

The impact of mining companies on community development in the
Dilokong and Ga Pila villages in the Sekhukhune and Waterberg
Districts of Limpopo Province

Submitted by

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DECLARATION

I, Mathabatha Margaret, the undersigned, hereby declare that the work contained in this thesis is my own original work and that I have not previously, in its entirety or in part, submitted it at any university for a degree.

Signature: _____

Mathabatha Margaret

Date: _____

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DEDICATION

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ABBREVIATIONS

BBSEE Broad Based Socio economic Empowerment

BEE Black Economic Empowerment

CSR Corporate Social Responsibility

CDWs Community Development Workers

EIA Environmental Impact Assessments

GDP Gross Domestic Product

HDSA Historically Disadvantage South Africans

IDPs Integrated Development Plans

LPGDS Limpopo Provincial Growth and Development Strategy

MPRDA Mineral and Petroleum Resources Development Act

NEPAD New Partnership for Africa's Development

NFCA Non Ferrous Corporation in Africa

NGO Non-Government Organization

SAHRC South African Human Rights Commission

SMMEs Small, Medium and Micro Enterprises

ABSTRACT

The impact of mining companies on community development in the Dilokong and Ga Pila villages in the Sekhukhune and Waterburg Districts of Limpopo Province has been demonstrated in many ways in this study. The mines have influenced the economic, environmental and social aspects of the Province. The study has revealed that even though mining has placed the Province on the global economic map, the reality is that often the environmental damage is hidden; this was shown by the fact that respondents reported over usage of water by mines.

It is clear that the impacts both good and bad of mining begin before mines were even established and does not disappear with the closure of a mine. Mining does not have a good record of contributing to sustainable development or poverty reduction. This research has indicated that mineral extraction is neither necessary nor sufficient for sustained economic growth, and that it has not helped developing communities escape from poverty. This belief is due to the fact that the mines are not following mining charter and other related acts.

In conclusion, these benefits may look good on paper, but it is difficult to gauge whether the community are really gaining from this mining projects.

CHAPTER ONE: INTRODUCTION: MINING COMPANIES AND COMMUNITY DEVELOPMENT

1.1 Introduction

In more than hundred countries around the world, mining companies and individual miners dig minerals and metals out of the ground, satisfying a slowly but continuously increasing demand from industrial production, agriculture, high-tech sectors, and merchandise producers. Among those countries are more than fifty that can be considered “mining countries,” well known for the sector’s contribution to export earnings. These include Australia, Botswana, Chile, Canada, Guinea, Kazakhstan, Papua New Guinea, Peru, and South Africa (International Finance Corporation (IFC, 2000).

Mining is an important sector in the Limpopo Province. The Limpopo Provincial Growth and Development Strategy (LPGDS, 2004) identifies mining as one of the key drivers of the provincial economy, noting its potential to contribute to economic growth, job creation, enterprise development and broad-based economic empowerment. The world's largest reserves of platinum group metals are found in the centre of the province, which also have rich deposits of chrome, vanadium, nickel, diamonds, coal, chrome, iron ore, copper and titanium (LPGDS, 2004). Large coal reserves occur in most of the western parts of the province and are associated with significant quantities of natural gas or coal bed methane (Jeffrey, 2005).

Major international mining operations contribute to 20% of Limpopo's economy, making mining the primary driver of economic activity after government services (LPGDS, 2004). The good public standing of mines in a developing country requires their benefits to flow at both national and local community level. But there is pressure on mining companies to catalyse socio-economic development across sectoral boundaries and, especially, beyond mine closure (Sharp-Paul, 2007).

1.2 Statement of the Problem

About 3.9 billion people live in today's 56 "mining countries;" 90 percent of them in the 51 developing and transition countries. Among the 3.5 billion people in these countries, about 1.5 billion live on less than \$2 a day, making up nearly two thirds of the world's poorest population. Their countries have potential mineral wealth and thus one of the key questions for them is how they can turn this endowment into an economic asset that will help them find ways out of persistent poverty (IFC, 2003).

The mining sector in South Africa has enjoyed decades of profiteering and unchecked neglect of developmental needs of surrounding communities. Most of the communities surrounding South African mines are therefore synonymous with social problems that include poverty, poor health, unemployment, adult illiteracy, poor housing, family disorganisation and high influx of unaccompanied migrant labour. Recently, external forces, including globalisation, the government through the Mining Charter and the Mineral and Petroleum Resources Development Act (MPRDA), and the communities have put pressure on mining organisations in South Africa to start behaving like a corporate citizen, taking social responsibilities and work towards sustainable development in the areas that they operate (Cronje, Theron and Chenga, 2005).

Despite the Limpopo Province's endowment with mineral resources, the incidence of poverty in it is among the highest in the country. Sekhukhune District, for example, has some of the largest mining operations; and yet, it is one of the poorest districts in the country to the extent that in 1999, it was declared as a presidential node which has been earmarked for state support in order to enhance development in the area (Chenga, Cronjé and Theron, 2006).

The Dilokong Chrome mine, Tameng Platinum, Modikwa Platinum are examples of many other mines that have allocated equity to the local communities. However, this does not appear to be sufficient because there are still protests and upheavals against mining companies in the area. Legal responsibilities are also required by the society that demands that businesses abide by the law and "play the rules of the

game” and that laws are codification of society’s moral views, therefore abiding by these standards is necessary. “The satisfaction of legal responsibilities is required of all corporations seeking to be socially responsible” (Mattila, 2009).

Communities complain about Section 21 companies which have been created by the mines to implement their Corporate Social Responsibility (CSR) activities. The dissatisfaction about Section 21 companies in Limpopo Province led the communities around the mining operations to protest against them. There is a perception among community members that Section 21 companies are bribed and given kickbacks so that they do not enforce the mines’ CSR. Communities experience major economic inequalities between themselves and mining companies. These communities are living in conditions where there is little or no infrastructure or basic services. Communities feel that these Section 21 companies are working in collaboration with the mining companies to give them a raw deal. They complain that they have to make way for mining activities which trampled on their graves and disregarded their deceased (Carlos, Carolyn and Ralston, 2008).

1.3 Significance of the Study

The study will provide a detailed insight into the activities of mining operations in the villages under study and assess the extent to which they are contributing to the development of the communities. Findings should contribute to knowledge about the role of mining companies in development. This may be useful in terms of further policy development with regard to the use of the country’s mineral resources.

1.4 Aim of the Study

The overall aim of the study is to assess the contribution of mining companies to the development of communities in the areas in which they operate.

1.5 Research Objectives

The main objectives of the study are:

1. 5.1 to review the operations of the mining companies;
1. 5.2 to assess the social, economic, cultural and environmental impact of the mines on the communities; and
1. 5.3 to assess the responses of the communities.

1.6 Research Questions

The researcher poses a number of questions including the following:

1. 6.1 What is the nature of mining investments in the Dilokong and Ga-Pila villages?
1. 6.2 How are mining companies contributing to the development of the two villages?
1. 6.3 What are the perspectives of the communities with regard to the operations of the mining companies?
1. 6.4 Which structures exist in order to promote dialogue between the companies and the communities?
1. 6.5 To what extent are the communities involved in terms of decision-making with regard to the corporate social responsibility activities of the companies?
1. 6.6 How sustainable are the companies' CSR activities?
- 1.6.7 To what extent do the CSR initiatives (if any) empower the communities?
- 1.6.8 What strategies are in place to ensure sustainability of the communities in the event of closure of the mines or depletion of the mineral resources?

1.7 Definitions of Concepts

Different authors define community development in different ways. However, there is consensus about its focus on the development of communities. A few definitions are presented here.

1.7.1 *Community Development*

This is a process in which community-based groups manage their existing resources to stimulate economic activity in an economic area focusing on alleviating poverty and the redistribution of wealth (Akpalu and Parks, 2007).

It is a collective activity in that a group of people sharing mutual problems, need, sentiment or concern act together and share in concert and share a certain responsibility for the action. Such a collective action is a human activity, dealing with human problems and needs (Akpalu and Parks, 2007).

A process by which members of a society increase their potential and institutional capacities to mobilize and manage resources to produce sustainable and justly distributed improvements in their quality of life, consistent with their own aspirations (Akpalu and Parks, 2007).

It is the conscious process wherein small, geographically conscious communities are assisted by the more developed communities to achieve improvement standards of social and economic life? This is done primarily through their own local efforts and community participation at all stages of goal selection, mobilization of resources and execution of projects, thus enabling these communities to become increasingly self reliant.

1.7.2 Sustainable Community Development

This is the ability of communities to utilize their natural human and technological resources to ensure that all members of present and future generations can attain a high degree of health and well being, economic security and a say in shaping their future while maintaining the integrity of ecological systems on which all life and production depends (Kumah, 2006).

It is a neighbourhood of humans in a place plus the place itself, its soil, its water, its air and all the families and tribes of nonhuman creatures that belong to it - a complex connection not only among human beings and their homeland but also between the human economy and nature, between forest and field or orchards, and between troublesome creatures and pleasant ones. All neighbours are included (Kumah, 2006).

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

Mining is one of the oldest industries in the world and its history has evolved with human history. It is an economic activity that consists of the extraction of potentially usable and non-renewable mineral resources (excluding petroleum, natural gas and water) from land or sea without involving agriculture, forestry or fisheries (Boon and Ababio, 2009). The exploitation of mineral resources has accelerated during the past century with the discovery of new ore bodies and the development of new mining and metallurgical technologies. These mineral resources hold the promise of exceptional long-term social and economic benefits for the region (Hounsome and Ashton, 2001). Such potential benefits are recognised as a key component of the recently launched and widely supported New Partnership for Africa's Development (NEPAD).

The mining industry is an important aspect in the development of local and foreign economies in that it contributes to government's Gross Domestic Product (GDP), growth, job creation, revenues and skilling of personnel. However, mining does not have a good record of contributing to sustainable development or poverty reduction. The World Bank's own research has indicated that mineral extraction is neither necessary nor sufficient for sustained economic growth, and that it has not helped developing nations to escape from poverty (World Bank, 2006).

This chapter presents a theoretical framework that illustrates the role that can be played by mining companies in the development of communities. It also reviews the evidence of the impact of mining on communities. It focuses on historical background and presents the policy and legislative framework which governs the mining companies.

2.2 Theoretical Framework: Mining Companies and Community Development

Mining activities offer opportunities for communities who live around them, and this may explain why governments in mineral-rich countries tend to invite mining companies to come and invest in the sector. Some of the potential benefits include the employment of local labour (skilled and un-skilled), the development of infrastructure such as roads, schools and clinics through the Corporate Social Responsibility (CSR) activities of the companies, the growth of small to medium enterprises through sub-contracting and other preferential procurement arrangements between the mines and these enterprises. Overall, there is potential to improve livelihoods of communities in mining areas (Ako, 2009).

The concept of CRS is not entirely new to business organizations (Ako, 2009). The modern formulation of CSR obliges organizations to consider the interests of society and take responsibility for the impact of their activities on customers, employees, shareholders, communities and the environment in all aspects of their operations. CSR includes other issues such as human rights, transparency, bribery and corruption, disclosure of information and consumer protection (Ako, 2009).

2.3 Mining Companies in South Africa: The Historical Background

It is generally accepted that extensive mining in South Africa began to occur from the end of the first millennium AD and the start of the 2nd millennium AD. The most well-known early agriculture, herding, mining and trading culture in South Africa occurred at Mapungubwe (Hall, 1987). The discovery of world-class diamond and gold deposits in the latter half of the 19th century laid the foundations for the transformation of South Africa from an essentially agricultural to a modern industrial

economy. Mining, embracing numerous other minerals too, in which South Africa has an exceptional geological endowment' remained at the heart of the economy in the 20th century (Malherbe, 2000).

The unique characteristics of the mining environment in South Africa are that mining communities are mainly isolated, originally rural with high illiteracy rates and are very dependent on the mining companies for their livelihood and development. The rural-based environment often becomes barren and is associated with ugly landscapes from large-scale excavation. In addition, communities are often exposed to toxic environmental hazards from mine operation wastes. Mining is, by its nature, a temporary activity because of its dependence on the available mineral deposits. It is also fast growing and is associated with high earnings for the mining corporations, which have an impact on the local communities who are usually unable to respond to this across-the-board momentum because of their rural-based backgrounds. Consequently the local population experiences cultural shock and do not respond effectively to the developmental changes, occupational skills requirements and the rapid change from an agricultural-based society to a cash dependent environment. This has resulted in companies depending on labour from elsewhere (Cronje and Chenga, 2005).

In the South African mining environment, the developmental initiatives have until recently been on a voluntary basis. Consequently, most mining companies developmental programmes have been philanthropic initiatives in communities surrounding the mines or via national programmes in education, health, welfare or small business development. Hamann and Kapelus (2004) argue that although these initiatives have, in some cases, represented welcome developmental contributions, they have had little impact on the root causes of social problems surrounding the mines. Furthermore, the research findings were that most community members perceive the mines' developmental initiatives as 'window dressing' and artificial (Bench Marks Foundation, 2008).

To overcome this, the concept of 'corporate social responsibility' (CSR) has become the buzzword for social developmental efforts. But again, like sustainable

development, this concept is surrounded by ambiguity and vagueness. In the next section the concept will be discussed in the context of mining in South Africa. As mentioned above, the issue of corporate social responsibility remains vague with numerous descriptions and interpretations of what it entails. For example, the European Commission (Hamann and Kapelus 2004) defines corporate social responsibility as “Essentially a concept whereby companies decide voluntarily to contribute to a better society and a cleaner environment.” The problem is that theory and practice are two different things; mining companies have written their intentions into their company policy documents, but there has never been a check on whether these intentions are being implemented (Bench Marks Foundation, 2008).

The current state of the South African mining communities is a case in point, in showing that most of these policies have been stated but not implemented despite the new political dispensation. To overcome the voluntary nature of CSR and to ensure that companies are accountable for corporate social responsibility, the South African Government has instituted regulatory policies through the South African Mining Charter (2002) and the Mineral and Petroleum Resources Development Act (MPRDA 2004). In summary, these policies require that mining companies achieve 40% per cent historically disadvantaged South Africans’ (HDSAs) participation in management and 10 per cent women participation in mining within five years. In terms of the Communities Regulation 46 (c) iii of the Act specifically requires mines to support infrastructure and poverty eradication projects in line with the Integrated Development Plans (IDPs) of the area in which the mine operates and of major labour-sending areas. The development of community capacity is a crucial component of establishing a sustainable community and, therefore, the government requires that each mine prepares a comprehensive integrated development and implementation plan for communities where mining takes place and for major sending areas. These regulations have now become a prerequisite for mining license renewal (Mining Charter, 2002; MPRDA, 2004).

What the MPRDA has done with the Mining Charter is to put issues of corporate social responsibilities and sustainable development in the hands of the mining industry at national policy level; and what it has not done is to spell out what this

means in practical terms. The result is that the voluntary nature of these concepts still exist in terms of how companies choose, and to what extent, they implement their corporate social responsibilities. Ultimately, the government hasn't got a measuring tool or benchmark to ascertain to what extent companies are implementing their corporate social responsibilities (MPRDA, 2004).

Against the above mentioned background and the findings of this research, taking account of the South African political, economic and social history, the researcher recommended that mining companies take account of the following underlying critical factors in order to prepare the groundwork towards achieving sustainable development and community engagement, namely, acculturation stress, power relationships and communication (Cronje and Chenga, 2005).

2.4 Mining in South Africa: The Case of Anglo and Impala Mines

Anglo and Impala mines mostly in South Africa, account for more than three-quarters of world output of platinum used in applications from electronics and jewelry to devices that curb vehicle pollution. Anglo Platinum Limited is the world's largest primary producer of platinum, (Anglo Platinum, 2000). The company, based in South Africa, was previously called "Anglo American Platinum Corporation Limited". Anglo Platinum expected to produce approximately 2.9 million ounces of refined platinum in 2006 (Anglo Platinum, 2006). Most of the group's operations lie to the northwest and northeast of Johannesburg. The majority of the company's operations take place in the Bushveld complex, a large region that contains a range of mineral commodities including chromium, vanadium, titaniferous magnetite and platinum group metals. Anglo Platinum came into being in 1995 when the company Johannesburg Consolidated Investments unbundled. The platinum interests of the company became Amplats, later to be renamed the Anglo Platinum Corporation Limited. Although Anglo American is a major shareholder in Anglo Platinum, the latter is listed as a separate company on the Johannesburg Securities Exchange (JSE), and on the London and Brussels Bourses.

The company's major facilities and production areas include: Rustenburg production area, Amandelbult production area, Union production area, Bafokeng Rasimone Platinum Mines, Potgietersrus Platinum Mines, Lebowa Platinum Mines, Modikwa Platinum Mine, Kroondal Pooling and Shared Agreement, Polokwane Smelter, Waterval Smelter, Rustenburg base metals and precious metals refiners. Anglo Platinum's products include: platinum, palladium, rhodium, iridium, ruthenium, osmium, gold, copper, nickel and cobalt sulphate (Anglo platinum, 2000).

Ga-Pila falls under Potgietersrus Platinum Mines are based in Waterberg District while Modikwa is in the Dilokong area is under Modikwa Platinum Mine; it is the mining company that handles the country's largest mining site. Apart from making profits for its shareholders and ensuring a safe and healthy working conditions, the critical question is how committed are the policies of the company towards community development? Also, according to the company, other priority areas are to keep and sustain the environment in which they work and make it remain ecologically sound and sustainable, provide employment and improve living standards in the community. It hopes to ensure that "the communities in which they operate derive real social and economic benefits from their presence." Although it would be "ludicrous and unnecessarily restrictive" to expect Anglo Platinum to be solely responsible and involved in every social development aspect of the community, we hope to see an appreciable level of commitment from the company.

2.5 Effects of Mining on the Communities

Platinum mining, like any other mining of extractive minerals, has several methods for its extraction. Whilst each of these methods affects the environment and the community, the extent of impact may differ among methods adopted. In this section, we look at the impact of deep subsurface and open cast mining. Subsurface mining entails the removal of top soil including everything (trees, buildings, homes, roads, etc) that is on the soil over a large tract of land. This type of mining can cause damage to personal properties such as homes, farms, roads and hospitals to name but a few. Open cast mining is a method of extraction whereby underground shafts are sunk and are mainly supported by timber and other types of strong woods such

as teak. The difference between the two methods lies in the fact that whereas the subsurface mining entails the removal of mainly top soils which means mass destruction of everything on that land, the open cast mining “has fewer positive spin-offs like road building, home construction, health clinics etc” (ALRN 2005). However, it has a huge effect on groundwater, as the level has to be lowered below that of the pit, affecting wells and ecosystems over a huge area.

2.5.1 Environmental Impact

The removal of gold ore for extraction disturbs the ecosystem of that area and the surrounding areas as well (ALRN, 2005: 8). The removal of the top soil reduces the vegetation in the area and other biological lives which may be present in the place. The biodiversity as well as the rainfall pattern of the area is completely changed. Over time, the least one would expect is climate change which contributes to global warming. The use of cyanide to extract the gold from the ore can be hazardous to both the land and the water bodies when these chemicals are discharged wrongly after use or when they spill. The chemical destroys streams, rivers and other sources of water bodies thereby contaminating them. Such water may be what the villagers drink; the consequences of which are just as numerous. According to the ALRN (2005: 8), the mining and processing of gold creates heaps of “toxic waste because of the nature and quantities of chemicals used. It produces noise and dust, which can also be toxic and radioactive.” Farmers in mining communities also lose their crops and the fertility of their land to mining activities. Apart from the spillage of cyanide, smoke from the mines can also destroy crops and bring about certain diseases to the inhabitants of the area such as lung diseases and other forms of cancer.

2.5.2 Social-economic Impact

Mining communities enjoy certain facilities such as electricity, construction of good roads and other social and economic amenities. However, these facilities may not make us overlook the negative social impact of mining as their quantity and quality may not be up to the people’s expectations. . Usually, the land earmarked for the mining is sold out by top government officials with very little or no involvement of the local people. Some parts of the land may be considered sacred and special to the

people, but due the mining and processing of gold in the area, the local people are forced out of the land. Again, mining companies use large amounts of water and energy (ALRN, 2005: 8), thereby exerting pressure on the already strained water, land and energy resources. Although the existence of the mining company in the community creates jobs by employing some of the local people and improving their standards of living, the level of poverty in mining companies are nothing to write home about. The worst part comes when the mine is closed down. Economic activities in the community melt down, as people who were employed in the mining company lose their jobs and other subsidiary jobs (which may be providing goods and services to the company) to the company are likely to face a collapse of their businesses. Farmers sometimes lose their land or experience a drastic reduction in their farm output due to land, water or air pollution from the gold mine. The government may pass certain laws which would prohibit the local communities from accessing any natural resource which may be the concession of the mining company.

The AFLN (2005: 13) provides a summary of the environmental, economic and social effects of gold mining in mining communities.

2.5.3 Environmental Impact

The impacts of mining on the environment include the following:

- Water use and water pollution, often in water-scarce situations;
- Energy-intensity, where coal is the main source, as in South Africa, has climate change knock-on effects;
- There is waste in huge volumes, some of it highly toxic;
- The surface of the vegetation is disturbed and there is failure to meet rehabilitation requirements;
- Geological disturbance like sinkholes and seismic movements;
- The effects of acid mine drainage, including the liberating of heavy metals;
- The use of chemicals like mercury and cyanide contaminating water and the land;
- Uranium and radioactivity coming from uranium in tailings and scrap metal contaminated by uranium plants; and

- Dust leading to health problems like silicosis.

2.5.4 Socio-economic Impact

- Loss of sacred places of meeting or worship etc.
- Explosions in open cast mines which leads to cracking of walls in nearby houses and excessive noise levels.
- Environmental injustice where communities are the victims of mining through displacement, loss of land and livelihoods, political confrontations, contaminated
- Ecosystems – especially with “indigenous communities” in remote areas.
- Uneven gender impact, where women shoulder the burden of externalized costs through loss of natural resources, and stress on the social system, while excluded from most of the benefits.
- The legacy of more than a century and a failure of those who profited from mining to take responsibility for the present day consequences that communities live with around abandoned and “ownerless” mines.

2.5.5 Cultural and other impact of mining

Mining also has an effect on the culture of the indigenous people in the community. The presence of mining companies and the removal of forest regions sometimes interfere with the rich culture of the people living in the community especially when they are in a way attached to the natural settings of the area being cleared. Indigenous people and their communities have a historical relationship with their lands and are generally descendants of the original inhabitants of such lands. In another sense, any interference with the natural settings of a community can have an adverse effect on their history and their culture as a people. Closely related to the issue of culture is the adverse effect of mining on the human rights of people living in the communities. Some local people have lost their homes, farmlands and other properties to mining companies without adequate compensation (CMI, 2007). After all, what compensation can be adequate to being evacuated from the land you have grown to love and be used to. Many times, there have been conflicts generated as a result of relocation , and in some cases, people have even lost their lives. Also, people who are considered as encroachers on the concession lands of mining

companies have suffered various degrees of consequences including being shot and injured. Whatever, the method of mining adopted, the community and the environment suffer some negative impacts?

2.5.6 Controlling the Environmental Impacts of mining: The role of EIA

“Environmental Impact Assessment (EIA) is a process for taking account of the potential environmental consequences of a proposed action during the planning, design, decision making and implementation stages of that action” (Morrison-Saunders 2004:1). The EIA process also takes into consideration the socio-economic impacts of such proposed courses of action (UNEP 2004: 4). Mining companies are required to produce Environmental Impact Assessments, the implementation of which the Environmental Protection Agency (EPA) is supposed to ensure.

2.5.7 Sustainable Development

Sustainable development (SD), a term codified for the first time in the World Conservation Strategy, has become a common cliché for most political and corporate leaders. This phrase has got several meanings and explanations but the most dominant of these explanations is what emerged in the Brundtland report in 1987. During a meeting by the World Commission on Environment and Development, “*Our Common Future*”, sustainable development was defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland, 1987: 43). This term, sustainable development is the main theme that runs through the entire Millennium Development Goals (MDGs). For example, MDG 1 seeks to eradicate extreme poverty and hunger from developing countries by the year 2015. MDG 3 seeks to promote gender equality and MDG 7 is about ensuring environmental sustainability, all to be achieved by the year 2015 (UN, 2008). In all three, we can see the theme that runs through the meaning of sustainable development coming out. Thus, economic, social, cultural and environmental sustainability are all embedded and very important to one of the most important documents currently for most developing countries. Now, the difficulty is not in seeing these principles being documented; the real question is how do we ensure economic, social, cultural and environmental

sustainability in poverty stricken areas in the world? This is where, Corporate Social responsibility comes in. Corporate social responsibility could be said to be one of the most important factors which can help developing countries achieve sustainable development.

2.6 Evidence of the Contribution of Mining Companies on Community Development

Community can be described and divided in two main groups: geographical and functional (Ife, 2002; Reid, 2003). The geographical community is based on locality while the functional community is based on a common sense of identity (Ife, 2002). The concept of geographical community is used in relation to issues of community development and community-based services (Ife, 2002). Mayhew, (1997) describes community as a human alliance within a specific geographical space that relates itself to local social system of human alliances.

There are common characteristics that bind communities such as human scale involving size of the community guaranteed interaction,; identity and belonging, which entails cohesion and commitment to common goals; enjoying rights bestowed by the community with obligations for community engagement which include the preservation of community structures; and harnessing local talent and abilities which impact on the betterment of the community as a whole; and the formation of a culture which allows the sprouting of producers/protagonists instead of passive consumers thereof and nurturing inter-community diversity and broad-based participation (Ife, 2002).

Community development is understood as a togetherness of the ecological perspective, incorporating issues of sustainability, diversity, holism and equilibrium, together with the social justice perspective related to issues of social equity, oppression, human right and so on (Ife, 2002). Therefore, community needs should

be decided by the community itself through empowerment and thus it is fundamental to remove continuing unequal power structures by linking the needs with the social justice perspective of empowerment and structural disadvantage (Ife, 2002). Mining can be a vehicle through which the aspirations of the people for empowerment, social justice, self-reliance and self-determination can be achieved.

Thus, minerals have the potential to contribute to poverty alleviation and broader economic development at the national level. Countries have realised this with mixed success. For this to be achieved, appropriate frameworks for the creation and management of mineral wealth must be in place. Additional challenges include corruption and determining the balance between local and national benefits (Bench Marks Foundation, 2008).

Minerals development can also bring benefits at the local level. Recent trends towards, for example, smaller work-forces and outsourcing affect communities adversely. However, the social upheaval and inequitable distribution of benefits and costs within communities can also create social tension. Ensuring that improved health and education or economic activity will endure after mines close requires a level of planning that has too often not been achieved (Bench Marks Foundation, 2008).

The table below is an indication of the level of unemployment at Sekhukhune and Waterberg districts. The unemployment levels at Sekhukhune and Waterberg in 2003 were 68.1% and 30.1% respectively and this attest to the notion that communities are not optimally benefitting from mining activities.

Table 2.1 : Level of employment by District, 2003

Item	Year	Capricorn	Bohlabela	Mopani	Sekhukhune	Vhembe	Waterberg	Province
Economically	1998	219167	144410	214298	124303	271454	187933	1161565
active population	2003	277590	183 759	270004	157 591	343649	235505	146 8098
(number)								
Employment	1998	118380	45673	129871	27459	123271	135804	580457
(number)	2003	128818	57863	150274	34075	134466	169595	675092
Unemployment	1998	46	55.7	39.6	68.1	49.3	30.1	46.6
(%) (expanded)	2003	50.7	56.9	41.8	69.4	53.1	31.2	49.3

Source: Development Index Framework: Limpopo.

In reality though, benefits to communities tend to be much smaller (if they exist at all), than expected. Mining companies have been known to worsen the livelihoods of communities through environmental pollution (air and water); payment of low wages to workers who are drawn from the communities; and also through unfair and unjust practices such as payment of inadequate compensation to community members who may have to be relocated to make way for mineral explorations.

Many advocates of the locals who are residing in the mining area argue that the transformation in the mining industry does not advantage the disadvantaged optimally. They argue that there is a need to revise the industrial strategy of the Department of Minerals and Energy.

It is not always clear, however, how communities of interest should be involved. Current consultation strategies may often be little more than public relations exercises that are conducted at the beginning of major projects. Ideally, there should be consultation with the affected communities about the social impact of mining regarding any aspect of mine development; operation or closure should begin as early in life of a mining project as possible as possible, and then be ongoing (Ivanova, 2007). When communities are adequately consulted, they are less likely to revolt against mine operations.

In 2008, the South African Human Rights Commission (SAHRC) opened an investigation into alleged human rights abuses by the UK-US Anglo Platinum mining company against the people of the Limpopo District. The probe came after an explosive report released by the Action Aid Human Rights Organization on the living conditions of 20,000 people displaced in the past five years by the company for its extraction of platinum. The commission also reported on Anglo Platinum and alleged that the company violated residents' rights in Motlhotlho near Mokopane in the Limpopo Province (HRC, 2008). The report charged that the company had desecrated graves, established exclusive and unaccountable community representation structures in the form of Section 21 companies. The report also cited another case where residents of Ga-Puka and Ga-Sekhaolelo in Motlhotlho had to move to a place called Armoede and Rooibokfontein in 2002. Media reports also said that the residents of Ga-Pila near Mokopane in the same province had lost some of their cattle due to rivers being poisoned by chemicals from nearby rivers such as the Pholotsi River, which had turned into blue muddy water. They were promised roads, schools, clinics, water, jobs, education bursaries and R20, 000 per household and alternative farming land and a share of 30 per cent of the mine's total jobs plus a 50-50 joint venture in a construction company which had won a contract to develop the new villages (HRC, 2008). However, most of the promises were actually not fulfilled. No alternative farming land was provided to the households, roads are reported to be still sub-standard and water facilities are still inadequate (SAHRC).

An International NGO, Action Aid, denounced the inadequacy of the settlements built by Anglo Platinum for the displaced because these had no access to drinking water

or grazing land. It also alleged that water sources were contaminated with nitrates and that the company manipulated the local communities to resettle. As expected, Anglo Platinum rejected the accusations (Simutanyi, 2008).

The experience of Zambia, a country which is richly endowed with copper, demonstrates the potential of mining companies to either promote or retard community development. According to Simutanyi (2008:1), large-scale mining tends to have several impacts on local communities, including dislocations and displacements, effects on employment, health and safety, and environmental damage. The author cites the case of the Chinese-owned Non Ferrous Corporation in Africa (NFCA), which was awarded 1000 hectares to build a smelter at Chambishi. The company is reported to have paid K 500,000 (an equivalent of US \$ 30 at the time) to each of the affected families who had to be relocated (Simutanyi, 2008). This was considered inadequate not only by affected families but also by the general public as well. Simutanyi (2008:9) also alludes to the environmental damage caused by some mining operations in Kitwe, Mufulira, Chingola and Ndola where some smelting takes place. He explains how yellow fumes caused by sulphur oxide pollute the air (Simutanyi, 2008).

Frynas (2005) argues that some of the developmental interventions of mining companies could lead to a 'dependency' mentality where communities develop an attitude that the companies should take responsibility of all their development needs and they themselves adopt a passive attitude. This poses serious challenges in the event of closure of the mines when the communities then have to fend for themselves (Frynas, 2006).

Government policies that seek to redress the imbalances of the past in the mining industry are seen to be deepening this dependency mentality. Affirmative action policies in state tendering were intended to assist with the growth of small black business but it came with a high cost. Many of the small businesses were unable to take advantage of the opportunities through lack of technical and financial resources. The result was "fronting" (surreptitious subcontracting back to white enterprises with

an empowerment premium for the successful black tendered and wholesale inefficiency (MPRDA, 2004)

The Mineral and Petroleum Resource Development Act, (MPRDA), The Social and Labour Plan and the Broad Base Black Economic Empowerment Policy are some of the South African intervention strategies which seek to level the field between mines and communities. These policies and strategies are aimed at economically empowering the communities and ensure that they are not exploited by mining magnets. They are meant to enforce the CSR which will in turn ensure infrastructural, social and economic development (Hilson and Potter, 2005).

Some mining companies are making an effort in adhering to the Community Social Responsibility (CSR) requirements. The Bafokeng Royal trust is one of the examples of community development brought about by a mining company. X-Strata in Dilokong for instance, has sponsored the establishment of a very good school mine which is well equipped with necessary facilities to enable teaching and learning to take place (X-Strata, 2007).

Mining companies, like the Anglo Platinum are to be credited for the development of communities. From their 2009 report they site that the direct economic impact of the company can be measured in the form of employee wages, royalties and taxes to governments, and payments to suppliers (Anglo Platinum, 2009).

The value distributed directly by Anglo American in 2009 was \$407 million to providers of capital, \$3,505 million to employees for wages and related costs, \$406 million paid to Anglo American and outside shareholders, \$2,036 million paid to governments in taxes and royalties, and \$10,392 million paid to suppliers. \$6,946 million represented reinvestment in the Group.

The economic giants predict that the Limpopo's contribution to mineral distribution will grow substantially, i.e. when conditions remain ideal. Conditions that are not ideal may include amongst others, the recession, earthquakes and many other natural causes which might impact negatively on the mining industry (Anglo Platinum

, 2009). The report shows an attractive situation where the locals are benefiting from the operations of the mines which has to be compared with the real situation on the ground.

2.7 The positive impact of mining companies on community development

Large scale mining can have significant economic, social and environmental impacts at the local, provincial and national level. In Ghana, NGOs, governments and the communities themselves are being challenged to ensure that the benefits accruing from mining, are maximized in a sustainable way and that the negative impacts of the mine are mitigated to the extent that the communities both during and after the life of the mine, are better advantaged by the presence of a mining investment (Aryee and Aboagye, 2008). At a local level, a mine has the potential to significantly benefit the local population through the creation of direct and indirect employment, skills transfer, enhancing the capacity of health and education services, improved infrastructure, and small and medium business opportunities. However, the advent of mining and the inevitable closure of a mine can also cause significant adverse effects on the local population, infringing on certain rights, and affecting their traditional means to livelihood (Akabzaa; Seyire and Afriyie, 2008). This can be manifest in many ways, impacting on land rights and the rights of indigenous people, induced inflation, influx of newcomers to the area, disruption of traditional social structures and social jealousy (Akabzaa; Seyire and Afriyie, 2008).

The impact of mines on local communities has been an area of growing concern and attention, and one that mining companies, NGOs and governments are grappling with (Awudi, 2002). Recent work in the South African government sets out to explore more specifically the linkages that exist between mining operations and the four dimensions of poverty, economic opportunity, capability, security, and empowerment in the context of two generically different forms: (i) large scale mining; and (ii) small scale and artisanal mining. The convening of conferences, meetings, analytical research and the dissemination of good practice are among the number of ways in

which the government has been working to gain a better understanding of these issues, develop mechanisms for resolution and propagate good practice

2.8 Conclusion

Mining companies are being required to take account of the impact of their activities on surrounding communities and to implement strategies to mitigate negative impacts and promote positive outcomes. In developing these strategies, mining companies need to actively engage with their communities, in order to ensure that monitoring and management activities are focused on issues of concern to local stakeholders. The absence of standard guidelines gives the mining industry a chance to show leadership in developing and adopting social impact assessment standards, which might become accepted in the various regulatory regimes where the companies are active. More generally, social impact assessment provides an opportunity to plan how a minerals development project can best support sustainable development and the community's vision of the future:

- Sustainable development calls for appropriate methodologies of information acquisition and presentation and a move from social impact assessment to integrated impact assessment.
- social impact assessment should become a dynamic, ongoing process of integrating knowledge on potential social impacts into decision-making and management practices and should lay the foundation for a Community Sustainable Development Plan.

A community-level resource inventory could be compiled as part of the social impact assessment process, including data on demographics, land-carrying capacity, water availability, and so on. This would help mining companies inform communities of the potential impacts of minerals development.

- Communities should be involved in continuous dialogue during the preparation of an social impact assessment. Meeting legal requirements for public participation and information is necessary, but where these are inadequate to develop a shared vision, other processes should be considered.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction: Research Approach and Methodology

Before a person can conduct a research, he/she must consider the method to be adopted for the research. There are several ways of conducting research and researchers choose the appropriate method based on what they want to achieve and other factors which influence the outcome of the research. This chapter of the thesis is divided into three parts. The first part discusses the factors which influence a researcher's choice of the research strategy and methodology as well as the specific considerations which informed the choice of research strategy. The second part discusses the different strategies of conducting social research. In this vein, an examination of both quantitative and qualitative research strategies is done, highlighting the distinguishing features between them. As part of research strategies, this section discusses the action research strategy. The last section looks at how this research was conducted and the challenges involved in using these methods.

3.2 Considerations for Conducting Social Research

Various factors need to be considered when conducting a social research. Some of these factors include the relationship between theory and research, epistemological, ontological and practical considerations as well as the values of the researcher (Bryman, 2004: 21). One or a combination of any or all of these factors could impinge on the conduct of social research. It is important to take a look at some of these factors as they possess the ability to have a huge impact on the research and sometimes determine the outcome of the research. The figure below shows the various factors that researchers have to consider when conducting a social research study.



Diagram1: Things to consider when conducting social research [Source: (Bryman, 2004)]

3.3 Consideration of researcher's values

In conducting a research in the social sciences, values refer to the “personal beliefs” or impressions of the researcher (Bryman, 2004: 21). Different researchers have different impressions about the conduct of a particular study and it is largely expected that the conduct of a study is not subjective but rather objective. However, in the growing recognition of the values of researchers, it has become acceptable to create room for a certain level of subjectivity in social research. Researchers would have to acknowledge that it is possible for the personal beliefs of the researcher to have an impact on the study and still remain a credible study once the researcher has been able to put these feelings in check.

3.4 Theoretical Considerations

Researchers must consider the impact of theory when conducting a study. Although it is an easy and straightforward matter for researchers, its consideration and impact cannot be overlooked. There is a strong correlation between theory and research which needs to be considered. Theoretical considerations could be either inductive or deductive (Bryman, 2004: 8). With the deductive approach to theory, the researcher or social scientist must come up with a hypothesis which will be subjected to empirical proof and a possible modification of the theory which was already in place (Bryman 2004: 8). However, with an inductive stance, the researcher would have to conduct his own observations without any hypothesis but then at the end of the research, he will formulate a theory based on his observations. In other words, theory is essential in the sense that, depending on what the researcher has in mind, he will adopt the appropriate strategy. When using a deductive approach, the structure will look different from when using inductive theory (Sein, 2007). Depending on the topic on which one wants to do research, the fact is that to some extent different variables will influence the result.

3.5 Epistemological Considerations

Another important tool that social researchers have to look out for is epistemological considerations. Epistemology is concerned with knowledge generation/construction from the *“relationship between knower and what can be known”*. It also explains theories on how to get knowledge about the world (Ryen, 2008). Epistemology raises such important questions as whether social problems can be handled by using the same rigorous procedures which are applied in the natural sciences and whether such procedures may fit well into the study of a social phenomenon. Usually the epistemological consideration is looked at with two distinct perspectives; natural science epistemology-positivism and interpretivism (Bryman, 2004: 11). Proponents of the natural science epistemology hold that the canons that are utilized in the physical sciences can be applied to the study of society. On the other hand, the interpretivist stance advocates the fashioning out of a set of procedures that are

applicable in the study of social phenomena and not necessarily follow the natural science model. It is important for the social researcher therefore, to consider carefully how he intends to generate the information required for their research.

3.6 Ontological Considerations

A researcher will also have to contend with issues of ontology. Ontology in particular addresses issues like “*what is reality out there, what reality consists of and how it is perceived and what there is to know about that reality*” (Ryen, 2008). Objectivism and constructionism are the two ontological positions. Objectivism “implies that social phenomena may confront us as external facts that are beyond our reach or influence”, while constructionism is based on realism and points out that social phenomena can be handled and accomplished by social actors, and that individuals create their own reality (Bryman, 2004, p. 16-18). To the extent that a researcher will need to understand what reality is before he pursues it by conducting a social research, ontological considerations are very important.

3.7 Practical Considerations

According to Bryman (2004: 23), practical issues have to be taken into consideration when conducting a social research. Apart from the philosophical issues of epistemology, ontology and axiology, there are also practical issues that may have such significance and importance on the outcome of the research that they may be difficult to ignore. For instance, a researcher will have to take into account the research questions in order to determine the right research strategy, design or method to use. A researcher will also have to take cognisance of the topic and the people or social phenomena being investigated. The availability of data or information on a particular topic is also crucial in determining what type of method that may be relevant. If no research has been done on a particular topic, it will kind of influence a researcher’s decision to adopt either a qualitative or quantitative research as it is extremely tedious to conduct a quantitative study in such a case (Bryman, 2004: 23). These and such considerations are very crucial for the conduct of a social

research and it is very important that a researcher takes all of them into consideration.

3.8 Factors Which Influenced the Choice of Research Strategy

The choice of this research's strategy was informed by a combination of the factors discussed above. Based upon the research questions that I formulated, I decided to conduct a qualitative research. The qualitative aspect offered me the opportunity to be flexible and get to the bottom of certain social issues. I felt that an inductive approach to theory will be most appropriate for since what I wanted to find out did not require the formulation of hypothesis and proving it or otherwise thereof. I wanted to know the extent to which the company's CSR policies had benefited the local people from the community's point of view. With epistemology and ontology, I have taken an interpretivist and constructionist stance because I am of the view that not only are the actors of social research different from the natural sciences (Bryman, 2004:13) but also, there must be room for some level of subjectivity in social research since we deal with the behaviour of human beings and not objects. On the ontological stance, it is also my belief that social issues or issues concerning the behaviour of human beings cannot be static but they are constantly changing. This informed the way I structured my research questions in order to get the best results from the community.

3.9 Research Strategy

There are several strategies that researchers could adopt in conducting their research. However, the most utilized and widely explored are the quantitative and qualitative research strategies. Another strategy which is not so popular is the action research. Whereas quantitative and qualitative strategies are more explanatory and exploratory, action research is focused on finding solutions to a particular societal problem. Thus, it is noteworthy that each of these research strategies has distinguishing features that will be described in the following sections.

3.10 Quantitative Research

Quantitative research can be defined as a “research strategy that emphasizes quantification in the analysis and collection of data” (Bryman, 2004: 19). Bryman further notes that quantitative research is more objective and focuses on imbibing the practices of natural science models (2004: 19). Unlike qualitative research, a quantitative research strategy is of the position that “social reality is an external and objective reality” and that society is static and not dynamic.

3.11 Qualitative Research

Qualitative research methods are about exploratory studies to understand motivations and identify dimensions of problems in a society based on in-depth observations and analyses. It often focuses on how individuals and groups view and understand the world and construct meaning out of their experiences (Silverman, 2001:4). Bryman also views qualitative research strategy as one that “can be construed as a research approach that usually emphasizes words rather than quantification in the collection and analysis of data” (2004:19). It must be noted that notwithstanding the traditional distinguishing emphasis of each of these strategies, it is not unusual these days to come across a purely qualitative work with tables and figures; and vice versa. It is in this regard that Silverman has particularly been critical of accounts of research strategies (in particular, the qualitative research) that do not acknowledge their different forms (1993 in Bryman 2004: 267). Nonetheless, differences exist and Bryman has observed that there is ample evidence suggesting that such differences are growing and gaining more currency (Bryman, 2004: 19). Qualitative and quantitative research strategies differ again in epistemology, ontology and in how they relate to theory as the table below shows.

	Qualitative Research	Quantitative Research
Epistemology	Interpretivist - The emphasis is on understanding the social world by examining how the human being as an active social actor interprets the social world around him. It acknowledges that human beings are not static but dynamic.	Positivist and natural science model – it emphasizes on the use of the natural science model to understand the social world and the human beings therein because they are considered as objects that are acted upon by objective natural laws.
Ontology	Constructionist - Implies that social properties are outcomes of the interactions between individuals.	Objectivism assumes that social properties exist independent and outside of the social actors.
Relationship with theory	Inductive - Maintains the view that theory is generated out of research.	Deductive maintains that research should be carried out based on a theory

3.12 Action Research

Action research can involve both qualitative and quantitative data. “It can be defined as an approach in which the action researcher and a client collaborate in the diagnosis of a problem and in the development of a solution based on the diagnosis”. The orientation of an action research is therefore to find solutions to problems instead of exploring same, just to explain them. In this vein Rapoport observes that an action research “aims to contribute both to the practical concerns of people in an immediate problematic situation to the goals of social science by joint collaboration within a mutually acceptable ethical framework” (1970, cited in Sussman and Evered 1978). As a result, this type of research strategy calls for the active involvement of both the researcher and the researched or the beneficiaries in this case. This

contrasts the positivist view where the client system members are seen as objects. In conducting an action research, Sussman and Evered (1978: 600) have identified the five cyclical phases:

- Diagnosing,
- Action-planning,
- Action-taking,
- Evaluating, and
- Specifying learning.

3.13 Research Design

Bryman (2004: 33) identifies five different types of research designs which are experimental design, cross-sectional or survey design, longitudinal design, case study design, and comparative design. My research was based primarily on a single case study of Ga-Pila and Dilokong areas. The aim of a case study is usually to “generate an intensive examination of a case”, and then “engage in a theoretical analysis” in relation to this (Bryman 2004:52). Thus, in this case study we can identify two main actors: the people of Ga-Pila and Dilokong with the mining company. Yin (1994), defines a case study as “an empirical enquiry that investigates a contemporary phenomenon within its real life context, when the boundaries between phenomenon and context are not clearly evident, and in which multiple sources of evidence are used. It is particularly valuable in answering who, why and how questions in management research.” The research questions presented under the research problems above seek to identify the improvement or otherwise in the social, environmental and economic lives of the people in the Ga-pila and Dilokong in Waterberg and Sekhukhune District municipalities as a result of the siting of the mining industry in the area.

3. 14 Data Collection Method

Bryman (2004: 27), defines a research method as “a technique for collecting data”; Silverman outlines four main techniques for data collection, which are (1) Observation, (2) Analyzing text and documents, (3) interviews, and (4) Recording and transcribing (Silverman, 2001:11). The study relied on the use of observation and interviews to obtain data that guided the researcher to get appropriate answers for research questions. The study considered and discussed the sort of improvements that have taken place in the lives of the people living in that area as a result of the company being sited in the district. The study also considered the social, economic and environmental effects of the allocation of the company in the districts. Similar to ethnography, the term observation is made to refer to a situation whereby the researcher is involved with watching the behaviour of the researched, paying attention to conversations among the people and also asking them questions (Bryman, 2004: 292). Document and text analyzing has to deal with taking a critical look at some relevant written materials as well as internet materials that may be available in the area of research. Interviews in qualitative research could be either unstructured or semi-structured. Malbon (1999) observes that unstructured interviews usually are conducted in the form of conversation and they come without interview schedules (cited in Bryman, 2004: 320). Meanwhile, Bryman (2004: 323) acknowledges that with semi-structured interviews, the researcher may have an interview guide and follow it to some extent. This means that semi-structured interview is also a bit flexible and makes room for the researcher to change the style of the interview if it becomes necessary. Lastly, recording and transcribing is an important part of qualitative research as it also provides the researcher with the opportunity to get every detail that is required. Qualitative researchers are “not just interested in what people say but also the way they say it” and thus to be able to take all these details, they may need to record the interviews and later take time to analyze it. It is noteworthy that recording/taping and transcribing sometimes come along with problems such as the unwillingness of respondents to be taped or recorded as well as the malfunctioning of the tape machine (Rafaeli et al 1997, cited in Bryman, 2004: 331).

3.15 Selection of Case Study

While Sekhukhune and Waterberg have remained some of the mineral resource rich communities of the country for over a century now, they are not among the best developed communities in South Africa. Sekhukhune and Waterberg are interesting districts to consider as a case study owing to the fact that mining has existed for such a long period, one would expect that it would among the best developed communities in the country but this is not the case. The choice of company is obviously due to the fact that mines in Sekhukhune and Waterberg is owned by Anglo Platinum. One thing interesting also is that, Anglo platinum has for some time now been priding itself with being socially responsible and also making the Sekhukhune and Waterberg communities better off than when they met them. That is from their point of view but what about the community's? Do they feel the same way? The case study helps to find this out.

In pursuit of giving empirically founded answers, research questions of which factors influence the economic, social and environmental performance of a committed mining company in Sekhukhune and Waterberg and how the practice may improve the lives of the people in the community, qualitative case study was conducted. This offered an opportunity to get a deeper understanding of development from the community's point of view. As indicated earlier, an interpretivist and constructionist stance was adopted instead of embracing positivistic and objective positions. According to Silverman (2001: 25), researchers who are interested in exploring peoples' lives, histories or everyday's behaviour must use qualitative instead of quantitative research strategy. Apart from the flexibility that the former offers, it makes room for researchers to actually appreciate the changing nature of society and the dynamic characteristics of human behaviour. Semi-structured interviews guided by an interview guide and the questions were mainly open-ended questions were used. Open-ended interviews means that the interviewees can freely respond to questions (Kvale, 2001: 96 cited in Tobiassen, 2007: 29). This approach too was good as the objective was to get more information about the perceptions of people as far as their personal development and the development of the community were concerned. The responses of all the interviews with the communities were written

down. The choice not to record the majority of the interviews was based on a belief that this would have made many of the interviewees feel uneasy, and hence that the most extensive and reliable information would be obtained without recording. Interviews took from 30 minutes to 2 hours, but with the majority in the 40-50 minutes range. The sampling methods were a combination of purposive and snowball. Purposive sampling is a form of non-probability sampling which is used when the researcher has a purpose for sampling those people for interviews (Trochim, 2006).

3.16 Validity and Reliability of the Study

The issue of reliability and validity for a qualitative research is not as rigid as in the case of a quantitative research. Reliability and validity of the study lies in the fact that in this research, aspiring to identify the importance of more informal relations, it is the use of people's perceptions as the main data, which is deemed to best ensure the validity of the study. Further, the main means of striving for both reliability and validity in the study has been the gathering of many different perspectives, which can be held up against each other. Also, concretely, the assurance of the reliability of the data was sought by crosschecking factual information/stories by asking several interviewees about the same concrete incidents/affairs. A validity problem may lie in the fact that some of the interviewees were biased in expressing their perceptions.

3.17 The Research Site

The research sites were two villages in Limpopo, Dilokong and Ga-Pila to be specific. These are villages in the Sekhukhune and Waterberg Districts respectively. The two villages consisted of 300 households all-encompassing. These villages have been selected because of a number of mining companies which are operating in the areas. Dilokong village is situated at the Burgersfort area which is approximately 150

km from Polokwane and has 140 households. Ga-Pila village is situated at the Burgenberg area and consisted of 160 households.

3. 18 Population of the Study

3.18.1 Primary Population

The questionnaires were distributed to the residents of Dilokong and Ga Pila: These were the affected people i.e. benefiting or not benefiting from the mining activities. The buy in of the traditional authorities was sought beforehand so as to guarantee the smooth administration of questionnaires. A questionnaire with ten short items was also distributed to mining official in the two villages. The mines were part of the primary population because they were supposed to explain their contribution towards the development of those communities.

3.18.2 Secondary Population

There are other important actors who can also provide insights into the research issue. For example, traditional authorities who are an entry point when land is sought for mining activities. Municipalities are responsible for providing basic services to the mines and communities and are also engaged in the Integrated Development Plans of their area, and this includes planning for mining actions. The Community-based Organizations (CBOs) Non-Governmental Organizations (NGOs) and the Community Development Workers (CDWs) spearhead and are custodians of community developments.

Some government departments such as the Limpopo Department of Economic Development, Environment and Tourism who are responsible for the Environmental Impact Assessments (EIA) and also for promoting local economic development of communities were considered and included in the study as primary population. One

questionnaire was given to the Senior Manager-Environment Impact Assessment Directorate to complete. The Private sector, business communities, and Small, Medium and Micro Enterprises (SMMEs) because of their supply of resources and marketing strategies for mines were also included in the study. All these sectors, together with the members of the community responded to a questionnaire with thirty items.

3.19 Sampling Methods

Purposive sampling was used to select households from communities around the mine. Thirty members from the two communities were selected based on criteria such as the number of years the household has lived in the area, employment status (preference was given to those who were employed by the mining companies but the sample also included a few unemployed people), and knowledge about the operations of the mine and its CSR activities. This selection included the CBOs, civic society groups, traditional leaders, municipal managers and government departments. The selection ensured a mix in terms of gender, age and educational qualifications.

Questionnaires were administered to officials in the mining companies. At least ten officials were selected from senior and middle management of the mining companies. They were selected because they were the most knowledgeable about the operations of the mines, including their CSR activities.

3.20 Data Collection

Primary data was collected from the sample of the study by means of questionnaires which were self administered to the mining officials (because of their literacy levels). Community members were interviewed using face-to-face interviews. This was to

ensure confidentiality and also to encourage them to speak out freely. Community members were given ample time to relate their stories even though the content of the interview was short. Data on how the mines' activities have affected them was also collected.

Structured questionnaires were designed and administered to the sample of ten mining officials from middle and senior management. Thirty semi-structured questionnaires were also developed for the community. This was done so that they could have the latitude to describe and narrate their encounters with the mines. The group of people that were encompassed in this category included members of the community, municipalities, traditional leaders, civic society groups, business sector and one government department. Key issues were on the social, economic, cultural and environmental impact of the mining companies on the community.

Participants in this study were assured that their personal information will not be divulged for any other purpose except where necessary, the research results.

CHAPTER FOUR: RESEARCH FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter examines the various aspects of communities surrounding mines. These mines are in most cases synonymous with social problems that include poverty, disease, unemployment, adult illiteracy, poor housing, family disorganization and uncontrollable migration, despite efforts by some mining companies to redress these. Ongoing revisions to the environmental, social and corporate governance frameworks for the sector, as well as the Mining Charter's requirements, are creating new threats, but also opening up new opportunities. More specifically, in terms of the Communities Regulation 46 (c) iii of the Mineral and Petroleum Resources Development Act (MPRDA) mines are required to support infrastructure and poverty eradication projects in line with the Integrated Development Plans (IDPs) of the area in which the mine operates and major labour sending areas. Thus this chapter further seeks to put forward some critical factors for the sustainability of social projects in the community. The basic characteristics of sustainable development in mining, as stated by John Strongman from the World Bank, provide a useful point of departure when talking about social projects. These characteristics are as follows:

- Financially viable,
- Environmentally sound,
- Socially responsible,
- Effective governance, and
- Long-term community value

It is common knowledge that the mining industry has become an important issue in the African economy. The mining industry in South Africa has seen significant restructuring and changes since the early 90's with the traditional mining houses such as , Anglo American, De Beers, Gencor/Billoton, Goldfields, JCI, Anglovaal and Rand Mines being restructured and extending their global presence. These

companies traditionally controlled gold, platinum, chrome, coal and base metal production in South Africa. The industry is growing at a rapid pace and it must be further noted that the mining industry has also affected communities in the areas of its operation. Some communities, for example, have relocated to give way to mining activities. As a result, conflicts between the mining companies and communities have emerged. Since the Limpopo Province in South Africa has a large mineral base such as, platinum, disputes between the mining companies and surrounding communities are likely to happen in many of these instances.

4.2 Relationship between the Mine and the Communities around Mining Operation

Although the company does engage the community in various meetings, it seems as if their opinions do not matter that much to the company. The formulation of CSR policies are mainly done by the company with no or little consultation with the people who are supposed to benefit from such policies. For instance, the vegetable gardens project initiatives were all planned by the company and implementation was imposed upon them. The community complains that they wished the company had consulted them before coming up with the project to seek their consent and opinions about how to make it more meaningful than it already is. Since they are poor, they do not have any choice but to accept any little help that the company wants to offer them. To all the people I interviewed in the communities, CSR policies and projects are formulated without their input. The company only informs them when the project is about to take off.

Meetings organized between the company and the communities are not always open to every person or adult in the community. In order to be able to have effective communication with the company, the community formed a Community Consultative Committee (CCC) which includes chiefs, local authorities and representatives from the community. The committee usually meets with the representatives of the company at specific periods of each month to discuss issues affecting the community.

4.3 Provision of Services by the Mine and In the Communities around Mining Operation

Owing to the fact that traditional leaders have quite an enormous impact on the development of the local communities, it is interesting to take a look at the role that traditional authorities in the mining communities played in bringing about sustainable development. The traditional authorities were organized in a hierarchy of paramount chiefs, sub chiefs and caretakers. Most traditional leaders enjoyed deep-rooted respect from their people. They were seen as the custodians of customs and traditions, and at a village level as the community leaders settling disputes and externally representing the interests of the community. Other respondents also said that:

The chiefs only show up when there has been pressure from the community. Otherwise they receive kickbacks from the company. When we did this letter from the Municipality, they had to support it, because otherwise they would be seen by the communities as accomplices of the company, but generally they normally keep quiet.

Most of the people interviewed in the various communities agreed that the activities of the mining company had indeed destroyed their environment. Although many of them acknowledge the fact that the company had environmental responsibilities towards them, they claimed that this responsibility had been neglected to a large extent so far as they were concerned. Their land was taken from them because they happened to be on concession land and by the time they might be done using the land, it would no longer be 'useful' as it would have lost most, if not all its nutrient content. They had to buy expensive chemical fertilizers before they could cultivate their crops. The situation was no better as far as their water bodies were concerned. "Our streams which serve as the main sources of drinking water for us have been heavily polluted with chemicals and they tell us not to drink it because it is poisonous". Another major issue was that the smoke from the chimneys of the company destroyed their crops and prevented them from growing properly.

4.4 Economic Impact of Mining Activities in Communities

The economic impact of mining activities cannot be overemphasized. Most of the people in these communities are farmers and what this means is that once farmlands are taken away for mining purposes, the people lose their source of livelihood. Two farmers in Ga-Pila complained that the company took away their farmlands and were never compensated for the loss of income. According to them, some other people lost large plantations of ground nuts and sugar canes without any compensation from the company. These actions were taken without any prior notice to them and without warning; they just destroyed their farms and took away the land for their mining. One farmer said *“How does the company expect such people to survive, having taken away their source of livelihood?”* The easy way out is for them to end up in ‘vegetable gardens’ business. The bitter part is that, such a business is not as rosy as their farming, but it is very risky and not sustainable and it requires water which the mining companies do not adequately provide.

Apart from those who got their land totally taken from them with little compensation, there were those who got low yield from their farms due to the limited amount of land coupled with pollutants affecting the land, water and the air. “Even though we buy chemical fertilizer at high prices, we still do not get as much yield as we expect because of the activities of the mine which pollutes the air and the land”.

When asked whether they felt better off with the allocation of the mine in the community, most people in the villages answered in the negative. They asked how they could be better off when their farms had been taken away without any sustainable compensation, alternative sources of livelihood and most of the youth in the villages are unemployed. Only a few of the youths in the village were employed to work for the company. One respondent said, “As far as we are concerned, poverty levels have increased and not decreased.”

“Anglo Platinum has taken us for granted; they have taken our land and destroyed it, left us unemployed, don’t provide employment for our youths and delivers empty

promises to us. They are not concerned with our welfare, but are only interested in the profits at the expense of our future; they have made us the poorest of the poor”

However, economic activities in terms of buying and selling in the community were very vibrant. A lot of small scale enterprises were doing well in the municipality because they were subsidiary companies of the mining company. The Anglo Platinum company does not operate in isolation. It operates in a society where people have their homes. This suggests that in their day-to-day activities they will come into contact with the community; whether such contacts are friendly or confrontational. Unfortunately, most of these contacts have been confrontational. Many people have lost trust in the company’s promise to make the community better off than they met it. This perception has sometimes caused the community to demonstrate against the company.

The existence of the mine has drawn people from all over the country and beyond to settle in the community. Intercultural co-existence has the benefit of the indigenous people getting to experience and learn about other cultures, but it also has enormous detrimental effects on the people. It has the likelihood to cause the indigenous people to lose their identity and their cultural heritage as a people. In Limpopo, culture is something that is highly cherished and each ethnic group is identified by the maintenance of their cultural values. From various interviews, the generalized perception is that the mining activities have diluted culture in the villages.

Even though there may be nothing wrong with having a diluted culture, it makes it difficult for a person to know which culture to identify the town with. One thing about having a lot of people coming and going out of the town is the upsurge of social values in the community. Everybody comes with the aim of making money because they know that miners have money and sometimes they want to make money through whatever means possible. This is manifested in the increase in social values such as prostitution which spreads sexual transmitted infections including HIV/AIDS. So the question is: how can Anglo Platinum claim to make the community better when it leaves the villages with traces of increased social problems?

4.5 Controlling the Environmental Impact of Mining

In its effort to improve upon the environmental standards of mining, Anglo Platinum has signed on to some international environmental tools aimed at keeping them in check of improving the quality of the environment. These international tools are the UN Global Compact and the ISO 14001. Launched by former UN Secretary General Kofi Annan as a network in 2000, the Global Compact is held to be “the world’s largest voluntary corporate citizenship initiative” (UN, 2007:4). With its office within the UN, the Global Compact sets out “*ten universally accepted principles*” derived mainly from and around the following themes; the area of human rights, labour, the environment and anti-corruption, that participating businesses commit themselves to aligning their operations and strategies with (UN, 2007: 6). Whereas there is no external monitoring of performance, participating companies are required to report annually on their progress towards implementing the principles, while third parties can bring ‘allegations of systematic or egregious abuses’ to the Global Compact Office, who may then provide assistance and guidance for the company to rectify the matter, and in the very last instance delist the company as a participant from the Global Compact website (UN, 2008). The other working document that the company uses to ensure environmental sustainability is the ISO 14001. Originally developed by the International Organization for Standardization; a network of national standards institutes – the ISO 14001 awards participating companies an ‘ISO 14001 certification’, which specifies the requirements for an Environmental Management System whose implementation in a company is audited every three years. Thus, the ISO does not set actual pollution abatement standards, but commit participating companies to ‘continuous improvement’ and evaluates the extent to which the Environmental Management System is utilized (Utting, 2000:5). Although the company conducts an Environmental Impact Assessment (EIA) before undertaking any mining contract or activity, the main working document for the company is the Environmental Management Plan (EMP).

4.6 Problems Relating To the Communities and the Mining Companies

In addressing the issue relating to mine community and rural development, research questions were formulated. These questions were based on the broad-based socio-economic empowerment charter for the South African mining industry which is provided and recognized as outlined in the charter.

4.7 The Profiles of both Mine Officials and the Community

It is of paramount importance to provide a platform upon which to make a thorough and constructive critical analysis of the consultations between affected communities and mining companies in view of the fact that local communities have to participate in the mainstream of the economy. This study is particularly useful in that it provides a base upon which to make a wide range of inquiry as to whether the mining companies have developed systems through which the communities in the mining areas can be empowered. The policy objective for the Mineral and Petroleum Resources Development Act of South Africa envisaged opportunities for historically disadvantaged persons who include communities in the mining regions to enter the mining and minerals industry or benefit from the exploitation of the mineral resources within their areas of habitation. This study has found that the monitoring, assessment and observance of the process of community's empowerment within the mining villages as well as the power to investigate and report on the observance of the same process, and the steps to secure appropriate redress where there was a violation of community empowerment were non-existent.

This study has further found that there were complaints and dissatisfactions among communities in the Limpopo Province whose areas were affected by the growing mining activities. Some community members interviewed argued that the mining companies around their area used vast amounts of water to do their daily activities.

“The water used by these mines could be used for local community’s consumptions.”

“For example, the water could be used for irrigation purpose and to feed livestock”.

The community members further felt that the electricity consumed by the mining companies was comparably higher than the one reserved for community use.



Figure1: Illustration of electricity use by the mine

“Electricity was there, before the mining activities; it is not the initiative of the mines. Mines have nothing to do with electricity; maybe in the new village that is where they say they are going to assist in electrifying the place.”

Some members of the community felt that the improved roads were used for the purpose of carrying out the interest of mining activities, as opposed to community interests as can be seen in Figure 2. The community was of the opinion that mining companies were only interested in making profit through its mining activities, while it could, on the other hand develop the community in one way or the other. It is further suggested that the mining companies could develop the community in the following aspects:

- Increased participation in the company through equity ownership of the company as a whole and through joint ventures at an operational level;
- Encouragement for the development of black-owned business independently and through their procurement policies; and
- Developing and empowering the people not only for employment at a mining company, but through providing them with skills that would be transferable should they leave the company.

Figure2: The improved road which is said to be in the interest of the mine



4.8 Stimulation of the Development of Community-based Organization

The study investigated and stimulated the development of community-based organizations in

balancing their interests against the interests of the mining companies. The study has revealed that communities' ownership and participation in the mining areas were passive. Involvement was greater than 0 percent and up to 100 percent ownership but without involvement in the management of mining companies.

Mines are often the key economic engines of the communities in which they are located. This study shows, however, that the positive impact of foreign direct investment on local communities is often extremely limited due to the lack of spill over effects. However, with appropriate local economic development (LED) instruments, mining projects could bring more than their own direct employment to a community. By voluntarily participating in or even driving an LED programme in a community, mining companies and other local stakeholders such as local government, education institutions, other businesses can work together to ensure that the local population, including the poorest segments of the community, can benefit from the presence of mining companies investments and share in the growth potential of the local economy. For the Mining companies a successful LED programme would improve community and employee relations, develop supplier linkages, reduce dependence on the mine for local economic wellbeing over time as well as bring substantial benefits in terms of reputation and good corporate citizenship.

The following statements reflected the mining official's responses to the questions posed to them:

"This mine do its best to help the community, we are sponsoring their football teams."

“We have given them community members training on how to grow their own vegetables. “

“We order some of the things from the companies based in the community.”

“We give the traditional leaders everything they ask. That is community development.”

“We have created the much needed jobs”

4.9 Economic Development through Local Economic Development

LED is about local communities including public, private, not-for-profit sectors working together through a proactive process to achieve sustainable economic growth that ensures increases in employment, prosperity and quality of life for their communities. This study has found that in the mining areas communities are often dominated by a mine, being the only major source of revenue/employment in the area. An important component of an LED programme is the development of small and medium sized enterprises (SMEs). The mines encouraged local suppliers to supply their products to the mines through giving them contracts. This encouraged producers as entrepreneurs/businesses independent from mining that strengthen the overall competitiveness and economic development of the community.



Figure 3: Trucks delivering goods to the mine

This study also found that the mines further supported a broader LED programme which was not related to a mining community such as:

- Investment promotion and retention activities;
- SME networking and specific business development issues;
- Infrastructure investment and planning, including investment in both hard and soft infrastructure for business and the community;
- Environmental improvements to existing facilities; and
- Training and education, including access to work Environment Issues, contaminated site remediation and sustainable development.

4.10 Poverty Reduction

Poverty reduction is being seen as an increasingly important driver of LED, not only as an object but as a strategy in itself. In order to target the poorer villages within mining communities, LED assistance can establish eligibility criteria as was done in the mining community Initiative for applications for LED assistance – such as unemployment levels, levels of poverty, social and environmental problems and population size . In addition, there is a growing understanding that specific measures are needed to assist the unemployed, underemployed and otherwise disadvantaged to have access to jobs and/or improved qualities of life.

4.11 The Impact of the Mine on Communities

The various capital assets available to households for use in pursuit of livelihoods are identified as physical capital, human capital, financial capital, natural capital and social capital as outlined in the livelihood frameworks of Carney (1998), World Bank (2000) and Ellis (2004). The interviews were designed to obtain the views of a broad cross-section of groups and organisations in the community about the impacts of mining, plus the nature of mining investments in the villages, contribution to the

development of communities, the perspectives of the communities with regard to the operations of the mining companies, structures existence in order to promote dialogue between the companies and the communities, the extent the communities involved in terms of decision making with regard to the corporate social responsibility activities of the companies.

Although we were told as researchers on several occasions that the local community had been over consulted, most people who were contacted were willing to participate in the study and welcomed the opportunity to express their views.

A total of thirty interviews were conducted, covering the following sectors: a local community advocacy organisation, Indigenous organisations, local government representatives, local business, education, health, community development and other land users. Tables 4.1 and 4.2 summarise what representatives of these diverse groups identified as the main positive and negative aspects of the local mining companies. In terms of positives, most interviewees agreed that mining had brought long term economic benefits to the area, increased employment opportunities, broadened the local skills base and contributed directly and indirectly to improved infrastructure, facilities and services (Table 4.1). On the negative side, it was generally perceived that there had been some adverse environmental impacts, although there were divergent views as to the nature and magnitude of these impacts. The responses from the respondents are outlined below:

“The mines are employing people from outside the village – they say we do not have the necessary experience”.



Figure 4: The expatriates working in the mine, answering questions from the interviewer

“We were sent to the Modikwa mine to plead with them so that they train local people so we can have the necessary skills to work but they referred us to the traditional authorities. The youth interviewed claimed that the traditional authorities did not have the interest of the community at heart.

“We are disillusioned because these traditional leaders and the directors appointed by the mines to represent us are making money for themselves and their families, and they do not really represent the community. The houses of directors are better off than the ones we are living in. These directors are using money which is supposed to be the companies CSR to benefit them.”

“The directors represent the community for three years then the new group takes office, all of those that have been in office are better off now.”

“The mines are purchasing their goods from people from outside the village because of capacity problem. No single contractor or SMME is from our village.”

Figure5: Living conditions of ordinary villagers



“The smoke is affecting our health.”

Around 75 per cent agreed that the local mines were responsive to concerns raised by the community, although several interviewees indicated that this was mainly due to the regulatory requirements that govern mines. For example, one said that: ‘the process to get contract means they have to register formally in the mine ... if you do not know about it is

difficult to know’. As shown in Table 4.1, nearly three quarters of respondents said that the community did not trust the mines. This was seen as an issue for the mining companies in general, rather than specific to particular mines.

As Table 4.2 also shows, a substantial proportion of interviewees agreed that some mine areas were more responsive than others, were better environmental performers than others and contributed more to the community. Again, differences in performance were often attributed to stricter regulatory requirements rather than to anything that the mines themselves had done voluntarily. The majority of participants said that they did not have the knowledge to rank the performances of the mines. However, those who commented typically indicated that mines were either ‘average’ or ‘above average’.

4.12 Social Development of the Communities

The introduction of mining and their operation in the communities of Ga-Pila and Dilokong has helped in enhancing the livelihoods of some of the people according to this study. Asked whether mining companies contributed to the development of communities, the traditional leader of Ga-Pila answered in the affirmative. He gave reasons that the company started “giving small tenders to people” for communities in the mine concession. He explained that “giving small tenders to people” involved capacity building of members of communities in supplying the mines with their produce, micro enterprises and supply of inputs for selected income generating projects. In his view the income generating projects had direct benefits to the livelihood activity in respect of livelihood community improvement. In the area of livelihood assets, he explained that about twenty households in the one community

had been provided with school, electricity, and clinic as well as bore holes with pumps (Table 4.3).

He further stated that “there have been other livelihood opportunities and benefits like medical outreach programmes, especially the extension of HIV/AIDS peer educators programme of the mines to the communities, and the support rendered to them in the form of other income generating activities like vegetable gardens.”

This has been achieved through the establishment of a clinic in the community to provide health care services.

He believed that mining had not impacted negatively on the livelihoods of all community members as outlined in Table 4.1.

He acknowledged the existence of the negative impacts that there was also a complaint about dust pollution and cracks in buildings caused by mining activities.

Approximately three out of four heads of households interviewed in Dilokong and Ga-Pila communities claimed that they had not realized any livelihood enhancement since the mines began operations in their communities.

“Mining has helped to attain greater well-being by repairing their roads and enhancing easy transportation of produce, the construction of clinic, school and workshop and the extension of electricity to the community.”

To these residents, training in alternative livelihood activities, especially financial management training had provided them with new skills and knowledge through which additional incomes could be obtained.

A little over twenty-five percent of the heads of households interviewed in the studied communities admitted that the introduction of mines into their communities and the operation of the mines in general had enhanced their livelihoods.

Nearly three out of four of the heads of households interviewed, however, stated that mining had not enhanced their use of any skills, knowledge, abilities, etc. that

accrued additional income to them. Furthermore, older respondents from other villages explained their dissatisfaction in the following statements:

“We live in poverty and depend on the state grants.”

“Mines are employing foreign people as they say they are more skilled.”

“Outside companies are given jobs/ tenders”.

“Mines come and go in the area and live them poorer and sick.”

“There is air pollution caused by the smelter.”

“There is no water in our villages; we can go for two weeks without water because the water tanks which this mines provides may not come to our area, or the taps that were installed by the municipality run dry”

“Only the traditional authorities are driving big cars. They have more than one car whereas the community is living in poverty; what their trust did was to ask for names of orphans that they would take to school, that is all! They never came back and reported about that; those children are still not at school”.



Figure 6: Illustrating the poverty level

“The houses are cracking, because of explosion/ blast in the mines, they complain about this to mine authorities, but nothing is being done. They fear that houses are going to collapse.”

“We work long hours, wages are low. We cannot fend for our families.”

“ We travel long distances transporting steel or taking the chrome/ ferro chrome to a smelter in Polokwane, no security is provided even though we are at a high risk of being robbed and injured or killed “

“We are also prone to prostitutes on our way to our destination and the mine does not consider the Employee Health and Wellness by providing things like condoms or sex education to workers. We have to buy for ourselves even though we do not have that much money or risk being infected by HIV/AIDS or other sexually transmitted diseases.”

Table 4.1: Relationship between the mine and the communities around mining operation

	Excellent	Very Good	Good	Fair	Poor
Relationship with the mine	2(7%)	6(21%)	5(15%)	6(21%)	11(36%)
The quality and the provision of water in the village	0(0%)	0(0%)	0(0%)	2(8%)	28(92%)
The condition of the clinic	0(0%)	0(0%)	0(0%)	7(22%)	23(78%)

The majority of respondents (36%) felt that they had a poor relationship with the mines followed by 21% of the respondents who felt that their relationship with the mines was very good and fair respectively, with 15% rating their relationship being good while 7% felt that the relationship was excellent.

Table 4.2: Provision of services by the mine and in the communities around mining operation

	Provision of water by mines for community usage	Over usage of water by mines	Improvement of supply of electricity by mine in the community	Community benefit from School built by the mine
Strongly agree	19(63%)	4(13%)	4(12%)	3(11%)
Agree	4(14%)	24(79%)	2(7%)	0(0%)
Neither agree nor disagree	2(7%)	2(7%)	26(86%)	0(0%)
Disagree	24(79%)	0(0%)	2(7%)	4(14%)
Strongly disagree	2(7%)	0(0%)	2(7%)	26(86%)

The majority of respondents (86%) did not benefit from the school built by the mine while (79%) believed that there was over usage of water by mines, with 64% filling that the availability of mines had not improved the supply of electricity in the communities around mining operation. About 7% felt that mines provided the community's consumption water.

Table 4. 3: Provision of services by the mine and in the communities around mining operation (Rating in percentages).

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Contribution of mining companies to the community development	1(7%)	1(7%)	1(14%)	4(43%)	3(29%)
Satisfaction with consultation about CSR projects	0(0%)	1(7%)	3(36%)	5(50%)	1(7%)
Satisfaction with representatives like section 21 companies	0(0%)	1(7%)	2(22%)	6(57%)	1(14%)
Satisfaction with representatives like section traditional leaders	0(0%)	1(7%)	3(36%)	5(50%)	1(7%)
Local people are given an opportunity to render services to the mines	0(0%)	0(0%)	5(50%)	4(36%)	1(14%)

Generally, many respondents ranging from 36% to 57% reported to be dissatisfied about the contribution of mining companies to the development of the community, consultation about CSR projects, representatives like section 21 companies , representatives like traditional leaders of which 50% were satisfied about local people given opportunities to render services to the mines.

4.13 Conclusion

Chapter four dealt with the analysis and interpretation of data collected during the research. Where practical, information is displayed either in Tables or Figures to make it easier for the reader. Most of the information displayed indicated that there was no significant difference between the respondents from the various communities. Also, there were insignificant differences between respondents from the mining officials. The research revealed that mining officials played a very important role in the development of the communities.

The majority of respondents spoke the local vernacular language, but there also seemed to be a trend of dissatisfaction about the usage of water by the mines.

The information revealed in this chapter however raised concerns, confirming that mines were not abiding with 40% representation as outlined in the Mining Charter. Career pathing seemed to be well addressed by the mines as they gave opportunities to HDSA women as they arose.

Increasingly, mine sites were being required to take account of the impact of their activities on surrounding communities and to implement strategies to mitigate negative impacts and promote positive outcomes. In developing these strategies, mining sites needed to actively engage with their communities, in order to ensure that monitoring and management activities were focused on issues of concern to local stakeholders. Involving the community also gave legitimacy to the process by communicating to people that their views mattered. The next challenge was to ensure that there was appropriate follow-up on the issues raised by the community. Mining companies were committed to providing this follow-up and to maintaining an on-going dialogue with its key stakeholders. The next chapter focuses on the conclusion and recommendations of the study

CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The previous chapter dealt with the analysis of all data collected during the research study. This chapter deals with the final interpretation of the information, gives the conclusions and presents recommendations for further research.

The information is directly linked to the research problem, the objectives and the research questions addressed in chapter one and two. The interpretation of data is presented to prove the research propositions.

5.2 Conclusions

The problem investigated in the study was to establish the contribution of mining companies to the development of communities in the areas in which they operate.

The study successfully proved that mining operation is contributing to the development of the communities where they do their operations.

Another objective of the study was to review the operations of the mining companies. This study confirmed that the majority of all mining companies procured from HDSA and most of the workers were from the community around the mining operation. The community also benefited from the mining companies through tenders although they were at a lesser value. The majority of respondents also indicated that the presence of mining companies brought about the improvement in the electricity infrastructure. They further expressed satisfaction with the building of the school, access road as well clinics for the community.

Another objective was to assess the social, economic, cultural and environmental impact of the mines on the communities.

The study confirmed that the majority of mines contracted private companies to dispose their mining waste to avoid polluting the environment. Most of the mines did their social responsibilities by sponsoring activities within the communities such as sponsoring football teams, vegetable gardens etc.

The study also confirmed that the mining management preferred to work with both the communities, traditional leaders on CSR projects and further that they gave attention to both section 21 companies and traditional initiatives when CSR projects were available.

The stakeholder interviews while covering a broad range of issues could be distilled into a small number of key themes. While some of these themes are primarily relevant to the specific community situation, others are likely to have more general applicability to the all mining companies in Limpopo Province.

First, it was clear that most people in the community accepted that the mining companies were a key driver of the local economy and that the fortunes of mining companies were, to a considerable extent, tied to the future of the companies. In this respect, the community did not need to depend on the overall running of the mining. Rather, their concerns related more to how the benefits and opportunities generated by the mining companies were being distributed. For example, the perceived decline in support for local businesses, employment of non-locals, and the lack of opportunities for young people and women in particular. There was also concern about whether, and how, the economic benefits that mining had brought could be sustained over the long term.

Second, the environmental impacts of mining both on neighbours and the wider area were an important issue for the community. Neighbours had a range of specific issues that demanded attention, although not all of them would be amenable to resolution. The community more generally had concerns about dust, noise, visual impacts, water quality and the loss of farming land to mining. Most of these concerns related not to the impact of any one operation, but to the overall impact that mining

had on the area. Unless the mining companies are seen to be taking appropriate action to manage and mitigate these impacts, it will be increasingly difficult to obtain regulatory approval for further expansion of mining activity in the area.

Third, it was apparent that in the community remained an issue for the mining companies. While most stakeholders acknowledged that the environmental and social performances of the local mining companies had generally improved, there was still a strong perception in some sections of the community that if the mines could get away with doing less in the environmental and social area, they would be happy. A more targeted approach to presenting this information to community opinion leaders might help to correct some of these misperceptions. However, more is required than just improving the one-way flow of information. The key to building and maintaining trust over the longer terms lies in being open and honest with the community, engaging in active dialogue with stakeholders about issues of concern, and, most importantly, responding to these concerns and following through with action.

A final observation was that some stakeholders were prone to over-state the extent to which the mining companies and its practices had been the cause of social and environmental changes in the community area. For example, criticisms of the mining companies' water management practices tended to overlook the fact that the long term decline in water quality was largely due to land degradation and agricultural practices over many decades.

5.3 Recommendations

In order to avoid the difficulties relating to acculturation processes and power relationships, and to build good relationships with surrounding communities, the mine needs to establish a communication department with a dedicated community liaison officer. The community liaison officer should be approached from a strategic viewpoint, because communities nowadays hold the company's social license to operate. Therefore a community's communication strategy is of utmost importance to

manage and facilitate participative communication with stakeholders, amongst others, different levels of government, NGOs and the communities.

According to the World Bank and International Finance Corporation's Report (2002, pp. 15-16), the importance of good communication between the company and its neighbouring communities cannot be overemphasized. Companies should begin early, be open and give lots of information. They should make use of the media that is available to them. The most effective and most cost effective include local radio advertising using all the languages. This is the least discriminative because it includes people who cannot read. Posters in key areas such as clinics, shops and village centres are also effective. It is essential to have a clear mission with regard to the project. There should be a group of senior managers dedicated to these tasks. Communication and support must be spread widely within the company and relevant government departments. Furthermore, it is important to understand the hierarchy within the community structures when communicating to prevent offending people, for example, traditional leaders. Improving communication with all facets of the communities is a process which starts with improved integration and power relationships between government, communities and the mine. This process facilitates a better understanding of the social capital and cultural practices within the communities ensuring representation of the disempowered groups within communities, such as women, the elderly, children and youth.

In order to substantiate a human-centered approach, developmental priorities must be taken in the context of the communities concerned. In view of this, developmental priorities were identified for each of the mines' surrounding communities and are briefly discussed below.

5.3.1 Specific recommendations

- The mines should implement mining charter on the representation.
- More women need to be promoted to senior and middle management levels.
- More black women should be employed in the management of the mines.
- A plan to minimize over usage of water resources should be developed.

- There should be more buy-in by the management in using HDSA when procuring and tenders of higher value should be awarded To HDSA.
- There should be public participation in mining development, including the creation of multi-stakeholder decision-making forums to address regional sustainable development issues.
- There should be community-mining facilitation, including assisting rural, black communities to negotiate impacts and benefits agreements with mining companies and in identifying mineral rights/ownership opportunities – partly in the context of developing an effective and viable community-based small scale mining sector.
- Environmental, social and economic impact assessments must be conducted to reflect on all the impacts from a mine. These assessments must not be mere formalities but must assist communities, mining companies, and government to resolve major concerns and to create monitoring and evaluation structures with all relevant stakeholders. It is not adequate to hold public participation meetings with only half truths and technical information. There are a number of mining costs that result from mining processes and some of these costs are externalized onto communities, workers, local government and the broader environment. The impact assessments must consider the full cost of the mining activity including water, air and waste pollution, living out allowance, health and safety, spread of HIV/AIDS, loss of agricultural land, and the growth of informal settlements.
- Government officials serving on mining company boards could result in a conflict of interest with government pushing mining above the interests of the community. Provincial and local government must put people first and protect their constitutional rights above those of the economic incentives of mines.
- Mining companies must re-assess their labour policies. Migrant labour and the living out allowance have an impact on informal communities. The continuation of labor policies such as subcontracting denies workers adequate protection. Through engagement, more inclusive social and labour

plans that involve communities and that addresses community needs and wants must be developed.

- The reality of mining activities is that they work with substances that are harmful to the environment. There must be a mechanism to ensure the safety of water, land and air. Mining companies must monitor the waste emissions and pollution from the mining activity. In cases of dangerous impacts such as acid mine drainage, air pollution, river pollution and denial of access to water sources, mining companies must be held accountable to control the problem and in situations where communities are denied access to water, alternative sources must be supplied by the company.
- Although CSR has been done to improve the public face of a company, there have been areas where the work done has been beneficial to the communities. Mining companies must report on all aspects of its activities such as pollution of underground water, perforation of dykes – and not just give what is good press. Effective CSR can only be done if mining companies embrace the interests of communities affected by their operations.
- Section 21 companies that are established by the mines serve to divide communities as they are then viewed as tools to enhance the mining companies. Representative community structures should be established and become the point of contact with mines. In addition, it can be argued that Section 21 Companies are in conflict with the Communal Land Rights Act (2004) and the Communal Property Associations Act (1996). According to these Acts, communities could gain control over their land by setting up a land administration committee or a communal property association to manage and administer communal land on behalf of the community.

5.4 Implications

External environments have major influences on the operation of the mines. Although, one does not have control over external environmental factors, it is required that issues that are affecting the community directly be identified and pro-measures are taken.

The other implication is that for the mines to remain developing the community there should be a need to improve the relationship with all relevant stakeholders within the communities. The implications of the mining charter require management support because this affects the financial implications of the mines.

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