence of core legislative frameworks devoted specifically to the monitoring and control of CSR in Namibia, Zambia, or South Africa (Mostert et al., 2016). This gives mining businesses the freedom to select the level of their involvement in social projects hence CSR is varyingly optional. Profit drives business operations but their consequences impact people's lives, traditions and social identities particularly in the mining sector. Mining companies must increasingly carry out their operations sensibly and viably giving advantages to a growing number of stakeholders.

Nonetheless, Bench Marks Foundation (2012, as stated in Bongwe et al., n.d.) claims that South African mining corporations are reprimanded for not reinvesting a major amount of their revenues in the development of local communities. Their case is based on the fact that South Africa is abundant with mineral resources and contains more than half of the world’s minerals. Despite the country's favourable mineral legacy and its role in economic development, most areas near the mines have astronomical scales of poverty, poor health, joblessness, adult illiteracy, substandard accommodation, family breakup and a large intake of single migrant labourers

(Ololade and Annergan, 2013; Mnwana and Capps, 2015 as cited in Bongwe et al., n.d). This is a testament of the level of their involvement in CSR and as a result the efforts of mining firms to ameliorate the socioeconomic situation of the rural populations around them are questioned.

Given the argument above, it remains a fact that the mining industry accounts for roughly 35% of Gross Domestic Product (GDP), with diamonds accounting for nearly 94% of the entire mining portion. Botswana produces the world's largest gem diamonds accounting for around 40% of total global output. Botswana also produces copper and nickel, as well as soda ash and salt. In 1998/1999, soda and salt output grew by 19% and 8.5 percent, respectively, over 1997/1998 levels. Unlike Botswana, Sikamo (2016) argues that despite the Zambian government's plan to expand the economy through diversification, copper mining activities will be driver of this diversification project for a long time. Research by the International Council on Metals and Mining's (ICMM), the mining sector was responsible for 86 percent of all foreign direct investment into Zambia in 2012, 80% of the country's export revenues, and over 25% of the government income. The mining sector brought above 10% of Zambia's GDP and provided jobs to more than 1.7% of the country's total labour force. Therefore, mining is not only key to the South African economy but also the foundation of other Southern African countries like Botswana and Zambia as highlighted previously.

Mining has benefited communities of operation, but the opposite cannot be left out. Various bodies of literature have written extensively about the undesirable consequences of mining in South Africa and advocacy meant to protect economies. Among them are Rall and Pejan (2019) who note that people in areas around South Africa impacted by operations of mining are utilising their human rights to freedom of expression and peaceful assembly to petition the state and mining firms to acknowledge and uphold the rights of people within areas of their operations from potentially severe ecological, social, and health-associated damages of mining. However, such activism is normally met with persecution, threats, or aggression. Sikhosiphi Rhadebe a community activist was assassinated at his house in 2016 after getting death threats from unidentified people. Rhadebe was the chairperson of the Amadiba Crisis Committee, an organization based at community which was founded in 2007 in Xolobeni Eastern Cape province to fight mining development. Members of

the community had expressed worries that the titanium mine proposed for development on South Africa's Wild Coast by Australian company Mineral Commodities Ltd will relocate the population and harm their environment, traditions, and livelihoods. The above stated facts highlight that there is no freedom after expression and that mining companies are often involved in disputes with their communities.

Over and above the harassment, intimidation, and violence (Akinlabi et al., 2019) placed focus on the country's coal mining. South Africa's mining sector is one of the country's most important top producer of a wide range of metals and is among the world's largest coal producers. Highveld, with eMalahleni (Witbank) and the adjacent area in Mpumalanga account for nearly 60% of South Africa's coal deposits. In South Africa, mining has a significant negative effect on the environment and society. Water resources are used up, with the air, land, and water heavily polluted, and flora and fauna are destroyed. Coal mining pollutes the air because harmful gases such as sulphur (SF6), nitrogen oxide (N2O), carbon dioxide (CO), and methane are emitted into the atmosphere in the process of mining coal. Mining also depletes agricultural land, putting food security at risk. In South Africa, acid mine drainage is among the worst effects of coal mining. Acid mine drainage is still the most serious side effect of coal mining across the globe particularly in South Africa, where the government has overlooked the problem for more than a century which is a cause for concern.

The effects of mining activities can still be felt ages after the closure of mines. This is revealed by (Duda and Valverde, 2020) who assert that the detrimental impacts of coal mining such as subsidence and a massive post-mining sinkhole that emerged on the surface of the area can still be seen in many nations where coal mines were ceased operations ages ago. Methane concentrations and emissions are too more harmful impacts of mine closures. Cases of harmful gas concentrations on the ground floor sections and basements of buildings are also documented. Methane emissions is hazardous since it is a greenhouse gas with a particularly bad environmental impact.

In the same vein, Tremblay and Hogan (2016, as cited in Cornelissen et al., 2019) maintain that many mining communities face an issue with abandoned mines, including abandoned shafts resulting in the emergence of artisanal and small-scale mining putting lives at risk, waste rock formations and pits which necessitates the

development of measures to mitigate the impact of these through rehabilitation. Abandoned mines pose considerable communal health, safety, ecological and socioeconomic dangers as well as significant policy and financial ramifications. Asbestos is an example of a substance that poses a considerable hazard to the health and safety of communities and is the chief source of worry in South Africa. Even smaller countries that aren't generally thought of as mining regions face dangers from neglected mines, such as acid mine drainage and radiation.

2.4 Experiences of Resident Employees regarding Mining Activities in their Communities: A Global and South African perspective

Mining activities are perceived differently by various communities. Several studies also prove that mining has dire consequences on human health. Loewenson (2018) mentions that Dr Yabe of the University of Zambia, in collaboration with other institutions in the Kabwe Mine Pollution Amelioration Initiative (KAMPAI), conducted a study on blood lead levels in Kabwe, Zambia. Kabwe mined lead and zinc from 1902 to 1994 and the study discovered that lead levels in Kabwe soil were extremely high. Many youngsters, especially those residing near the mine dumping site and downwind of the mine had dangerously high blood lead levels. According to the study, lead in soil can be absorbed through roots and leaves and eaten through vegetables or as pica in pregnant women. Lead dust is also blown to communities by the wind, while playing on lead-contaminated soils also expose children to lead. Lead exposure was also found to arise through placental transfer and nursing after birth. The findings reveal more health problems associated with mining.

Moreover, in a different incident research found out as implied by Davies (.n.d) that in 2010 a gold mine within the Zamfara region of Nigeria was the source of death to many children in this region from serious lead harming related with gold metal processing. More than 2,000 children have been treated with chelation treatment and thousands more have been and proceed to be extremely harmed by exposure to inescapable lead dust. Regardless of the above stated challenges, mining has performed an instrumental responsibility in the social and economic growth of Southern Africa through investments, employment opportunities, revenue for government, and infrastructure development. As a result of the local gold supply the

Johannesburg-Pretoria metropolitan region, which acts as Southern Africa's economic and financial hub grew (Digging Beneath the Surface ,2019).

The mining sector remains the biggest employer to date in South Africa and according to (Statistics South Africa, 2021) by the end of June 2019 there were 514 859 people working in the mining industry. This is a 0.2% annual increase over the employment level recorded in 2015. Majority of the people were employed in the 'mining of platinum group metal ore' in 2019 and were estimated to be around 198 574. Nonetheless, Mpumalanga was the province with the highest mining-related revenue in 2019 of R137,3 billion, Limpopo had R106,2 billion and was the province with the second highest revenue from goods sales, followed by North West with R106,1 billion and Northern Cape had R98,7 billion.

In terms of employment by province the Northwest contributed the most with 150 003 people to the industry, followed by Limpopo which had 110 319 and Mpumalanga with 94 804 (Statistics South Africa, 2021). Moving attention to South Africa experience, (Koen et al., 2017) argue that mining communities across the Southern African development community suffer from several issues that have a negative impact on their well-being. Bekkersdal is a township in Gauteng Province, South Africa, that has existed since 1949. It is in the Westonaria municipal region. Bekkersdal not only has to deal with certain unique historical issues but it also must deal with challenges that another local township encounter. These issues include substantial urban expansion, asset management complexity, rising levels of poverty, joblessness, and concurrent mounting criminal activities, as well as a community norm of avoiding paying for services provided.

In addition to that, a deteriorating mining sector, geo-technical complications, the scarcity of resources, insufficient resources to meet rising demand and social disturbances such as demonstrations and stay aways (Aboobaker and Matlala, 2013, as cited in Koen et al., 2017) state that all contribute to the difficulties that the township's residents face. Negative health outcomes, poor mental health, stress, risky sexual conduct, and criminal activity are all dangers connected with rural-to-urban migration, according to evidence (Gerritsen et al., 2013). Olufemi (2011) argue that informal settlements' rapid, uncontrolled, and unplanned growth put a lot of strain on

existing services. This proves that mining does not only affect the health of inhabitants in communities close by but the environment and housing patterns.

The economy of the Bekkersdal village is primarily reliant on the local goldmines but because of a fall in gold production and laying off employees witnessed in the last past 20 to 30 years, the fortunes of the town have suffered. Mining activities, among other things have added to environmental deterioration and pollution of the air, land and water resulting in associated health complications such as respiratory diseases. Again, the potential consequences of dirty water and mine drainage in the broader Upper Wonderfonteinspruit ecosystem, particularly near the Bekkersdal informal settlement cannot be ignored.

2.5 Theoretical framework(s) underpinning the study

Rosa and Tudge (2013) argue that, Bronfenbrenner's theory is concerned with the quality and context of people's lives as seen through developmental stages that take place within the setting of complex interrelated systems. He also mentioned that people's surroundings and ecological realities have an impact on their growth, including their behaviour. Individuals are influenced directly by systems such as home, school, and employment, as well as indirectly by policies, resources, and expectations of others, according to him.

Similarly, (Eriksson et al., 2018) believe that an ecological approach allows us to emphasize both individual and contextual systems, as well as the interdependencies between them. In Bronfenbrenner's standard version of ecological systems theory, there are four types of interconnected environmental systems: microsystems, mesosystems, exosystems, and macrosystems. These levels span from smaller, proximal settings where individuals interact directly to bigger, distal settings where growth is influenced indirectly, (2017, Peppler).

According to Bronfenbrenner (1975, as cited in Rosa and Tudge, 2013), ecology is described as a fit between the individual and his or her surroundings. The individual's fit with its surroundings must be even and closer in order to develop, not only survive. As a result, ecological psychology's primary premise is that the individual is not the most basic unit of human behaviour; rather, the most basic unit is the behaviour context. This is a bold assertion that goes against practically all of psychology's

assumptions that the individual is the most fundamental unit of study and the source of all behaviour.

Bronfenbrenner, on the other hand, used a scientific approach, emphasizing the interrelationships of various processes as well as their contextual diversity. The ecological systems theory of Bronfenbrenner views child development as a complex system of relationships influenced by several layers of the surrounding environment, ranging from intimate home and school settings to broad societal values, laws, and practices. Bronfenbrenner thought that everything in a person's surroundings had an impact on their growth.

Ecological systems theory, according to Hayes and O'Toole (2017), provides a holistic approach that is inclusive of all the systems children and their families are involved in, accurately reflecting the dynamic nature of actual family relationships; however, Wertsch and Tulviste (1992, as cited in Vélez-Agosto et al., 2017) argue that culture is a major concept in Vygotsky's sociocultural theory, despite the fact that it was not well developed by Vygostsky and his followers. Culture moderates human experience and alters human action, according to sociocultural theory. One of its major doctrines is that the external usage of culturally specified tools and indicators is internalized in higher psychological functions later on. According to this theory, culture is the system in which every human daily activity is realized and finally assimilated, rather than a separate entity functioning from a higher outside macro structure.

Furthermore, Thomas Weisner has contributed to culture and developmental research from the viewpoint of the ecocultural hypothesis that cultural community offers children with developmental routes within an ecocultural environment. Everyday routines absorb developmental pathways (bedtime, video games, homework, cooking dinner, etc.). As stressed by Weisner (2002 as referenced in Vélez-Agosto et al., 2017), culture is the routines that individuals engage in.

Rogoff et al. (2007, as cited in Vélez-Agosto et al., 2017), another advocate of ecological theory, describes development as the transformation of participation in sociocultural activities. Vygotsky's sociocultural theory influenced Rogoff's understanding of cultural processes in human development, puts culture inside "community routines," which are a set of standards made up of social community practices and their interpretation through language. Language is more than just a means

of communication; it also defines practices in terms of content and form, allowing for action that is not entirely constrained by those definitions due to context. Culture gives the skills and indications that are part of those groups' historical legacy through language and behaviours. These are essential components of the microsystems of the child.

From an ecological standpoint, it is believed that human life is part of a larger system of interconnected processes that all have an impact on humans. As a result, the theory is best suited, as the study examines how people in their environment (in this case, Thabazimbi) are impacted and perceive their environment, as well as how it affects them. Looking at the workers that work for the Amandelbult mine in Thabazimbi and how they are influenced by it all, it is the various systems that are interacting here on the lives of these employees' homes.

2.6 Chapter Summary

This chapter reviewed the literature for the study where reference was made to the subject study by focusing on the historical overview of mining, legislative and policy framework guiding the mining sector in South Africa, the opportunities and challenges brought by mining activities within communities, the experiences of resident employees regarding mining operations in their communities and mining related studies focusing on South Africa and Africa as a whole. The literature was reviewed in line with the experiences of Thabazimbi resident mine employees regarding the perceived effects of mining activities within their community. Finally, the chapter covered on the theoretical framework(s) underpinning the study. Data collection and analysis supporting the study are discussed in the next chapter.

CHAPTER THREE
METHODOLOGY

3.1 Introduction

This chapter describes the procedures adhered to in the process of gathering data. It commences with a presentation of the research question guiding the study as well as the aim and objectives. It also explains the research strategy and the sampling methods of the study, the research instruments used to gather data and methods applied to analyze data. The ethical issues that were considered in the study are provided later in the chapter.

3.2 Research question(s)

The study revolved around the following research question:

What are the experiences of Thabazimbi resident mine employees regarding the perceived effects of mining activities within their community?

3.3 RESEARCH AIM AND OBJECTIVES

3.3.1 Primary aim

The fundamental aim of this research was to explore the experiences of Thabazimbi resident mine employees regarding the perceived effects of mining activities within their community.

Objectives

The study was centred on the research objectives below:

- To explore the benefits, if any, that mining activities brought to Thabazimbi community.
- To explore the challenges experienced by Thabazimbi resident employees since the inception of mining activities in their community.
- To explore resident employees' opinions in mitigating challenges presented by mining activities in Thabazimbi community.

  To elicit recommendations from Thabazimbi resident employees on how the

effects of mining activities can be mitigated.

3.4 METHODOLOGY

3.4.1 Research Strategy

The study employed a qualitative research approach. Denzin and Lincoln (2002) state that a qualitative research methodology provides a holistic comprehension of human encounters in specific environments. Additionally, qualitative research permits researchers to learn about the inner experience of participants and to understand how meanings are shaped by and in culture (Corbin and Strauss, 2008). The use of qualitative research methods has several advantages. The detailed accounts of participants' reflections, sentiments and experiences generated by qualitative research approaches are used to comprehend participants' actions (Denzin, 1989). Again, qualitative methodologies are used to acquire a greater understanding of problems with creating, implementing, and interpreting language evaluation.

However, the strategy has its own drawbacks. According to Maxwell (2013) the goal of qualitative research is to acquire an in-depth knowledge of a specific issue instead of being numerically representative. Qualitative research aims at comprehending and justifying the underlying forces of shared relationships and is unsettled by the portions of realism that fails to be measured. Maxwell (2013) adds that the fundamental drawback of qualitative mass analysis approaches lies in the fact that their findings cannot be generalized to bigger populations with the same level of accuracy as quantitative methods. However, in qualitative research the aim is not to generalize to the broader population but to gain a deep understanding of the phenomenon within a particular setting. Babbie and Mouton (2010) state that qualitative research requires more of in-depth data. In this situation, the research strives to provide a deep illustration of the experiences of Thabazimbi resident mine employees regarding the perceived effects of mining activities within their community.

A case study was employed as a research strategy for this study. Case studies enables the examination and comprehension of intricate matters utilising reports from earlier studies (Krusenvik, 2016; Starman, 2013 and Zainal, 2007). It is a reliable research design especially when a comprehensive in-depth inquiry is necessary. Moreover,

case studies are described as an in-depth analysis of a few units with several variables which is defined as an intensive study. The goal of the intended research is to gain a thorough a picture of a condition, incident, or event. An empirical study into an existing phenomenon in greater detail and inside its everyday environment, especially when the differences between phenomenon and setting are blurred.

Bless, Higson-Smith and Sithole (2013) highlight that case studies are applied to gain an insight into the research strategy to study a phenomenon, to create hypotheses and to justify a method. Reflecting on the character and objectives of this study, a case study design was deemed to be the most appropriate approach for this research.

3.4.2 Population and sampling procedures

In this study, the target population was Amandelbult mine employees who are residing in or their homes are at Thabazimbi. The study considered employees with twelve months and above of employment at the mine. The participants that were considered were above the age of 18 years. In addition, the study also tapped on the knowledge of key informants who are not mine employees such as the local school principal and a local church leader. This was done in anticipation of biased responses from the mine employees. Employees who are not residents of or who do not have homes at Thabazimbi were not included in the study.

Sampling is “a technical accounting device to rationalise the collection of information and to choose an appropriate way in which to restrict the set of participants from which the actual information will be drawn” (Bless et al., 2013). Purposive sampling technique was applied in getting the participants in this regard this assisted in involving relevant key participants. In qualitative research, purposeful sampling was commonly employed to detect and choose rich data linked to the topic of significance.

This involved selecting candidates across a broad spectrum to provide extensive opinions linked to the topic of study. It is a non-random method which does not require essential theories or a specific number of participants. The benefit of applying purposive sampling was that there was no limit on how many participants should be included in this technique if the necessary data was to be gathered. Purposive sampling generates valid and robust results and it does provide researchers with a reason to make a broad view through the sample that is being studied, whether such

generalizations are theoretical, analytic or logical in nature (Etikan, 2016; Palinkas et al., 2015; Tongco, 2007).

Additionally, authorization to conduct the study at Amandelbult was obtained from the Senior Social Performance manager of the department and consent to take part in this study was obtained from the research participants. In terms of the inclusion criteria participants needed to be Amandelbult permanent employees, with more than 12 months of working at the mine and above the age of 18 years. The researcher works at Amandelbult as a community relations officer which made it easy to assemble participants. The researcher clarified in detail that the research was for academic reasons and provided participants with a participant information sheet. It was also explained that there were no consequences associated with participation or non-participation in the study.

3.4.3 Research Tool

The research instrument used for this study was a semi-structured interview. According to Monette et al. (2014), interview schedules help researchers to think carefully and explicitly about what they would like to see the interview covering and achieving. A semi-structured interview guide was employed in this research because it is useful when aiming to have in-depth discussions. (Ritchie and Lewis, 2003) highlight that for the most part, a researcher can carry on examining all spoken and unspoken reactions, like hunches, happiness, and silence, to discover valuable knowledge in concluding data analysis of the numerous themes that were identified from the interview. Moreover Hancock et al, (2007) emphasize that semi-structured interview schedules (Appendix C) consist of open-ended questions which allow the researched to probe more in order to gain more clearness on a particular issue.

3.4.4 Pre-testing the research instrument

To determine the applicability and acceptability of the semi-structured interview schedule, a pre-test was conducted. A pre-test is an essential part of a research survey that gives researchers the chance to think about and refine their study before beginning the actual data gathering. The checks help researchers obtain reliable study results and prevent errors (Hashim et al., 2022). A pre-test is a crucial procedure conducted prior to data collection (Sekaran and Bougie, 2016; Stockemer, 2019 as

quoted in Hashim et al., 2022). It is crucial that the sample taken matches the final model analysis exactly. Pre-testing the research instrument is done to ensure that research participants are acquainted with the questions and to make sure that the language is appropriate. Additionally, a researcher can improve the research tool by pretesting it to get rid of analytical flaws. The pre-test was done with one individual, who is not part of the actual study. Patton (2002) argues that pre-testing typically entails giving research instruments to individuals who will not be a part of the study. However, the pre-test people chosen must have characteristics that are comparable to those of the study participants. Pre-testing highlighted the need to include in the information sheet that participating in the study will cost participants time and this was included in the information sheet provided to research participants. Again, that some research questions sounded similar, those research questions were reviewed by the student and supervisor. Especially, under objective one and the question was reworked to read as, "if you remember, how long is it since mining began in this area? Are there any notable differences that you can allude to? (These can be both positive and negative)".

3.4.5. Data collection

Bless et al (2013) reveal that there are various methods of collecting data used in research studies. As a result, this study made use of individual in-depth interviews to collect data. An in-depth interview is a qualitative data collection approach whose aim is to investigate the perspectives, experiences, and sentiments of participants in greater depths. English language was used during the study and clarifications were provided by the interviewer to improve the participant's understanding. This method is the best as the type of study requires respondents' perspectives and interviews can solicitate the anticipated data. Talking about the advantages and disadvantages of using interviews, remember Covid-19 measures were taken into consideration as collection of data was under way.

Semi-structured interviews result in more flexibility around the categorization of interview questions and empower the interviewer to permit the participant to speak more openly about the topic of study (Monette, Sullivan and DeJong, 2011). To increase the reliability of the gathered data, the same questions were used on all participants and all the interviews were done by the researcher. The interviews were

25-30 minutes long.

Nonetheless, the interviews were not audio-recorded as all participants felt uncomfortable due to the sensitivity of the information they shared about how they perceived their employer. The researcher respected the decision of the participants as it made them feel more comfortable and could easily share their views and guaranteed their confidentiality. However, this led to the loss of critical data including detailed quotations during the data analysis phase that increase trustworthiness.

3.4.6. Data analysis

The data collected in this study was thematic analysed. Braun and Clarke (2006) argue that thematic data analysis is capable of distinguishing, studying, and describing patterns (themes) from the gathered data. The researcher analysed and drew patterns that eventually produced themes from the notes gathered during the interview process. Unlike Braun and Clarke (2006) who emphasized one to be familiar with collected data, (Akinyode and Khan, 2018, p.165) argue for the use of five-step analysis processes such as data 'logging, anecdotes, vignettes, data coding, and thematic network'. This study used the Braun and Clarke six step of data analysis.

This was done following the steps given by Braun and Clarke (2006) with the foremost step being to become acquainted with the data. It was critical for the researcher to immerse herself in the data to the point of getting acquainted with the subject matter in greater depths. Immersion typically involves reading through the data on multiple occasions and reading it actively looking for meanings and patterns. As a result, it was best to read over the full data set at least one time prior to coding as this shaped thought and helped to identify possible patterns, and then transcribe data coming from drafted notes of interviews.

Step two includes creating initial codes, this process began as soon as the researcher had assessed and familiarised herself with collected data and developed a first record showing ideas in the data and what was fascinating about them. The first codes created from the data obtained during this stage. Codes symbolise the most important pieces, or components, of unprocessed data which can be evaluated in a meaningful manner in relation to the phenomenon (Boyatzis 1998 as cited in Braun and Clarke, 2006).

Step three is to search for themes, this stage refocused the research on themes rather than codes, and it involved grouping the numerous codes into possible themes and putting together any important coded data extracts inside the discovered topics. It was a critical phase that aided the researcher and data coding made the development of themes much easier.

During step four themes were reviewed and it became clear that some of the topics were not actually themes. As a result, it's critical to change some of these themes at this time and some of them maybe combined to form a single theme while others may completely disintegrate. The researcher had a decent understanding of the distinct themes, how they blend with each other and what the whole story tells regarding the data collected by the end of this phase.

Step five consists of defining and refining the themes. Define and refine means determining the basis of every theme and the component of data captured by every theme. This step was completed by going back to the gathered data excerpts of every theme and arranging them in a logical and internally uniform story accompanied by narratives, revealing what was intriguing about these themes and why they will stay crucial of the collected data. The final phase is phase six which entails generating the report. This process involves the report's final analysis and writing. This will only be done once the researcher has a fully developed set of themes. The analysis (plus data excerpts) provided a transparent, organised, rational, nonrepetitive, and an all-encompassing account of the story told by the data within and across all themes.

Trustworthiness

Trustworthiness (credibility; dependability; transferability and confirmability) Shenton (2004: 64), asserts that ‘data trustworthiness has four key components: credibility, transferability, dependability, and confirmability’.

Credibility focuses on making certain that the results provide an accurate picture of the research that has been carried out. Credibility is key to guaranteeing trustworthiness in qualitative studies. Shenton (2004) put forward numerous ideas for credibility that must embraced by deep-rooted research methods. Less regular can be employed in collaboration to assist in widening the scope of the study. Knowledge of the topic under research is mandatory and if feasible, purposive sampling must be

used to decrease any impartiality in data the collection process. According to Lincoln and Guba 1985 as cited in (Korstjens and Moser, 2018) credibility denotes the credence that may be put in the accuracy of the research results. Credibility authenticates if the research results depict the credible information extracted from the research participants' initial data and is an accurate analysis of the participants' original opinion. Therefore, to ensure credibility I developed themes from the collected data that the supervisor guided the process as analysis was done.

Transferability highlights the capability to convey the interpretation of findings to groups outside of the sample which is an essential component of qualitative research and human factors approaches that are fundamentally directed at the practitioner. It is essential for the replication of research, to deliver a comprehensive explanation of how the data was gathered, and the method employed together with the inclusion criteria, the approaches utilized to gather data, information on the sessions carried and their duration (Shenton, 2004). Shenton (2004) adds that transferability is the extent to which study findings can go beyond the boundary of the study setting and be applied to a similar setting. In this study, only Amandelbult mine in Thabazimbi was studied which might have a limitation, however whilst reviewing literature it became evident that other research studies were done from other settings, therefore, ensuring a dense description of the data collected ensured transferability.

Dependability- according to Shenton (2004) means if the study was to be done again within the same setting using similar methods and participants the same results should be achieved. Moreover, (Forero, et al., 2018) stated the goal of dependability is to ensure that findings obtained from this qualitative study can be reproduced with the same group of participants and in the context. Dependability is the qualitative equivalent of reliability (Schurink, Fouche and de Vos, 2011) and therefore, to ensure dependability I conducted all the interviews in person and used similar steps whilst analysing all the findings obtained in the study. **Confirmability**- qualitative research is not dependent on objective approaches employed by positivists and the gathering and processing of data centers on the researcher. Thus, qualitative research is prone to subjectivity and impartially which can have an impact on the trustworthiness of the research study. Hence using multiple collection methods known as triangulation is a

critical move in decreasing bias and permits other researchers to examine the methods used to collect and analyze data (Shenton, 2004).

In light of these principles, it is critical that research be built around the choice and utilization of acceptable methodologies that protect persons participating, as well as communication means that are similarly responsive to the privacy and confidentiality concerns. Shenton (2004) mentioned the necessity to have the research results authenticated by other people. Therefore, to ensure and augment confirmability I employed correspondence checking, that involved the inspection of the study's themes by my supervisor. However, this method of using researcher supervisors instead of independent people is viewed as a limitation of the study.

3.4.7. Ethical consideration

This study was guided by the below ethical consideration:

Ethical clearance – ethical clearance certificate was awarded by the School of Human and Community Development Ethics Committee constituted under the University Human Research Ethics Committee (Non-Medical), Clearance Certificate (Protocol number: sw22/03/01). Collection of data only took place after the issuing of this certificate.

Anonymity: The researcher endeavored to keep the participants safe from any bodily or psychological harm. The researcher apprised the participants in advance about the possible effect of the study and that participating in the study was optional. Anonymity is one form of confidentiality that involves concealing the participant's identities.

Besides knowing the participants' identities, researchers in most cases meet the participants but the participants' names or identifying information will not be divulged. Even this study strived not to disclose any participant's details of identity. It should be emphasized that the identity of the participants is not included and disclosed anywhere in the report of this study. Although the researcher is an employee of Amandelbult and the fact that interviews were conducted in person, and the participants were known to the researcher prior to the study, the researcher anonymized the participants.

Confidentiality: The names and other identifying information of the research participants were swapped with codes to enhance the anonymity of the participants (Hepworth et al., 2010). Confidentiality is described as a key value in social work practice and research. Confidentiality safeguards participants' data and always respects their worth and dignity. Confidentiality implies that only the researcher and those involved in the research can be aware of the identity of participants and pledge to conceal all the data shared in the study by the participants. Moreover, information on the degree and boundaries of confidentiality in the study was shared with the participants.

The principle of voluntary participation: Participating in the research study was voluntary and the decision not to participate did not result in negative repercussions for the participants. The interviews were only conducted after essential information had been shared with the participants and no one was coerced, paid, or manipulated into taking part in the study. All participants were competent enough to give consent and knew their right to pull out from the study at any moment without any negative penalties (Bless et al., 2013). All the participants took part in the study at their own accord without any kind of coercion. It is also included on the information sheet shared with participants that, "your participation is entirely voluntary and refusal to participate will not be held against participants in any way". This was to underline that no prospective participants were pressured or intimidated into taking part in the study.

Doing *no harm* according to ESRC (2020), when conducting research on children, the elderly, or the disabled, harm is typically used to refer to doing something that causes someone harm physically, morally, or mentally. In this study, there were no group of vulnerable people who took part in the study and all participants were handled by the researcher with the respect they deserved.

3.5 Chapter summary

The chapter gave a detailed account of the research approach and methodology applied in the study. The research question together with the aim and objectives, research strategy, the population size and sampling procedures were succinctly discussed. Research tools, method of data collection and analysis, together with ethical considerations were discussed afterwards. The following chapter presents and discusses the findings of the study.

CHAPTER FOUR

PRESENTATION AND DISCUSSION OF RESULTS

4.1 Introduction

Chapter four presents and discusses the gathered data in this study. Descriptive statistics was used to examine demographic information, while thematic analysis was applied to analyse and document themes that emanated from the qualitative data. The results of the study are discussed in connection to the objectives of this study, theory, and the constraints implicit in the research design and methodology. The themes are explained by verbatim responses extracted from participants' interviews.

4.2 Demographic information

Table 4.1 Demographic profile of participants (N=12)

Demographic factor	Sub-Category	No.
	Permanent Employees	10
	Key- Informants	02
Gender	Female	03
	Male	09

Table 4.1 provides a demographic profile of the participants. Among the 12 participants in the study, 03 were females and 09 were males, with English, and Setswana being main languages of communication for the participants. Of the 12 participants in the study, 10 were Amandelbult mine permanent employees while 02 were community key-informants of which one was a school principal and the other a church leader. The researcher understands Setswana language very well that participants communicated with and there was no need for an interpreter to translate the research materials. In response to a suggestion provided by one of the participants

during the pre-test, years of experience, educational level, specific ages, and racial categories were not included as demographic factors and the reason for adhering to this recommendation was that including this information was going to compromise the identity of the participants infringing the confidentiality clause in the process.

4.3 Themes that stemmed from the study

Category	Themes	Quotations
1. Benefits brought by mining activities to Thabazimbi communities	• **Improved community welfare**	*"I have grown up in Thabazimbi, I can attest mine has tried improving the welfare of the communities…"* *"…mine developed SLP projects that benefited the community, such as schools, clinics, road infrastructure, provision of water and so forth…"* *"local socio-economic development within our community has improved since mining activities took place…"*
	• **Creation of employment opportunities for the community**	**"***Employment opportunities are created by this mine…"* *"… mine has assisted our unskilled and semi-skilled community members get part-time jobs from contractor works within the mine"* *"Mine provides local youth with cadetship training to get ready and exposure of mine work, this empower our youth…"*
	• **Reduced poverty levels within Thabazimbi community**	*"The mine does its part, (in reducing poverty) however fighting poverty cannot be left for mines only…"* *"…there is a difference in our families as, two or three members are employed by various companies in the mine, poverty rate is better than before"*
2. Challenges experienced by Thabazimbi	• **Visible rise in community social ills**	*"Substance abuse among youth is disturbing because of liquor outlets which are in every corner…"*

resident employees since the inception of mining activities in their community		*"...There is prostitution and prevalence of HIV/AIDS around the trucking deport in Northam, all these are impacts of mining"* *"...we are experiencing increased levels of crime within the community since inception of mining activities"*
	• **Experienced increase in levels of migrant influx which results in the emergence of uncontrollable informal settlements around the mine.**	*"it is sad that mining brought large number of migrant labourers and developed informal settlements in the community..."* *"I have grown up in Thabazimbi, Regorogile has developed as an informal settlement in the area and it keeps growing by the year. Those households below the mountain are barely less than 5 years. These are corrupt works of local politicians, as they buy votes and the need for political power in the area..."*
	• **Lack of employee retainment strategies due to shaft closure**	*"Mine closure in 2016 by the then Kumba, came unplanned to the local people, this has impacted about 800 employees and 360 contractors. These are not just employees but are bread winners looking out for their families...this closure left people without means of survival..."* *"...closure planned or unplanned itself just causes stress, anxiety and uncertainty within the community"*
	• **Over reliance of the municipality to the mine**	*"It is quite sad that whenever we have electricity and water issues at Thabazimbi, we have to call the mine as our employer and yet the municipality takes credit as if services are provided by them, it is unethical..."* *"...the community is suffering from poor service delivery by the municipality due to migrant influx"* *"...political instability within Thabazimbi municipality impacts negatively on community as leaders are fighting in courts other than focusing on providing service delivery to people"*

3. Resident employees' opinions in mitigation challenges presented by mining activities in Thabazimbi community	• **Create awareness over community SLP projects**	*"SLP projects are a major component, the community can capitalize on if we are to see socio-economic development. Poor engagements over this project made communities to remain with white elephants' projects and it's sad…"* *"…as a way of fighting poverty and levels of unemployment, community may request SLP projects that will serve as alternative economies, such as the agriculture sector, network connectivity at schools etc."*
	• **Proper planning required for the erection of informal settlements**	*"Informal settlements cannot be eradicated completely so, but proper planning during erection can assist…"* *"…mine cannot control informal settlements, but assist with identifying sites and develop in basic needs, such as roads, water and sanitation…"* *"provision of affordable housing by mine, can assist in reducing growth of informal settlements..*
	• **Employment needs to prioritize locals**	*"youth in community have jobs, only if the mine can have fewer contractors to create more opportunities for locals…".* *"…employment required skills, let the mine create skills development centres to train youth to be employable".* *"mine does create employment for locals, but proof of residence for that remains sceptical…"*
	• **Monitor procurement opportunities to benefit local SMMEs**	*" …assist SMMEs to get into Join Venture partnerships (JVs) to get exposure and develop…"* *"…may the mine look at gaps and what local SMMEs lack and provide trainings to close those gaps"* *"mine needs independent consultants to*

		monitor inclusive procurement to benefit local SMMEs…"
4. Recommendations by resident employees regarding effects of mining activities in the community	• **Create alternative economic activities alongside mining**	*"Thabazimbi has tourism sites, nature reserve sites and it is surrounded by agricultural farms, alternative economic activities may come from these areas…"*
	• **Provision of a skills development centre**	*"Mine cannot employ all young people, let them provide skills training over and above mining skills. Yes, we can see that the mine is closing shafts down as its resources are depleted. Let the mine assist in reskilling its employees and provide new skills to the youth to prepare them for new opportunities..."*

Table 4.2 Table of themes that emanated from the study

4.4 Benefits brought by mining activities to Thabazimbi community

4.4.1 Improved community welfare

The study findings show that, most resident employees are of the same view that benefits brought by mining activities to Thabazimbi community can be realised by the improvement of community welfare. This is supported by some comments from the respondents captured below:

"I have grown up in Thabazimbi, I can attest mine has tried improving the welfare of the communities…"

and

"…mine developed SLP projects that benefited the community, such as schools, clinics, road infrastructure, provision of water and so forth…"

Another participant further indicated that,

"local socio-economic development within our community has improved since mining activities took place…"

In view of the three quotes that have been presented, it is clear that these mining activities really benefited the local community in improving its welfare. However, the narratives all point to the direction of economic welfare because they are mostly focusing on projects aimed at improving the community's wellbeing and develop its socio-economic aspects. These findings are supported by the objectives of the Social

and Labour Plan's act which include to: (a) advance 'employment and the social and economic welfare of all South Africans (Section 2 (f) of the MPRDA); (b) promote economic growth and the development of the country's mineral and petroleum resources; and (c) ensure that owners of mining or production rights contribute to the socioeconomic development of both the areas in which they operate and the areas from which the rights are obtained' (Department of Mineral Resources 2010: 5).

Moreover, a study conducted by the Federation for a Sustainable Environment (2018) indicated that mining operations can have a variety of positive significances on the host community, including job opportunities, an increase in the local economy and the wellbeing of individuals who are affected. Even though the study by the Federation for a Sustainable Environment was conducted in 2018 and the (MPRDA) act was developed in 2002, findings from 2022 show that mining operations still have the same effects in the communities they operate in and these studies remain relevant.

4.4.2 Creation of employment opportunities for the community

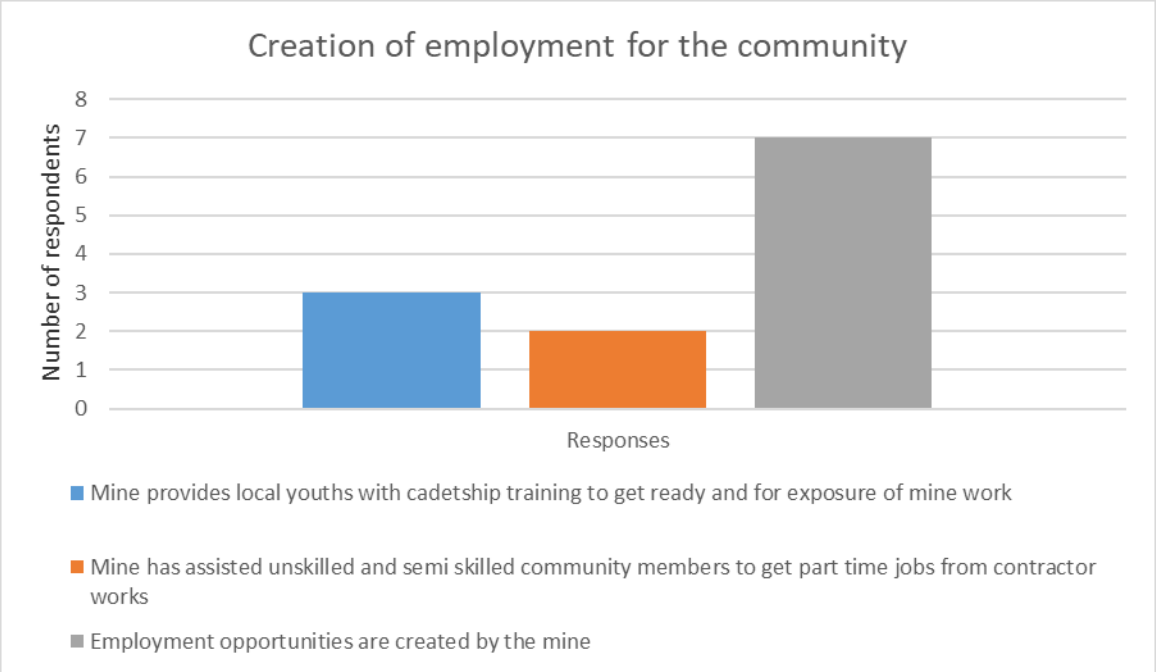


Figure 4.4.2.1 Creation of employment opportunities for the community (N=12)

Most participants indicated that mining activities within the community assisted in the creation of employment opportunities, and this saw improvements in people's lives. Resident employees indicated that the creation of employment by the mine had

positive impacts for the community. In support of this some of the participants' comments were well captured indicating that:

"*Employment opportunities are created by this mine…"*

and in addition, one more participant said:

"… mine has assisted as our unskilled and semi-skilled community members get part-time jobs from contractor works within the mine"

Some participants were of the view that unemployment is a problem faced by the whole country and it cannot be the sole responsibility of the mine to assist in this. An illustration of such a view came from the following excerpt taken from one interview indicating that:

"Mine provide local youth with cadetship training to get ready and exposure of mine work, this empowers our youth…"

In reference to the quotations presented, the findings indicate that mining activities have great potential to assist in the creation of employment opportunities within the communities they are operating. However, the presented findings demonstrate the economic welfare of the community since they are mostly focusing on creation of employment opportunities that are meant to improve people and community's economic wellbeing. These findings are supported by the study by (Mashaba as cited in Karolia-Hussain, 2021) that the mining industry contributes significantly to the South African economy, it employs more than 436 000 people many of whom come from underprivileged areas. These findings suggest that the traditional view of the role of mines as creators of employment is still relevant even in 2022 and that mining activities have the significant potential to create employment within the community they operate within.

4.4.3 Reduced poverty levels within Thabazimbi community

The pie chart below discusses the issues established during data analysis under the theme identified as reduced poverty levels within Thabazimbi community.

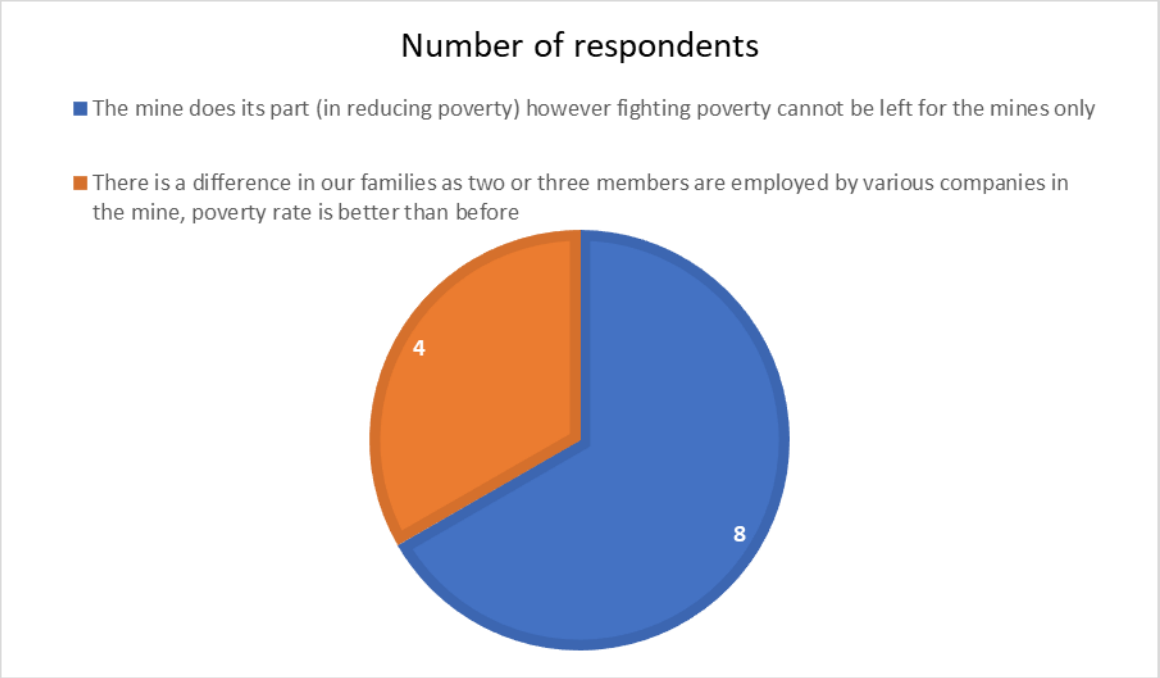


Figure 4.4.3.1 Reduced poverty levels within Thabazimbi community (N=12)

Findings from the study showed that most participants are of the view that mining activities within their community have a positive impact by reducing poverty levels. This has been regarded as one benefit that was brought by mining activities. To support this majority of the participants said the following:

"The mine does its part, (in reducing poverty) however fighting poverty cannot be left for mines only…"

Furthermore, most of the participants shared similar sentiments as they highlighted that:

"…there is a difference in our families as two or three members are employed by various companies in the mine, poverty rate is better than before"

Looking at the views above, it is evident that mining activities have really benefited the community of Thabazimbi as participants attest to reduced poverty levels within their community. A further analysis of the participants' accounts show more emphasis on improved community welfare as participants acknowledge the efforts of the mine but hoped for other parties to make meaningful contributions to maximise the impact. These findings are supported by The World Bank as cited in Pegg (2006), who note that the most effective way that mining can combat poverty is through creating jobs that pay well and provide money for both the miners and their families.

Moreover, the World Bank estimates that 13 million people worldwide are employed in small-scale mining. Through the use of suppliers, vendors, and contractors to create jobs poverty can be decreased. Even though the study by Pegg was conducted in 2006, it is still evident in 2022 that mining activities still have the potential to reduce poverty levels in the communities they operate in through job creation, hence this study remains relevant.

4.5 Challenges experienced by Thabazimbi resident employees since the inception of mining activities in their community

4.5.1 Visible rise in community social ills

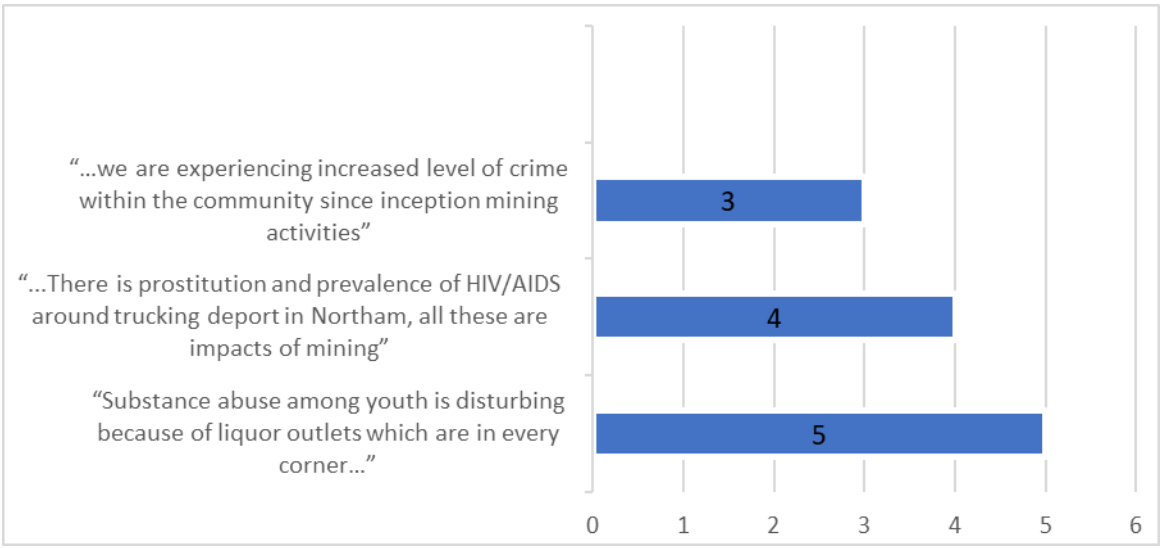


Figure 4.5.1.1 Visible rise in community social ills (N=12)

Findings from the study indicate that the majority of the participants are of the view that the introduction of mining activities in their community resulted in challenges experienced by Thabazimbi resident employees. Although some of participants believe that mining resulted in positive benefits for the community, unintended effects such as visible rise in community social ills that came with mining activities impact the community negatively. This sentiment is well captured in the following responses provided by the majority of the participants:

"...we are experiencing increased levels of crime within the community since the inception of mining activities"

Another participant elaborated further by voicing that:

"...There is prostitution and prevalence of HIV/AIDS around the trucking deport in Northam, all these are impacts of mining"

In relation that, another participant claimed that:

"Substance abuse among youth is disturbing because of liquor outlets which are in every corner..."

From the findings, it is evident that mining activities have brought challenges which are experienced by Thabazimbi resident employees since the inception of their activities in the community. However, looking at the presented quotations they are all focusing on the moral deterioration of the community as shown by the mentioning of substance abuse, the prevalence of crime and incidents of prostitution happening in the community. These findings are validated by findings of a study illustrated in the Rustenburg Community Report (2011) which reported that Xstrata mineworkers in Thlabane reside in backyards in an informal township. The social problems and overcrowding in the town are supposedly caused by these workers. Additionally, it is asserted that single men who live in the neighbourhood support the development of bars and taverns, which encourage prostitution and drug usage. However, the study by Rustenburg community was conducted in 2011 and the findings of this study remain relevant in 2022.

4.5.2 Influx of migrants resulting in the mushrooming of uncontrollable informal settlements around the mine

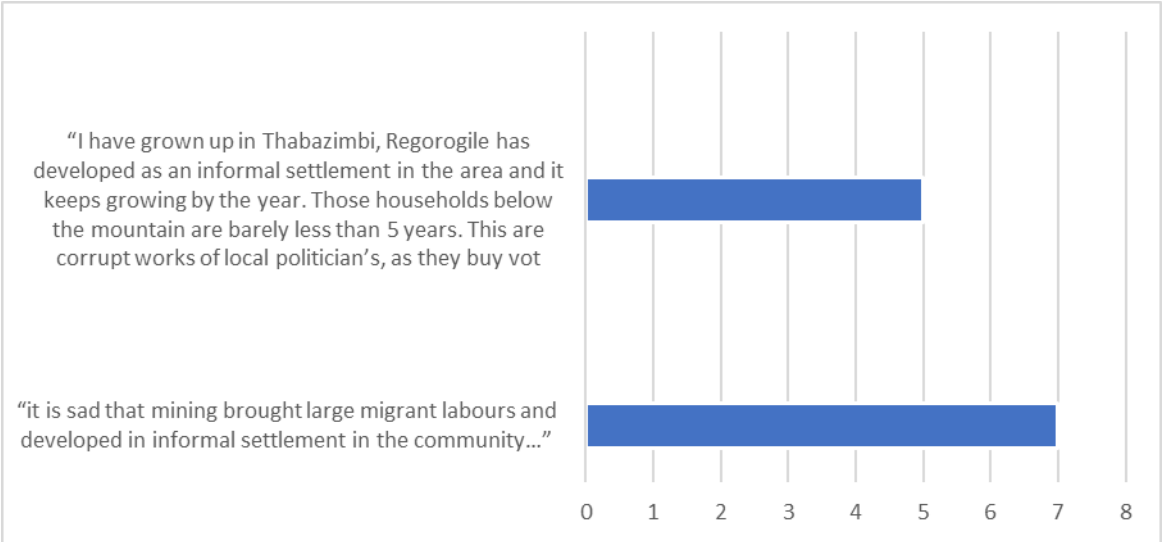


Figure 4.5.2.1 Influx of migrants resulting in the emergency of uncontrollable informal settlement around the mine (N=12)

Results from the study indicate that most participants are of the view that since the beginning of mining activities in their community, community members experienced increased levels of influx of migrants which results in emergence of uncontrollable informal settlements around their area. These unintended consequences brought challenges within the Thabazimbi community. Some of participants are of the view that mining activities offered some positive benefits for the community but the unintended consequences such as increased levels of influx of migrants and development of informal settlements threatens their community. This, is confirmed by the following remarks made by the majority of the participants:

"it is sad that mining brought large migrant labourers and developed informal settlements in the community…"

In addition another participant lamented that:

"I have grown up in Thabazimbi, Regorogile has developed as an informal settlement in the area, and it keeps growing by the year. Those households below the mountain are barely less than 5 years. These are corrupt works of local politicians, as they buy votes and need for political power in the area…"

The findings indicate that mining activities as much their ultimate goal is to develop and benefit the community they operate in, unintended effects linked to their operations emerge such as the increased levels of influx of migrants which result in emergence of uncontrollable informal settlements that create challenges which resident employees experience in their community. The comments indicate the uncontrollable mushrooming of informal settlements in the community because of the influx of migrant workers and these findings are authenticated by a study conducted by Chinguno (2013) emphasizing that the establishment of informal settlements in many mining areas was initiated by migrant labourers and people who were searching for employment opportunities near the mining area.

Furthermore, Bosman (2014) notes that informal mining settlements like any other informal dwellings are identified in most cases by poor quality housing structures and the unavailability of infrastructure and basic services. These findings highlight the fact that development of mining activities led to challenges of overcrowding and influx of migrants because of job seekers coming to the community to search for jobs.

Although the studies by Chinguno and Bosman were conducted in 2013 and 2014 respectively, the findings of their studies remain significant.

4.5.3 Lack of employee retainment strategies due to shaft closures

The study revealed that most of the participants are of the opinion that some challenges brought by mining activities in their community include among others the lack of employee retainment strategies due to shaft closures by their employer. These accidental consequences bring with them increased levels of anxiety and stress and pose a threat to Thabazimbi community. This was highlighted by most of the participants in the following excerpts from their interviews:

"Mine closure in 2016 by the then Kumba, came unplanned to the local people, this has impacted about 800 employees and 360 contractors. These are not just employees but are bread winners looking out for their families…this closure left people without means of survival…"

Moreover, some participants expressed their concerns as follows:

"…closure planned or unplanned in itself just causes stress, anxiety and uncertainty within the community"

Taking these opinions into consideration it is evident that as much as the mine intends to benefit and improve the living conditions of the local community the depletion of resources or technical challenges often lead to the closure of mines. The narratives of the participants all demonstrate a fear of economic or income lose due to mine or shaft closures, especially when there is a lack of an employee retainment strategy from the side of the employer. These findings are confirmed by a study conducted by Mpanza, Adam and Moolla (2021) who emphasized that the local mining community suffers great pain and infuriation when a mine is shut down. Termination of employment, safety fears linked to "zama zama" (illegal miners) invading neglected pits, interruption of power supplies, poor health, and pollution of the soil, water, and air all add to the suffering.

In addition, Pathak and Rao (2009) asserted that, the community may experience a significant level of social stress as a result of the mine closure, which if not properly managed in a timely manner may result in agitations, protests, and even acts of terrorism. Losing sources of income when a mine closes, can causes a significant drop in workers level of living.

4.5.4 Over reliance of the municipality to the mine regarding service delivery

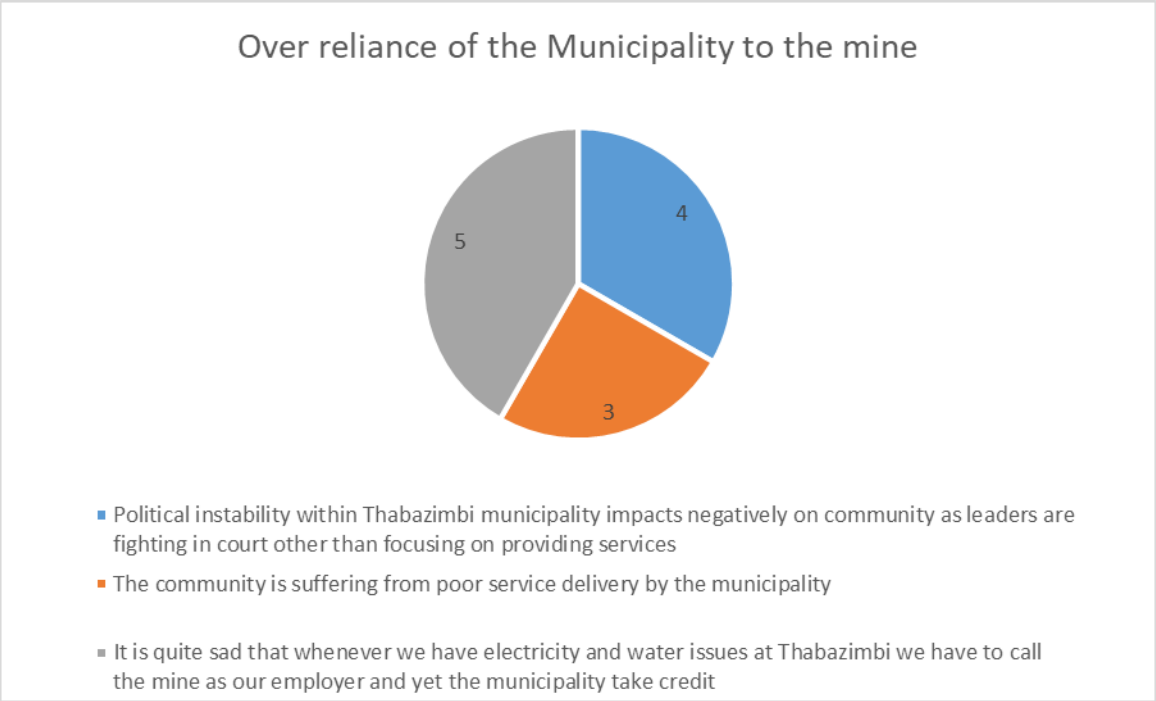


Figure 4.5.4.1 Over reliance of the municipality to the mine (N=12)

The results of the study denote that some of participants are of the view that some challenges brought by the inception of mining activities in their community, include over reliance of municipality to the mine. This consequence brought by the municipality's over reliance on the mine causes challenges of poor service delivery to Thabazimbi community as some of the municipality's responsibilities such as delivery of water are provided when the mine comes on board to assist their resident employees residing at Thabazimbi. To confirm this, the participants commented that:

"It is quite sad that whenever we have electricity and water issues at Thabazimbi, we have to call the mine as our employer and yet the municipality takes credit as if the services are provided by them, it is unethical…"

The other participants mentioned that:

"…the community is suffering from poor service delivery by the municipality due to influx"

To further support this another participant stated that:

"…political instability within Thabazimbi municipality impacts negatively on the community as leaders are fighting in courts other than focusing on providing service delivery to people"

Based on the findings, it is evident that as much as the mine intends to benefit and promote the wellbeing of the community there are challenges it faces which involve the over reliance of the municipality on the mine. The above stated quotations are all mainly focusing on the unintended consequence of the municipality's over reliance on the mine which may impact and have influence over provision of services to the community. These findings are supported by the study conducted by (IDASA and Madue as cited in Kanyane, 2013) who argued that the municipality's failure to deliver basic services not only puts their people through serious hardships, but can have an undesirable impact on social and economic growth. In most cases the challenges are inextricably linked to the political and social context in which the government operates. The incapacity of the municipality affects services delivery to the community it serves.

4.6 Resident employees' opinions on how challenges presented by mining activities in Thabazimbi community can be mitigated

4.6.1 Create awareness over community Social Labour Plan projects

The study discovered that most participants believe that mitigation of challenges brought by mining activities in Thabazimbi may include among other things raising awareness over community SLP projects. Participants are of the opinion that raising awareness over these projects will educate the community to see the positive benefits and this can assist in mitigating the unintended challenges brought by mining activities in the community. This argument is proven by some of the participants who indicated that:

"SLP projects are a major component the community can capitalize on if we are to see socio-economic development. Poor engagements over this project made communities to remain with white elephant projects and it's sad…"

To further support this, some participants remarked that:

"…as a way of fighting poverty and levels of unemployment, community may request SLP projects that will serve as alternative economy, such as agriculture sectors, network connectivity at schools etc."

It is evident that although the mine intends to benefit and promote the wellbeing of the community, the activities intended to benefit the community resulted in challenges which impacted negatively on the community and a way of mitigating these challenges that can be implemented by the mine is raising awareness on SLP projects for the community. The account presented are mainly focusing on how best can SLP projects can be developed in a manner that develops the community. These findings are in agreement with the Department of Mineral Resources (2010, p.5) which states that 'the objectives of the social and labour plan are to promote economic growth and mineral and petroleum resources development in the republic (Section 2 (e) of the (MPRDA), promote employment and advance the social and economic welfare of all South Africans (Section 2 (f) of the MPRDA) and ensure that holders of mining or production rights contribute towards the socio-economic development of the areas in which they are operating as well as the areas from which the majority of the workforce is to be sourced (Section 2 (i) of the MPRDA, and the Charter). To utilize and expand the existing skills base for the empowerment of HDSA and serve the community'.

4.6.2 Proper planning required for the erection of informal settlements.

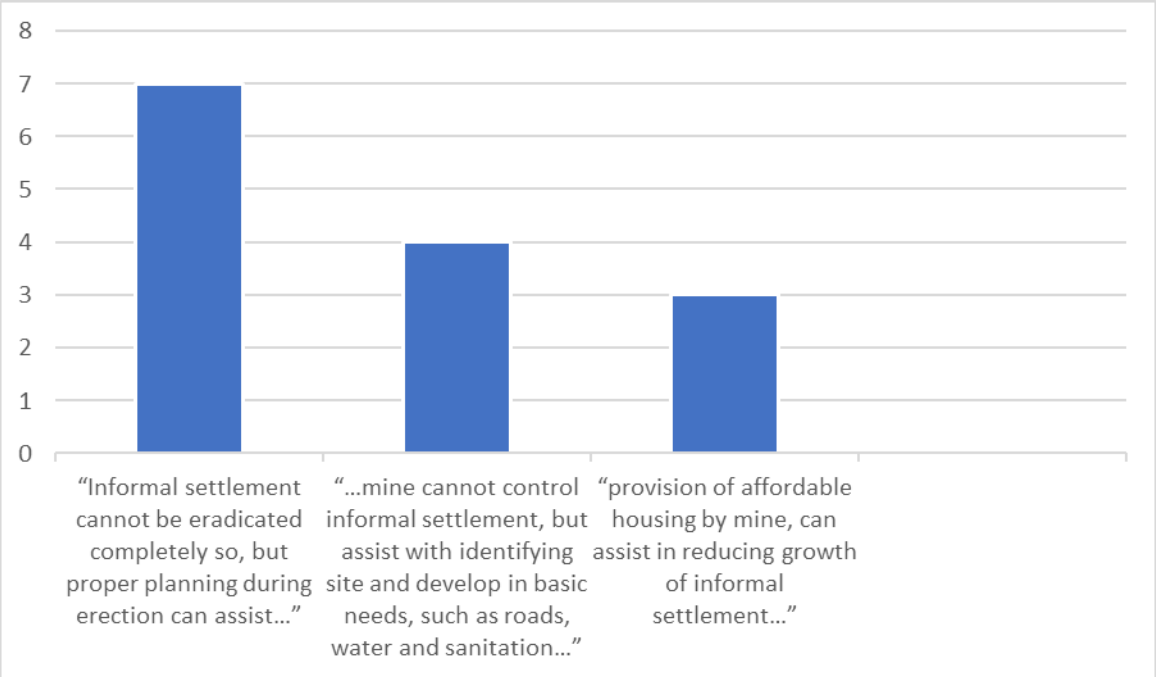


Figure 4.6.2.1 Proper planning required for the erection of informal settlement (N=12)

This study's findings highlight that majority of the participants are of the belief that mitigating the challenges brought by mining activities in Thabazimbi community must include among others proper planning of erection of informal settlements. Participants believe that, properly planned informal settlements may assist in geo-spacial planning which will include development of roads and sanitation. This may assist well in the delivery of basic services as the area will be easily accessible. The mushrooming of informal settlement resulted in the increased levels of social ills, anxiety and stress and poses a threat to the Thabazimbi community. Majority of the participants were in agreement with this, as shown by the narratives they shared:

"Informal settlement cannot be eradicated completely so, but proper planning during erection can assist…"

In the same vein another participant said that:

"…mine cannot control informal settlements, but assist with identifying site and develop in basic needs, such as roads, water and sanitation…"

Over and above, another participant said that:

"provision of affordable housing by the mine can assist in reducing growth of informal settlements…"

Informal settlements have been a challenge in the country and mostly around the mining communities. Marais et al., (2017) indicate that the mushrooming of informal settlements is one challenging aspect the country is faced with. The establishment of informal settlements close to mining places is frequently attributed to mining firms across the globe that provided housing and created towns to house their personnel. With the dawn of democracy, the South African policy has shifted in the opposite way changing the emphasis to forming integrated communities and promoting home ownership. Regardless of this policy shift, mines have carried on shaping local housing conditions. One direct consequence has been the growth of informal settlements.

In relation to the narratives provided, most participants are of the view of the above that the complete eradication of informal settlements does not seem to be a possible

phenomenon. Nonetheless proper planning of these settlements can assist in mitigating some challenges brought by mining activities within the community.

4.6.3 Employment needs to prioritise locals

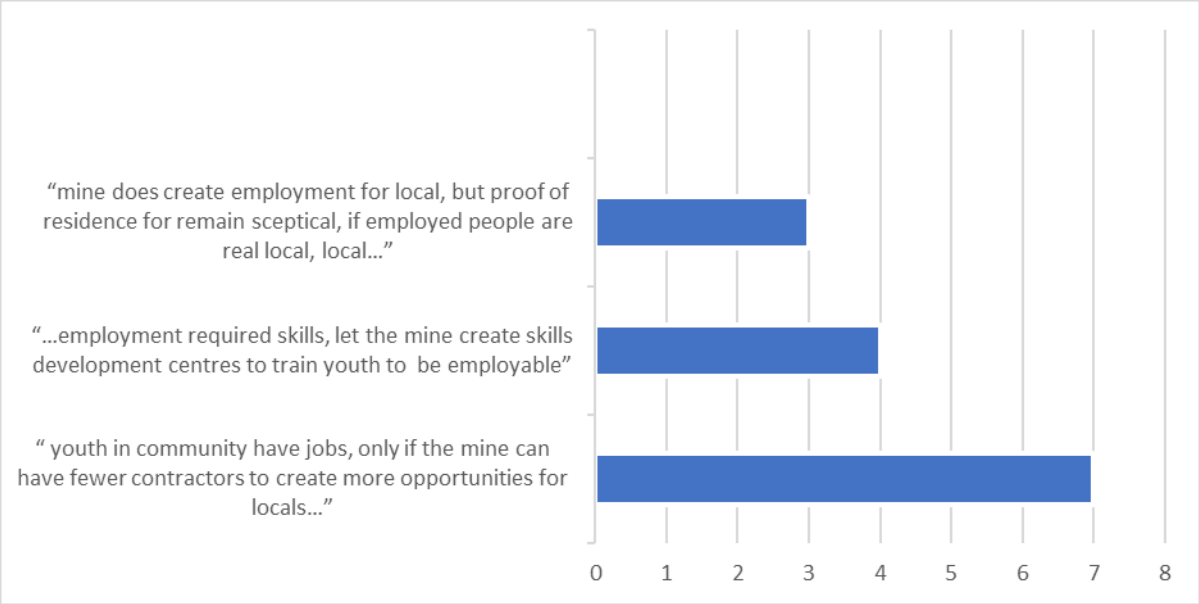


Figure 4.6.3.1 Employment needs prioritise locals (N=12)

Most participants think that among other measures to mitigate the challenges brought by mining activities in community is prioritising employment for locals. Majority of the participants believe that creating employment and providing first preference to locals can be another mitigating measure. In support of this argument, some of the participants explained that:

" youth in community have jobs, only if the mine can have fewer contractors to create more opportunities for locals…"

Some of the participants emphasised that although employment opportunities can be created, skills remain an important factor.

"…employment requires skills, let the mine create skills development centres to train youth to be employable"

and

"mine does create employment for local, but proof of residence for remain sceptical, if employed people are real locals, locals…"

In light of this, majority of the participants indicate that the other methods the mine can capitalise on as a way of mitigating challenges brought by mining activities in the community will be prioritising locals for employment. Participants believe that the mine does create employment for locals, but the challenges that remains is some jobs require skills and the most pressing one is the verification of local people using municipality proof of residence. Department of statistics SA (2022) disclosed that, the scourge of unemployment in South Africa is a shocking reality and in 2022 the country recorded an unemployment rate of 33,9% in the second quarter of unemployment rates. As such, the need to prioritize employment for locals remain paramount.

4.6.4 Monitor procurement opportunities to benefit local SMMEs

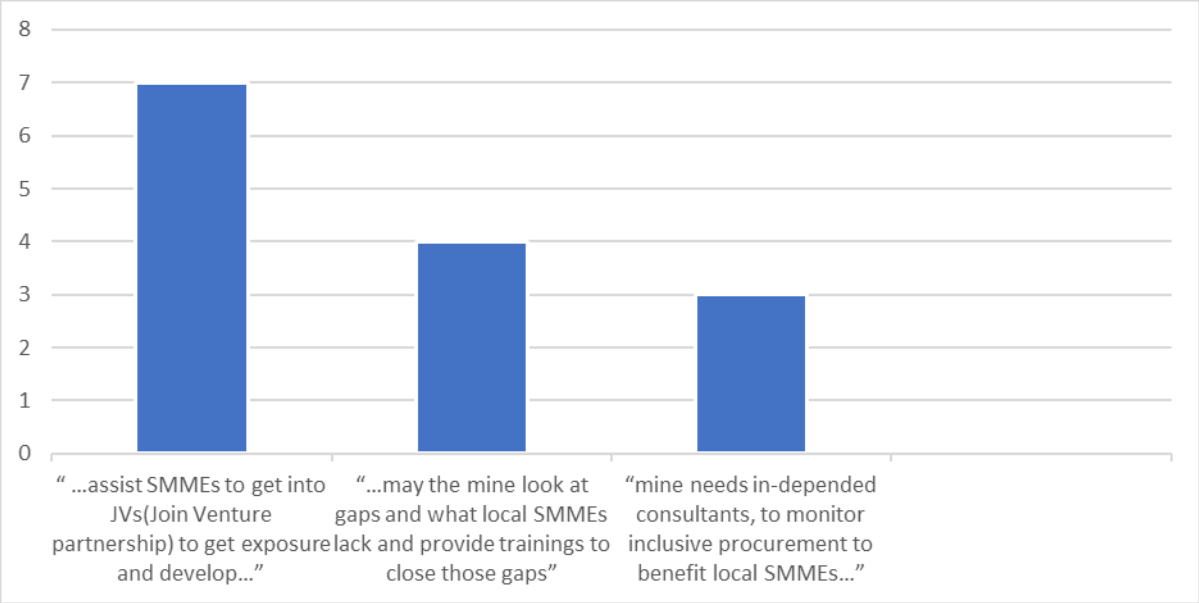


Figure 4.6.4.1 Monitor procurement opportunities to benefit local SMMEs (N=12)

The findings reflect that most participants think that to mitigate challenges brought by mining activities in community there should be monitoring of procurement opportunities to benefit the local SMMEs. This theme was depicted very well in the following response:

" ...assist SMMEs to get into JVs (Join Venture partnership) to get exposure and develop..."

and

"…may the mine look at gaps and what local SMMEs lack and provide trainings to close those gaps"

and

"…Amandelbult is currently having expansion projects on site, but this is mostly mechanized. We will be so humbled if the mine can proactively develop local SMMEs, so that equipment and machinery have service workshop in the area of influence. This will in a way develop more employment for locals…"

Some of the participants indicated that:

"mine needs in-depended consultants, to monitor inclusive procurement to benefit local SMMEs…"

These findings are closely connected to literature where the Department of Mineral Resources (2016) highlights that the Mining Charter and the BBBEE's norms of good behaviour direct mining corporations to contribute to economic adjustments which in this case takes the shape of enterprise expansion, in agreement with the Mineral and Petroleum Resources Development Act 28 of 2002. The revised Mining Charter states that sector policies were created to help mining companies fulfil their obligation to support the socioeconomic growth of the communities in which they work and to show them how to do so sustainably so that the communities' socioeconomic well-being is not solely dependent on the mine (Department of Mineral Resources, 2016).

Furthermore, Broad-Based Black Economic Empowerment (Act 53 of 2003) emphasize that, as a component of the BBBEE policy, enterprise development aims to direct companies "willing" to support black entrepreneurs in growing their small, medium, and micro-sized enterprises (SMMEs) or support the creation of new black small companies by availing funds or nurturing business. The availing of office space, tools and machinery, exposure of SMMEs to markets, and business mentoring are all components of SMME incubation.

4.7 Recommendations by resident employees on how these challenges caused by mining activities in the Thabazimbi community can be mitigated

i. Create alternative economic activities alongside mining

Most participants emphasised that mining is a different sector to work in. Mineral resources get depleted hence shafts are reduced and closed, as a result participants

highlighted the need to create alternative economic activities apart from mining. This was to assist in times communities are faced with uncertainties of mine closure so community may be sustained. participant shared their views on the matter as follows:

> *"Thabazimbi has tourism sites, nature reserve sites and it is surrounded by agricultural farms, alternative economy may come from these areas."*

The mine may capitalize on educating and creating awareness to the communities that apart from mining, alternative sectors can be investigated and assessed for economic development. As Mantashe (2021) mentioned that the vital responsibility of mining in the growth of South Africa is huge. Numerous towns such as Boksburg, Rustenburg, Welkom, Johannesburg and Thabazimbi included have been established because of mining. This has resulted in the livelihoods of the surrounding town to become solely dependent on mining ventures for their economic well-being and existence. The economic upkeep of most of these towns become difficult when mining operations inevitably decrease. Hence it is important, that interested parties in mining headed by mining firms and the government, proactively consider forming other economies to see to it that communities continue to be economically functional after the decommissioning of the mines. There is no definite answer to mine shutdowns, but the connection between mining and agriculture makes agriculture a desirable and sustainable solution.

ii. Provision of portable skills development centre

Majority of participants are more in support of the latter theme, nonetheless their responses mostly emphasised the need for a skills development centre to support in providing different skills that enable communities to develop new skills independent from the mine. Resident employees share the same sentiments that individuals need to consider different sectors for opportunities:

> *"Mine cannot employ all young people, let them provide skills training over and above mining skills. Yes, we can see that the mine is closing shafts down as its resources are depleted. Let the mine assist in reskilling its employees and provide new skills to the youth to prepare them for new opportunities."*

4.8 Chapter Summary

This chapter showed and discussed the results emanating from the study. The perceptions and experiences of Thabazimbi resident mine employees regarding the perceived effects of mining activities within their community were discussed together with how the resident employees perceive means of improving relations with the mine. Also, the perceptions of the resident employees in mitigating challenges presented by mining activities and recommendations of how the mine can lessen its impact on communities they are operating within. A summary of main findings, conclusion and recommendations are presented and deliberated in the ensuing chapter.

CHAPTER FIVE

MAIN FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The mining sector in South Africa has been in existence since time immemorial and has been the main contributor to the growth of the economy. However, in some mining towns, it has brought both positives and negatives when it came to the wellbeing of the community. Therefore, the aim of this research was to explore the experiences of Thabazimbi resident mine employees regarding the perceived effects of mining activities within their community.

5.2 Summary of the main findings

The synopsis of the main findings will be grounded on the objectives of the study.

Objective 1: This objective of the study sought to explore the benefits that mining activities have brought to Thabazimbi community

The 12 participants of the study identified the benefits that mining activities have brought to the Thabazimbi community. They identified the main benefits as improved community welfare, creation of employment opportunities for the community and reduced poverty levels within the Thabazimbi community. In addition, some resident employees were of the opinion that the mine cannot be looked at as the sole entity to benefit and enhance the livelihoods of the community, however, government, through the municipality needs to come on board and let this be an all-inclusive effort.

Objective 2: The second objective of the study sought to explore the challenges experienced by Thabazimbi resident employees since the inception of mining activities in their community

Findings showed that different views were shared by participants on this regard and quite disturbing perceptions held by the majority were on the negative impacts caused since the inception of mining in the area. Participants revealed that, the development of mining activities in their community brought about a lot of social ills such as excessive substance abuse, and an increase of informal settlement around the community leading to increased criminal activities and further environmental degradation.

In addition, there was an outcry on the loss of community identity, that is culture and heritage as people came in with their own beliefs and customs into Thabazimbi community. Again, abrupt mine closures, poor planning around mine closures are some challenges related by the study. Again, the research participants described that the municipality is partly to blame for some of the challenges faced in the community through its over reliance on the mine to provide services that it is supposed to offer. Poor service delivery by the municipality due to influx of migrants and political instability within Thabazimbi municipality which impacts negatively on community as leaders are fighting in courts instead of focusing on delivering services to people were some of the challenges revealed by this study.

Objective 3: The third objective of the study sought to explore resident employees' opinions in mitigation challenges presented by mining activities in Thabazimbi community

The study findings showed that different views were shared by participants on how challenges presented by mining activities can be mitigated in Thabazimbi community. Most participants held views such as creating awareness over community SLP projects to benefit community, again that proper planning is required for the erection of informal settlements as influx of migrates is inevitable. Furthermore, some participants were of a view that employment by the mine needs to prioritize locals and most importantly that the mine must monitor procurement opportunities to benefit local SMMEs as this will empower locals to grow and even be able to create employment within their community. Participants held a belief that, if the mine can look into the aforementioned opinions this can assist in mitigating the challenges brought by mining activities within the community.

Objective 4: The fourth objective of the study sought to elicit recommendations from Thabazimbi resident employees on how the effects of mining activities can be mitigated.

Findings indicated that, recommendations elicited from Thabazimbi resident employees regarding mining activities within their community included participants view that, creating alternative economic activities alongside mining will be beneficial to the community since they will have other economic activities when the mine closes or has reached its end of life. Moreover, participants revealed that providing a skills development centre can assist in mitigating the unintended impacts of mining

activities to the community, over and above will be able to prepare resident employees for opportunities outside the mine to rely on when the mine closes.

5.3 Conclusions

The study shows that the experiences of resident mine employees were both positive and negative. The argument that Amandelbult Mine was viewed as a good employer that seeks to make meaningful impact around the community it is operating within was expressed by resident employees as a humble act looking at the number of employees that the mine solely employed, which had a positive impact on the livelihoods and wellbeing of these families.

However, even though most resident employees perceived the mine in that regard, others also indicated that the inception of mining operations in Thabazimbi had undesirable consequences on the community. This then calls for awareness raising and the use of the required interventions in order to mitigate the concerns raised. It is hoped that this study might initiate debates in this area of research, thereby highlighting the need for relooking into mining activities in different communities so as to lessen the negative impacts of these activities in the communities where these mines operate.

5.4 Recommendations

Based on the aforementioned findings and conclusions, the following proposals are made:

a) for the mining companies;

Advance planning in anticipation for migrant and informal settlements

- The influx of migrants within the area and the subsequent emergence of informal settlements have often caught the mine and council by surprise.
- These informal settlements become uncontrollable and a burden to the municipality as it has to provide services to these settlements.
- Thus, the mine should be in a position to assist the municipality with resources to address issues affecting the neighboring community to prevent and manage disasters that might result from the increase in population in the areas due to the influx of migrants.

Creating alternative economic activities outside mining

• Crime increased in the community since the inception of mining as well as prostitution and the prevalence of HIV and AIDS around trucking deport.

• People are venturing into these activities due to poverty since the mines cannot offer employment opportunities to everyone.

• Hence, the mine should create alternative economic activities so that those not employed by the mine can earn a living through honest means rather than engaging into crime and prostitution for a living.

• These alternative economic activities can also assist former employees when shafts shut their operations so that they are not left stranded.

Regulation of liquor outlets and consumption

• Substance abuse has been identified among the social ills that have bedeviled the community.

• The spread of liquor outlets on every corner of the community must be contained as well as ensuring that rules governing the sale of liquor and consumption of alcohol are adhered to in order to create a conducive environment in the community.

• The mine should play a leading role in creating sanity in areas close to their mining areas through working closely with law enforcements agents.

Support and development of local SMMEs

- Given their highly conservative nature, South African banks and lenders are more inclined to put resources in small businesses in their later stages of development. They are less likely to lend to start-up SMMEs.
- The lack of access to physical infrastructure is a key impediment to business growth and adds significantly to the cost of doing business. This together with lack of training and education and shortage of skills development in general is an impediment and negatively affected this sector.
- Hence the mine needs to provide capacity building through the services of inclusive procurement, supply chain and Anglo Zimele in order to support and develop this sector.

b) **for occupational social work practice**;

Awareness on community projects for the welfare of host communities

- Community projects that are supposed to develop and improve the welfare of the host community are perceived not to be fulfilling their intended purpose.
- As such the occupational social workers should take lead and make use of mine resources to create awareness and educate the community, so that the community can take full advantage of the available projects to promote and enhance the welfare of their entire community.
- Occupational social workers can ensure this by teaching the communities that, they (communities) are the drivers of SLPs and remind them what are their responsibilities in this regard. Moreover, educate communities how and where do they complain if a mine is not adhering to its SLP so to keep the mine accountable.

- Most importantly occupational social workers need to advocate that, the mine's bursary, internship and experiential learnship opportunities are reinforced for the host communities and provide mentorship for these programs so to benefit employees and mine communities.

c) for policy;

Encouraging the continued fulfilment of the mining charter

- The current benefits enjoyed by the community of Thabazimbi as a result of the mining operations need to be maintained.
- The community needs support and care from the mine to improve their well-being and reduce poverty levels.
- The government needs to ensure this through the continued calls and monitoring of mines to fulfil the mining charter particularly the following objectives: to exploit and develop the current skills base for the empowerment of Historically Disadvantaged South Africans (HDSA) and to assist the community; and to encourage employment and improve the social welfare of mining communities and labour sending areas.
- This will result in more benefits for the community.

d) for research

As this study only focused on Amandelbult mine in Thabazimbi, it is recommended that similar studies can be done with a representative sample across the province and/or country in order to ascertain how other mining communities experience the mining activities in their communities.

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APPENDIX A

PARTICIPANT INFORMATION SHEET

Dear Sir / Madam

I am **Mashiatshiti Johanna Ditshego** a Master's student in Occupational Social Work at the University of the Witwatersrand, Johannesburg. My supervisor is Dr N. Dube. I am carrying out a research study about perceived experiences by Thabazimbi employee residents. The study title is **Experiences of Thabazimbi Resident Employees Regarding the Perceived Effects of Mining Activities within their Community. The case of Amandelbult Mine in Limpopo, South Africa.**

I am kindly requesting your participation in a research study. Should you decide to get involved in the study, a maximum of 45 minutes of your time will be required to respond to the questions in an individual interview. The interview will be conducted at [Amandelbult] at [09:00]. If you allow me, the interview will be audio recorded and the data will be kept in a PASSWORD protected laptop for 2 years and deleted afterwards. The researcher is the only person that will have access to the data. During the research interview, I shall ask for your personal information, including your name and surname, your date of birth, how long have you resided at Thabazimbi and how long have you been working for Amandelbult mine.

The interview is private and confidential and when the results of the study are shared, your names or any information that can lead to your identification will not be included. Other researchers may only utilise the information gathered in this research study with your permission, but your identity or any personal data shall not be used or shared with anyone. Participation in this study is voluntary and you have the right to withdraw your participation at any point in time. You will not get any direct benefits either in cash or kind if you choose to join the research study. Your decision not to take part in this study does not result in any form of punishment, loss of benefits or privileges. As a participant you are not compelled to respond to any questions if you do not wish to

The findings of this study will be included in a research report and the report will be made public on the university library website. If interested in a summary of the research and I am very glad to share it with you.

Should you have questions during the course of the interview or more questions afterwards concerning the study please do not hesitate to get in touch with me or my research supervisor using the contact information below. Any issues in relation to ethical procedures that you might want to raise feel comfortable to communicate with the University Human Research Ethics Committee (Non-Medical), telephone +27(0) 11 717 1408, email hrecnon-medical@wits.ac.za.

Yours sincerely,

Mashiatshiti Johanna D (Ms)

Researcher:
Mashiatshiti Johanna Ditshego, 2456025@students.wits.ac.za, 072 298 3767

Supervisor:
Dr. Nkosiyazi Dube, Nkosiyazi.Dube@wits.ac.za, 073 093 3485

APPENDIX B

CONSENT FOR PARTICIPATING AND AUDIO RECORDING

Title of project: Experiences of Thabazimbi Resident Employees Regarding the Perceived Effects of Mining Activities within their Community. The case of Amandelbult Mine in Limpopo, South Africa

Name of researcher: Mashiatshiti Johanna D

I, ……..…..., consent to take part in this research study.

I consent to the ensuing:
(Please circle the relevant options below)

The research study was clarified to me. I comprehend what this study is all about.	YES	NO
I comprehend that I can volunteer to participate in the study.	YES	NO
I give my permission for the interview/focus group/other activity to be audio taped.	YES	NO
I consent that direct quotations from my interview to be extracted and utilised the researcher's report/ manuscript/book chapter	YES	NO
I consent that my participation must remain anonymous (my name should not be utilised by the researcher in their research report/manuscript/book chapter)	YES	NO
I consent that other researchers may utilise the data I provide in my interview (depending on their own ethics clearance being obtained) but my identity and personal information will not be used or passed on	YES	NO

…… (signature)

…… (name of participant)

…… (date)

…… (signature)

…… (name of researcher/person seeking consent)

…… (date

APPENDIX C

SEMI-STRUCTURED INTERVIEW QUESTION FOR EMPLOYEES

Demographic data:

Name and Surname : …….

Gender …….

Age: 19-29 ☐ 29-39 ☐ 39-49 ☐ 49 and above

Level of education: Primary ☐ Secondary ☐ Degre/ Diplo ☐ Post Deg/Dip ☐

Number of years employed in AMB……

How long have you stayed in Thabazimbi: ……?

To explore the benefits, if any, that mining activities has brought to Thabazimbi community.

- If you remember, how long has mining began in this area? Are there any notable differences that you can allude to? (These can be both positive and negative).
- In your view, is the mine doing anything to improve the community's wellbeing in general? Or any setback brought in the community by the mine.
- What are the socioeconomic development activities that the mine is doing to benefit the community? May you kindly describe them?

To understand the experiences of Thabazimbi resident employees since the inception of mining activities in their community.

- Since the mine came to operation, what has been your experiences regarding the mining activities within your community?

Is life within the community still the same as per before mining took place? Are there any notable changes that the mining activities have brought about in this community? Kindly elaborate on your response. If possible, highlight both the positive and negatives.

To explore the notable changes within the Thabazimbi community that were brought by mining activities in their community.

- Looking at your community, are there any developmental gains or drawbacks that you can allude to that are as a result of this mine?

To elicit recommendations from Thabazimbi resident employees on how the effects of mining activities can be mitigated.

- In your view, what is it that you think can be done to mitigate some of the negative experiences that you mentioned?

- In your opinion, what can be done to foster the positive experiences that the mine has brought about so that they become sustainable?

If you were the General Manager for this mine, what aspects would be on your agenda to transform the working relationship between the mining sector and the community?

APPENDIX D

SEMI-STRUCTURED INTERVIEW SCHEDULE FOR KEY INFORMANTS

Demographic data:

Name and Surname : …….

Gender …….

Age: 19-29 ☐ 29-39 ☐ 39-49 ☐ 49 and above

Level of education: Primary ☐ Secondary ☐ Degre/ Diplo ☐ Post Deg/Dip ☐

How long have you stayed in Thabazimbi: ……?

To explore the benefits if any that mining activities has brought to Thabazimbi community.

So as a principal / religious leader in this area, what do you think has been the most important gains that this community has benefited from the mine?

- If you remember, how long has mining began in this area? Are there any notable differences that you can allude to? (These can be both positive and negative).
- In your view, is the mine doing anything to improve the community's wellbeing in general? Or any setback brought in the community by the mine.
- What are the socioeconomic development activities that the mine is doing to benefit the community? May you kindly describe them?

To understand the experiences of Thabazimbi resident employees since the inception of mining activities in their community.

- Since the mine came to operation, what has been your experiences regarding the mining activities within your community?
- Is life within the community still the same as per before mining took place? Are there any notable changes that the mining activities have brought about in this community? Kindly elaborate on your response. If possible, highlight both the positive and negatives.

To explore the notable changes within the Thabazimbi community that were brought by mining activities in their community.

- In your view, are there any self-sustaining projects or initiatives developed for the community by the mine?
- Looking at your community, are there any developmental gains or drawbacks that you can allude to that are as a result of this mine?

To elicit recommendations from Thabazimbi resident employees on how the effects of mining activities can be mitigated.

- In your view, what is it that you think can be done to mitigate some of the negative experiences that you mentioned?
- In your opinion, what can be done to foster the positive experiences that the mine has brought about so that they become sustainable?
- If you were the mayor what aspects would be on your agenda to transform the working relationship between the mining sector and the community?

APPENDIX E:
PERMISSION LETTER

[OFFICIAL]

AngloAmerican

SECURITY CLASSIFICATION

PLATINUM

Rustenburg Platinum Mines Limited

TUMELA MINE

R510 Thabazimbi Road
Chromite
0362
South Africa

Date: 17 March 2022

The Chairperson
Wits Human Research Ethics Committee (Non-Medical)

Dear Sir/Madam

RE: Approval and permission to Conduct Research within the Amandelbult Complex (Ms. Mashiatshiti Johanna Ditshego - Student Number :2456025)

This letter serves as confirmation that Amandelbult Complex (Mine) have granted Ms. Mashiatshiti Johanna Ditshego (the researcher) permission to conduct her research within the mine premises. Her research topic is "**Experiences of Thabazimbi Resident Employees Regarding the Perceived Effects of Mining Activities within their Community. The case of Amandelbult Mine in Limpopo, South Africa".**

We wish her all the best with her research and look forward to reading the report once the study is done.

Sincerely,

AngloAmerican

Ethne Makgasane- Lefakane
17 -03- 2022
Snr Social Perfomance Manager
Tel : 014 784 15

Regards,
Ethne-Lefakane-Makgasane
Snr. Social Performance Manager
E:Ethne.makgasane@angloamerican.com
T +27 (0) 14 784 1557

PLATINUM
Anglo American Platinum Limited
R510 Thabazimbi Road, Amandelbult Complex, Tumela Mine, Thabazimbi,0362 , South Africa
P O Box 02, Chromite, 0362, South Africa

www.angloamericanplatinum.com
A member of the Anglo American plc group

RIGHT WORK. RIGHT TIME. RIGHT WAY.

A member of the Anglo American plc group

Rustenburg Platinum Mines Limited
Registered Address: 55 Marshall Street, Johannesburg, 2001. P O Box 62179, Marshalltown, 2107 South Africa. T +27 (0) 11 3736111 F +27 (0) 11 3735111
Incorporated in South Africa. Registration Number: 1931/003380/06

Directors: CI Griffith (Chairman) I Botha G Humphries S Machell-Mkhabela L Mogaki, DW Pelser, I Pillay, VP Pillay GL Smith
Company Secretary: Anglo Operations Proprietary Limited

APPENDIX F

ETHICS CLEARANCE CERTIFICATE

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

SCHOOL OF HUMAN AND COMMUNITY DEVELOPMENT ETHICS COMMITTEE
CONSTITUTED UNDER THE UNIVERSITY HUMAN RESEARCH ETHICS COMMITTEE (NON-MEDICAL)

CLEARANCE CERTIFICATE	**PROTOCOL NUMBER: SW22/03/01**
PROJECT TITLE	Experiences of Thabazimbi Resident Employees Regarding the Perceived Effects of Mining Activities within their Community. The case of Amandelbult Mine in Limpopo, South Africa
INVESTIGATOR	**DITSHEGO MASHIATSHITI JOHANNA**
SCHOOL/DEPARTMENT OF INVESTIGATOR	SOCIAL WORK
DATE CONSIDERED	24 May 2022
DECISION OF THE COMMITTEE	Approved unconditionally
RISK LEVEL	MINIMAL RISK
EXPIRY DATE	29 JUNE 2025

ISSUE DATE OF CERTIFICATE 29 June 2022 **CHAIRPERSON** (DR L PETERSEN)

cc: Supervisor:

DECLARATION OF INVESTIGATOR

To be completed in duplicate and **ONE COPY** returned to the Chairperson of the School/Department ethics committee.

I fully understand the conditions under which I am are authorized to carry out the abovementioned research and I guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee.

Signature **Date** 07/07/2022

PLEASE QUOTE THE PROTOCOL NUMBER ON ALL ENQUIRIES