

**THE CONTRIBUTION OF MAAMBA COLLIERS LIMITED  
TOWARDS CORPORATE SOCIAL RESPONSIBILITY IN  
EDUCATION IN SINAZONGWE DISTRICT OF ZAMBIA**

**BY**

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A dissertation submitted to the University of Zambia in partial fulfillment of the requirements for the award of the degree of Master of Education (Education and Development)

**THE UNIVERSITY OF ZAMBIA**

**LUSAKA**

**2019**

## DECLARATION

I, **Joseph Simweleba**, do hereby declare that this dissertation presents my own work and that it has not been previously submitted for the award of a degree or any other qualification to the University of Zambia or any other University. All references have been adequately acknowledged.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

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## APPROVAL

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## ABSTRACT

The study aimed at establishing the contribution of Maamba colliers limited to education and community development through corporate social responsibility in education in Sinazongwe district of Zambia. The study adopted the mixed method design known as an embedded design. The sample size for this study comprised of the Chief Executive Officer, the Company Managers, 2 Human Resource Managers, 150 Employees, 10 employees on Focus Group Discussions. Others are 10 local people and 1 traditional Chief. The study used purposive sampling (non-probability) sampling to ensure an inclusion of relevant individuals only. The study used questionnaires, focus group discussions, document analysis, and interview guides. Quantitative data was analyzed using descriptive and inferential statistics. Factor analysis, using the rotated component matrix, was used under each research question to ascertain the underlying contributory factors to enhancing education and national development in Mamba Coal Mine in pursuit of Corporate Social Responsibility.

The findings show that the mine has been involved in the construction of primary schools, teachers' houses, roads, markets, health centres, and bridges. The study further shows mixed views on the mine's contribution towards human resource. The results ascertain that Maamba mine has constructed a training institute and that the mine is contributing towards teaching and learning in the district. Document analysis shows that the mine has some policies aimed at contributing towards health and agriculture. Overall, the study concludes that the mine is greatly contributing towards education and infrastructure; however, it has not done as much in agriculture, health, and human resource.

The study recommends the government to have affirmative policy that will compel mining companies to apply corporate social responsibility to host communities. Further studies on the impact of the CSR activities of the mine towards the local citizens should be carried out.

**Keywords:** *Corporate Social Responsibility, Education, Human Resource, Infrastructure, Community Development*

## **DEDICATION**

I dedicate this work to my dear late dad Mr. Miles Simweleba Gungu and my surviving mum Mrs. Elita Chinyama Gungu for their parental guidance and financial support in my education in Southern Province of Zambia. And to you Naomi Banda, Mainga Simweleba Gungu and Kanji Simweleba Gungu for being such an inspiration in my life.

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I cannot forget the selfless support I received from my dear friends Brian Chibuluma, Naomi and my course mates. My special thanks to the management and staff of Maamba Colliers Limited for allowing me to carry out this research in the mine, the DEBS office at the Ministry of Education in Sinazongwe District for its participation in this research, and all people of good will who, directly and indirectly offered support to me.

Lastly, I owe it all to my family members for their unwavering support both in good and hard times and to see me to this end. I can never thank you enough! God bless you all.

## ACRONYMS

ATSE	Australian Academy of Technological Science and Engineering
CSO	Central Statistical Office
CSR	Corporate Social Responsibility
DEBS	District Education Board Secretary
DESO	District Education Standards Officer
EFA	Exploratory Factor Analysis
FDI	Foreign Direct Investments
FGDs	Focus Group Discussions
GIZ	Gesellschaft für Internationale Zusammenarbeit
GRI	Global Reporting Initiative
HIV/AIDS	Human Immunodeficiency Virus Infection Acquired Immune Deficiency Syndrome
ICMM	International Council of Mining and Metals
IDE	International Development Enterprises
ILO	International Labor Organization
JCTR	Jesuit Centre for Theological Reflection
KCM	Konkola Copper Mine
KMO	Kaiser-Meyer-Olkin
MCL	Maamba Colliers Limited
NGO	Non-Government Organizations
OECD	Organization for Economic Co-operation and Development
SEAT	Socio-Economic Assessment Toolkit
SMEs	Small and Medium-size Enterprises

SNDP	Sixth National Development Plan
SPSS	Statistical Package for Social Sciences
TEVET	Technical Education, Vocational and Entrepreneurship Training
UK	United Kingdom
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNZA	The University of Zambia
WHO	World Health Organization
ZRA	Zambia Revenue Authority

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# CHAPTER ONE

## INTRODUCTION

### 1.1 Overview

This chapter presents the background of the study, statement of the problem, purpose of the study, research objectives and questions, significance of the study, delimitations and limitations of the study, theoretical and conceptual frameworks and operational definition of terms. The chapter will be concluded with a summary.

### 1.2 Background

The World Bank (2010) spelled out the case for more knowledge-intensive growth in Africa and described the critical role of higher education in this endeavor. The goal is to make higher education contribute to finding solutions to the development challenges facing Africa. However, higher level institutions in Sub-Saharan Africa faced (and still face) the formidable policy challenge of balancing the need to raise educational quality with increasing social demand for access. And since the task of funding these institutions would become increasingly difficult in the years ahead, as the youth population continued to grow, each country would have to devise a financing approach to higher education development that would enable it to meet the challenges.

Education is the most effective tool in fighting poverty and reducing inequality. Human capital and skills development is the single most important factor for economic growth of countries (World Bank, 2009). According to the Ministry Of Education (MoE) (2011: xiv), education is a major factor in enhancing a country's social and economic development, as it aids in fighting against poverty and hunger. In addition to this, globally, Technical Education, Vocational and Entrepreneurship Training (TEVET) has been an integral part of national development strategies because of its impact on human resources development, productivity and economic growth (World Bank, 2010). The United Nations Educational, Scientific and Cultural Organization (UNESCO) and International Labor Organization (ILO) define TEVET as a term referring to those aspects of the education process involving, in addition to general education the study of technologies and related sciences, acquisition of practical skills, attitudes, understanding and knowledge relative to various sectors of the economy and social life (Mwila, 2016).

The Ministry of Education (1996), stresses that education is a means of enhancing the well-being and quality of the nation. The Government of Zambia acknowledges that education and training in life skills are key drivers for economic growth in the country. The revised Sixth National Development Plan (SNDP, 2013-2016), explains that education and skills training are key national agenda for socio-economic development of the nation. This is because education and skills training provide opportunities for growth, poverty reduction, employment and productivity that lead to national economic development.

Chibuye (2016) also reemphasized the point that education is a key indicator in a nation's effort to develop a highly skilled workforce needed to compete in today's economy. He further said that given the extensive social and private benefits that result from education especially tertiary education, access and inclusive education are essential for achieving social justice, and ensuring the realization of the full potential of all young people. A talented but low-income student who is denied entry into tertiary education represents a loss of human capital for society. The lack of opportunities for access and success in tertiary education will lead to underdeveloped or undeveloped human resources and a resulting shortfall in the capacity to economic and social benefits (Harbison, 1964; Ramcharan, 2004).

Chibuye (2016) argues that it would be helpful for the corporate world especially the mining firms to get involved in the provision of education especially tertiary education in order to help the vulnerable but viable students. This necessitated him to conduct a research on *The Contribution of Mopani and Konkola Copper Mines in Enhancing Corporate Social Responsibility in Education*.

The International Council on Mining and Metals (2014) encourages mining firms to exist as 'good citizens' and practice good citizenship to host communities due to environmental degradation caused by mining activities. It is not the duty of mining companies to provide education to citizens, however, the comparative studies in Chile, Australia, Ghana and Tanzania and many other countries, overwhelmingly show that multinational mining companies are involved in offering education and skills training to mining host communities that have greatly contributed to national development. Chile, as one of the world's largest copper producers has a distinct and well established corporate social responsibility trail over the years where mining firms have been compelled to provide education facilities and training programs for host communities (Chile Mining Report, 2016). The quantitative study by Yaw Brew et al., (2015)

in Ghana also indicates that Gold mining companies are fully involved in helping the country in providing education to host communities.

Firms can contribute to the education sector through their CSR activities. According to the VISION Zambia 2030 on corporate social responsibility, it states that the Nation shall ensure Corporate Social Responsibility by the private sector is strictly adhered to and implemented to the latter. However, there is little literature on mining firms' contributions towards enhancing education. Hence, this study strives to establish Maamba Collieries Limited's Contribution towards enhancing education and national development in Sinazongwe District of Zambia.

### **1.3 Statement of the Problem**

Maamba Colliers Limited has been in existence since 1967 in Sinazongwe District. And according to the Second Report of the Committee on Education, Science and Technology for the Fourth Session of the Tenth National Assembly (2009), there has been escalating levels of illiteracy, high school dropout rates, inadequate and poor school infrastructure. Despite MCL having been the most lucrative mine in southern province and in the district, there is still high level of illiteracy, poverty, poor road networks, and poor school infrastructure around the community (MoE, 2016). This raises a question as to what the mine is doing in order to help the community through CSR activities.

### **1.4 Purpose of the Study**

The purpose of this study is to establish Maamba Colliers Limited's contribution towards enhancing education advancements, community and national development in Sinazongwe District of Zambia.

### **1.5 General Research Objectives**

To examine the contribution of Maamba Colliers Limited towards Corporate Social Responsibility in enhancing education and community development.

### **1.6 Specific Research Objectives:**

- i. To establish the contribution of Maamba Colliers Limited towards corporate social responsibility in infrastructure development in Sinazongwe District of Zambia.
- ii. To ascertain Maamba Colliers Limited's contribution towards Human Resource development through education in Sinazongwe District of Zambia.

- iii. To investigate if Maamba Colliers Limited has integrated material and social development activities and programs in its business bench mark in improving Teaching and learning in schools of Sinazongwe District of Zambia
- iv. To investigate if Maamba Colliers Limited's has policies on Corporate Social Responsibility aimed at enhancing education and infrastructure development for the local people of Sinazongwe District.

### **1.7 Research Questions**

- i. What are the contributions of Maamba Colliers Limited towards corporate social responsibility in infrastructure development in Sinazongwe District of Zambia?
- ii. What is Maamba Colliers Limited's contribution towards Human Resource development through education in Sinazongwe District of Zambia?
- iii. How has Maamba Colliers Limited integrated material and social development activities and programs in its business bench mark in improving Teaching and learning in schools of Sinazongwe District of Zambia?
- iv. What policies has Maamba Colliers Limited put in place in enhancing education and infrastructure development for the local people of Sinazongwe District

### **1.8 Significance of the Study**

The importance of this study lies in the contribution it will make to the body of knowledge and literature on the role of mining companies especially Maamba Colliers Limited's contribution in enhancing education and national development. Secondly, the study will be essential to the prospective investors on the need to pay back to the community they profit from and as compensation for environmental degradation in the concerned areas.

### **1.9 Scope of the study (Delimitation)**

This study was confined to Maamba Colliers Limited of Sinazongwe District of Zambia where an assessment of the mining firm's contribution towards enhancing education and national development in Sinazongwe District of Zambia was carried out. Another reason is that since the inception of Maamba Colliers Limited, it was interesting to evaluate both Macro-economic and micro-economic benefits for both the state and the community of Sinazongwe as key stakeholders in the mining activities.

## **1.10 Limitations**

The concept of limitations refers to influences, shortcomings or conditions that cannot be controlled by the researcher that place restrictions on methodology and conclusions. Macmillan Study Dictionary (2009:431) defines limitation as: “Weak points that make someone or something less effective”.

Firstly, finances were a challenge in meeting the needs of the study. Therefore, the researcher reduced the sample size of interviews. The study also had challenges with accessing the respondents. This was due to the fact that they were busy with other things.

## **1.11 Theoretical Framework**

There are various types of theories that would have been employed in providing microscopic assessment on how companies carry out their businesses in meeting the needs and benefit not only for the shareholders (company owners) but also for the stakeholders through Corporate Social Responsibility. Thus, for this study, the theories used are the Shareholder theory of Martin Milton Friedman (1962) and Stakeholder theory of Edward Freeman (1984). A firm is a citizen and as such, under corporate citizenship, a firm must contribute to the well-being of the nation and the community within which it exists. Thus, Stakeholder Theory of Edward Freeman (1984) is the guiding theory of this research project. However, Martin Friedman’s Shareholder Theory (1962) has been highlighted in the study to provide a build up to the Edward Freeman’s Stakeholder Theory (1984).

### **1.11.1 Shareholder Theory**

This theory takes a shareholder approach to social responsibility. Martin Friedman (1962) believes that businesses do not have any moral obligations or social responsibilities at all, other than to maximize their own profit. According to Friedman (1962), this theory views shareholders as the economic engine of the corporate company and the only group to which the firm must be socially responsible. In other words, the goal of the firm is to maximize profits and return a portion of those profits to shareholders as a reward for the risk they took in investing in the firm. Friedman advocates that the shareholders should decide for themselves what social initiatives to take part in rather than having their appointed executive decide for them. Friedman (1962) articulates that the sole responsibility of business is to increase profits and emphasises that under this theory the managements are hired as agents

of the shareholders to run the company for their benefit conforming to the basic rules of the society.

In support of Friedman, Klein (1999) criticizes Corporate Globalization Movements as unethically exploiting workers in the world's poorest countries in pursuit of greater profits. Klein (1999) concludes that through corporate social responsibility multinational and transnational companies make more profits at the expense of the poor communities and workers. Aglietta and Reberioux (2005) assert that the shareholder value theory protects the remuneration of shareholders who are considered as the real owners of companies.

Martin Friedman (1970) strongly argues in favour of maximizing financial return for shareholders. His capitalistic perspective clearly considers the firm owned by and operated for the benefit of the shareholders. He believes that there is one and only one social responsibility of business - to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game (Saint and Tripathi, 2013).

Friedman (1970) indicates that since the sole aim of a business is to make profit, and since the sole desire of those who own businesses (shareholders or stockholders) is that their business profit, Friedman concludes that employees of any business are obligated to do one and only one thing: Maximize that business's profit. The shareholder theory advocates that any instance of an employee of some company seeking something other than profit (such as common goods for society) will require that employee to take away from that business's profit. In other words, in order to promote the common good in society, a business must spend some of its profit in order to give back to the public. According to this theory this is stealing because the profit rightfully belongs to those who own the company. Promoting the public good therefore requires stealing from the shareholders who own the company (Friedman, 1970).

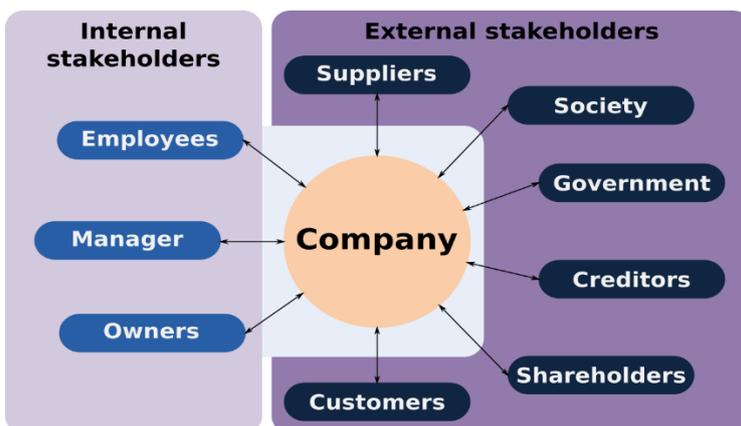
Hillman and Keim (2001) quoting Friedman (1962) assert that alternatively, taking money from the company in order to make others better off can be seen as a form of taxation. By forcing a company to give some of its earnings to the public, it is essentially imposing a tax on that company, and then using that tax money to help others, improve the community, etc. Friedman (1970) further elucidates that businesses are entitled to their earnings. They rightfully earn their profit, so any case of taking some of that profit away is theft arguing that earnings of businesses are already taxed by the government to fund public good. In this way businesses are already fulfilling their social responsibilities.

### 1.11.2 Stakeholder Theory

The stakeholder theory is a theory of corporate organizational management and business ethics that addresses the values and morals in managing an organization. Freeman (1984) illustrated that the core purpose of stakeholder theory is that organization and firms that manage their stakeholder relationships effectively will survive longer in business and perform better than firms that do not. This theory looks at the relationships between an organization and others in its internal and external environment and how these connections influence how the business conducts its activities. By contrast to Milton Friedman (1962), Freeman (1984) suggests that stakeholder theory is a view of capitalism that stresses the interconnected relationships between a business, its customers, suppliers, employees, investors, communities and others who have a stake in the firm. Key to the stakeholder theory is that the purpose of a business firm is to create as much value as possible for stakeholders but keeping the interests of the communities, employees, the government and the customers at the Centre of its business for its long term survival and success.

The Figure 1.1 illustrates the stakeholder theory stating that the company must exist to benefit both internal stakeholders, who are the employees, managers, owners, and as well as the community in which the firm operates.

**Figure 1.1 Illustration of the Stakeholder theory**



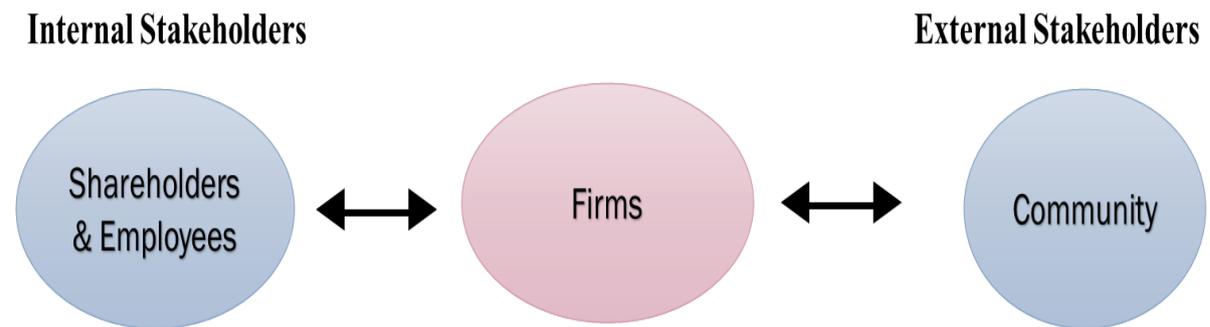
**Source:** [www.Spidermark.com/en/ed-freeman-and-stakeholder-theory](http://www.Spidermark.com/en/ed-freeman-and-stakeholder-theory)

The intention of stakeholder theory is to offer an alternative purpose of the firm. Stakeholder theory suggests that the purpose of the firm is to serve broader societal interests beyond economic value creation for shareholders alone. It is becoming central to the important story

of business in society. The concept of Stakeholder conceptualises managers to have a moral obligation to consider and appropriately balance the interests of all stakeholders (Saint and Tripathi, 2013).

Ahmed and Ahmed (2012) observed that every corporation tries to expand its business for profit motive. But companies are also responsible of their impact on people and planet. The word “people” includes company’s stakeholders, employees, and customers, investors, suppliers, business partner, government and community. All of them are linked together through the corporation and form a social circle.

Figure 1.2 shows a simple illustration of the stakeholder theory. In the figure, the firms are the links between the internal stakeholders and the external stakeholders. The internal stakeholders of a firm may include the shareholders and the employees while the external stakeholders include the community. This means that both the shareholders and the community must benefit from the firm.



**Figure 1.2 Illustration of the shareholder Theory**

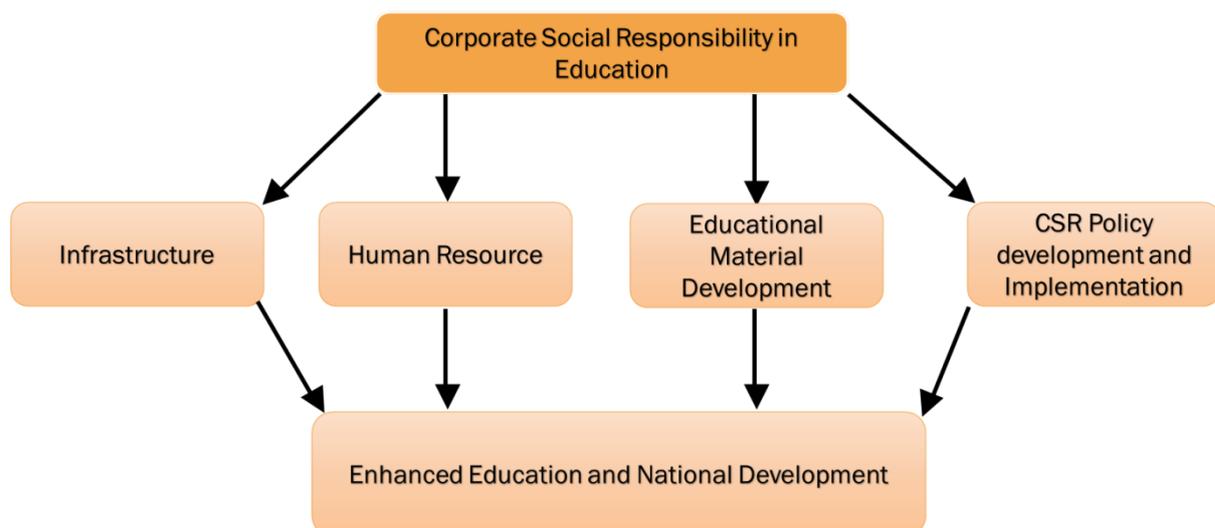
In order to remain competitive and productive, the corporation has to be socially responsible. Every business has two types of assets; one type is tangible assets that are physical in nature and the other is intangible that relates to corporate social responsibility or social dividends. The corporation’s worth is counted on both. But in a competitive environment, corporations benefit from their goodwill, which comes through effective corporate social responsibility (CSR) efforts. CSR emphasizes businesses to promote public interest by encouraging development and growth of community, especially when extractive activities are done and local resources are exploited (Ahmed and Ahmed, 2012). Bliss (2015) indicates that a corporate firm can reduce its business risks through its corporate social responsibility activities that increase shareholder value. Such activities in the community can help the company avoid regulations, taxes or fines; all which reduce cash flow and maintain profitability.

Two theories, namely; the shareholder theory and the stakeholder theory were employed in explaining how multination companies and the business world should apply the corporate social responsibility in order to maximize their profits as well as investing in the communities they operate. The business entities that empower the local community through social investing tend to exist longer in business and woo local community support than those that do not.

### 1.12 Conceptual Framework

Conceptual Framework is a study structure that outlines the independent and dependent variables to be used in the exploration of the research. In this study there are three interrelated variables that influence and enhance education and national development and improved livelihood of the people in the community within which corporate social responsibility is applied.

The Figure 1.3 shows the conceptual framework. The variables shown in the framework are educational infrastructure development, educational material development, Human resource development, educational and development policies and micro-economic investment. This means that if there is good infrastructure, well trained human resource, appropriate educational materials, and policies that support CSR it may lead to enhanced education and national development.



**Figure 1.3 Conceptual Framework**

### 1.13 Operational Definitions

The following terms were key words (variables) and they were defined according to the context they were used in this study as follows:

**Corporate Social Responsibility:** Corporate social responsibility (CSR) is a business approach that contributes to sustainable development by delivering economic, social and environmental benefits for all stakeholders. Movement aimed at encouraging companies to be more aware of the impact of their business on the rest of society, including their own stakeholders and the environment (businessdictionary.com, 2018). In this study, CSR will be used to include any non-profit services or activities that the mine does to its communities.

**Quality Education:** This is defined as the process that provides training and development of knowledge and skills to become economically productive, develop sustainable livelihoods, and enhance the individual wellbeing (VVOB, 2018). This study, quality education will include anything done to enhance education provision.

**Education infrastructure Development:** Educational infrastructure includes not only school building, but also textbooks, the expertise possessed by teachers, the informal organization of educational institutions, and the shared cultural assumptions in the community that support the value of education (OECD, 1999).

**Skills Development:** An ability and capacity acquired through deliberate, systematic, and sustained effort to smoothly and adaptively carryout complex activities or job functions involving ideas (cognitive skills), things (technical skills), and/or people (interpersonal skills) (businessdictionary.com, 2018).

**Sponsorship to education:** educational sponsorship whenever an organization invests in education-related programs. There are many ways a company can achieve these goals: donations (cash and equipment's), scholarships (Optimy.com, 2018). In this study sponsorship to education will include the packages that the mines have put in place to educate its workers and the community.

**Community Participation:** Involvement of people in a community to solve their own Problems that affect their livelihood.

**Rural Development:** A process of improving the quality of life and economic wellbeing of people in rural area

#### **1.14 Organisation of the Dissertation**

Chapter one gave the general introduction to the study on Maamba Colliers Limited's contribution towards enhancing education and national development in Sinazongwe District of Zambia by providing and explaining the background to the study, the statement of the problem, purpose, the research objectives and questions. The significance of the study will also be given. Other issues to be discussed in the chapter include delimitation or scope of the study, the limitations to encounter, theoretical framework, conceptual framework and the operational definitions used in the study.

Relevant literature was reviewed thematically which helped to support and identify the gap of this study in Chapter Two. In Chapter Three, there is a discussion on the methodology of the study particularly, the research design, research study area or site, study population, sample size, sampling techniques, data collection methods and instruments, validity and reliability, data analysis and ethical considerations.

Chapter Four presents the findings of the research study. These findings are presented according to research questions that are formulated in line with the objectives. Chapter Five discusses the findings of the study. The discussion was done according to objectives and this was guided by the theory of the study. Chapter Six gives the conclusions and recommendations based on the findings of the study.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Overview

Literature is a critical look at the existing research that is significant to the work the researcher is carrying out (Kombo and Tromp, 2006). It is an account of what has been published on a topic by accredited scholars and researchers. According to Brink (1996), literature review is that which provides an overview of current knowledge of the problem under study and it is also a process that involves findings, reading, understanding and forming conclusions about the published research and theory on a particular topic. Thus, this section of the study first presents the concept of CSR, and then proceeds to present a review of works from the Americas, Europe, Asia, Australia, Africa, and finally Zambia.

#### 2.2 Corporate Social Responsibility

CSR is a helpful conceptual framework for exploring the corporate attitude of companies towards stakeholders (Wheeler, Fabig, and Boele, 2002). For the mining industry, CSR is about balancing the diverse demands of communities, and the imperative to protect the environment, with the ever present need to make a profit (Jenkins, 2004). CSR calls for a company to respond not only to its shareholders, but also to other stakeholders, including employees, customers, affected communities and the general public, on issues such as human rights, employee welfare, climate change and social justice (Hamann, 2003).

Apparently, many multinational and local extraction companies have been registered by the Government of the Republic of Zambia but there is very scant and limited evidence from the media, literature and the host communities to show that CSR is practiced and maximized to profit the host communities especially in areas of education, micro-economic investment or SME for the local population and skills training.

The CSR globally operates around **3Ps** (Profits, People and Planet). There is much attention paid to profit making and taking care of the environment (planet) by mining companies and their concise application of CSR in view of empowering the host communities with social and economic benefits in improving their livelihood, is not definite. Corporate Social Responsibility is usually defined as *a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their*

*stakeholders on a voluntary basis* (European Commission, 2001:8). This definition already does not offer a clear commonly understanding among corporate companies and what should constitute CSR.

In this literature review we looked at what mining companies have done to improve the livelihood of the host communities and how they have applied CSR in their mining operations to benefit the local people in the areas of education, promotion of small businesses among the people and provision of skills training. Therefore, the literature review that follows highlights the current debates, on the need for the corporate world to incorporate corporate social responsibilities in their operations as one way of giving back to the communities which are affected by their activities. The literature has been examined according to regions.

### **2.3 Studies in North and South America**

Studies in the Americas including both the Northern and Southern America show that the mines have contributed to education training. Almerinda (2013) revealed in his study on corporate social responsibility in the US and selected countries in Europe that the implementation of CSR to host communities is voluntary and companies that apply CSR to communities other than as a response to environmental care, do so to build the company's image and to maintain competitiveness in their business. However, earlier research carried by Maignan and Ralston (2002) found that US firms promoted the quality of life and education. As such, mining firms and other companies paid attention to arts, education, culture and the quality of life. These companies focused on issues connected to the well-being of the community. This scenario is the same even in Europe. However, all such commitment to community well-being was not out of legislature but voluntary.

Nevertheless, the study done by Loeffler (2015) in the North American countries with Red Dog Lead and Zinc Mine indicates that the studied eleven communities in the North show significant positive effects on the communities due to the operations of the mines. This is because, as observed by Loeffler (2015), most of the land was forcibly occupied by the mining firms by displacing indignant people in Alaska region. Therefore, as a response to earlier forceful displacement of the people, the mines apply CSR. Thus, after 25 years of mining activities, the mining firms have been forced to exercise CSR for the communities affected. As observed in many countries, CSR is a new development among multinational

Mining companies especially regarding their duty to local community needs. The mining firms operate on economic gains and only respond to community social needs when the local people begin to apprise against them. Jenkins (2004) explains that the causes of misunderstandings between mining firms and the local communities are because both the government and the mining companies operate on two different criteria namely: for the governments, they operate on legal criteria while mining companies tend to operate on economic criteria. This leaves the local communities unsure of their role and benefits from the mining activities.

Loeffler, (2015), however, states that by 2014 the Red Dog Lead and Zinc Mine in North America had employed 600 workers of which 57 percent were local people who also share 57% in the company adding to the social economic benefit of the local communities. The Red Dog Mine affects education in the Northwest Arctic in the provision of funds to the school district through its payment in lieu of taxes, providing programs in various training and apprenticeship programs, and scholarships for youths, providing a career path for students. The mines also help teach the work culture of America's Western society (Loeffler, 2015).

The overall conclusions of the mining companies' activities in Latin America, generally through their foundations, are involved in creating social capital. The Inti Raymi Foundation, for example (McMahon and Remy, 2001) trains locals in the design and preparation of projects that they can present for funding, including organizational matters. However, the indirect creation of social capital is likely more important for the communities because the communities are learning how to organize, how to negotiate with both companies and central governments, and how to take advantage of the opportunities offered by the mining operations to pull themselves up by their own efforts.

Chile, as one of the world's largest copper producers has a distinct and well established corporate social responsibility trail and it is ranked as a middle-to-upper income economy by the World Bank and was the first South American country to join the OECD in May 2010 (Chile Mining Report, 2016). According to its yearly report (2016:10) Collahuasi Mining Company invested US\$1.6 m in training and development in 2015 –over 30% more than in 2014. 318 different training courses were offered, ranging from technical skills to conduct and safety, totaling 70,601 hours of training – over 52% more than 2014. Collahuasi mining

company trained 49 young people through its apprenticeship program. Investment in training enables Collahuasi's existing workforce to develop their skills. The key issue for the future will be to build the skills of Tarapacá residents so they are better equipped to take on jobs within the mining industry. Through the mining sector Chile has been able to construct educational and health institutions in the country. For example, Kinross Gold Maricunga has provided educational, employment, medical, environmental and other support to the local communities (Bradley, R. 2008). The Commission for Mining and Development of Chile National Council of Innovation and Competitiveness states that Chile is a global mining power and a largest producer supplying 32% of worldwide production and national economic pillar of the country (CMDNCIC, 2014).

Studies from this region have also shown that the mines are responsible for many jobs in the communities that they operate. The presence of a large employer provides the critical mass for other school district initiatives. For example, the school district operates the Alaska Technical Centre, which is a state wide vocational and technical education training facility. The school district also operates a high school magnet program with dormitory facilities for high school vocational training. These facilities benefit more than the Red Dog Mine, but the presence of the mine as a major employer provides the critical mass that makes them possible, or at least easier (Loeffler, 2015).

While the stakeholder theory may persuade mining companies to practice CSR, policy guidelines may help in achieving continuous community support. Tahir Mariam (2012) elucidates in her research in Canada that extraction companies do not have binding legal framework on CSR practices to empower local communities. The CSR practices by the mines is in response to demands made by the Global Reporting Initiative (GRI) where mining companies report on their CSR activities in response to environment, mines operation and human rights practices. Tahir Mariam (2012) states that mines in Canada are unaware of the standard they are expected to follow to ensure sustainable development. This means that there are no clearly defined guidelines that demand for responsible mining within Canada. Thus, it is difficult to expect them (companies) to follow the standards on CSR that they are not aware of. Additionally, this means that mining companies are not, per se, mandated to offer social and economic skills to host communities. This recent research by Tahir Mariam (2012) concludes that Canadian mining companies have a poor record of

support for corporate social responsibility guidelines despite the many efforts by the Canadian government to promote responsible practices.

Lastly, some studies have also suggested that the mines are not doing enough. It is hard to say that mining corporation have good reputation in CSR (Kapelus, 2002). This is because most of the extraction companies work towards maximization of profits and pay very little attention to environment and social justice to the communities and human rights. The shareholder Theory of Friedman (1970) discussed above is at play in most of these multinational companies whose sole agenda is to maximise profits and satisfy the owners of the company.

To the contrary, however, Tarhan Okan et al., (2015) argues that there are noticeable things in the historical development of the CSR such as an evolution of the earlier idea of corporate being only responsible to their shareholders in terms of profit, into meeting also the expectations of other stakeholders. This means that most mining companies in the USA are striving to incorporate community social responsibility in terms of philanthropy other than only performing activities that make profit for the companies.

## **2.4 Studies in Europe**

European studies have also indicated a strong presence of CSR in the host countries. Marzena (2013) further observed that most Coal Mines in Poland have devised a management base in offering social development for the local communities by constructing schools, sponsoring scholarships for children, promotion of local culture and tradition and offering financial support for community organizations and charities. In other words, CSR promotes profitable social relationships both within the mining company and the communities, and such relational needs become highly relevant for the productivity of the company. The involvement of the government and the community adds the strategic decision making and community through voice action directed to the stability of the company in community against rejection

Dzoga et al. (2010) observed that in Poland CSR was only developed in 2009. Firstly, the government established the Inter-Ministerial Team for Corporate Social Responsibility (IMTCSR) under which were formed four Working Groups for the promotion of CSR, education, responsible investment and sustainable consumption. Although CSR is a

relatively new approach to mining companies in Poland and is based on including social interests and environmental protection, the mining firms have adopted social involvement in the management of the mines by focusing on building the right relationships with employees, respecting their rights and involving them in the process of business management.

Furthermore, the research report on skills given by Penny Tamkin et al., (2004) in UK clearly indicates deficiency in number of skills measured in external skills and internal skills gap. The evidence shows that employers experience skills shortages amounting to 135,000 vacancies in England (Hogarth, *et al.* (2004). Penny Tamkin et al /2004) states that in UK

A lot of training activity is not driven by a formalized training or business plan and therefore can be reactive and dominated by short term needs rather than supporting business development and growth ..... Only half of training leads to a formal qualification, raising questions about completeness and coverage of sufficient underpinning knowledge. Furthermore, there are significant sectoral variations in the level and nature of training activity which may only serve to exacerbate problems in some sectors.

This scenario presents the fact that skills training and development is key to economic development. Therefore, if there was a legislature in UK that compelled mining firms to direct their CSR practices towards general education and skills training for the population, it would help cushion the deficit of skilled labour force in the country.

The Study carried out in Poland by Marzena Majer (2013) shows that Corporate Social Responsibility (CSR) has become particularly important among mining companies due to the character of activities carried out by mining companies, associated with mining of coal, a high level of employment and especially due to a strong impact on the social environment. The level of involvement of mining companies is in the three areas of CSR: consumers, market practices and social commitment. Their approach to social commitment has been to maintain a positive relationship with local communities and local government according to the principles of CSR, considering not only the applicable laws or rules of conduct developed in this area, but also potential differences emerging on the basis of the approach to CSR, the experience of the mining companies related to the functioning of the stock market, or the practices “contributed” by foreign capital. This means that a company that works with the local community builds its self-image and wins the support of the local people

The lack of policy guideline to CSR is also present in Europe. In Britain, there is no legislature that compels companies to mandatorily apply CSR in view of community social development except for issues that concern environment, taxes, company reports and operations. Becky and Broomes (2017) indicates that UK Companies Act of 2006, states that CSR, in contrast, is a voluntary initiative for which no legislation has been enacted in Britain. However, it is understood that voluntary CSR allows companies and firms in UK to exercise best practices and allows them to raise their own criteria on those practices. Companies in UK do not believe in standardization of CSR as companies believe that such a move would place unbearable burden on Small and Medium-size Enterprises (SMEs). Such legislature would simply constrain business and reduce CSR to a lowest common denominator (Becky and Broomes, 2017).

Lastly, some studies have shown that CSR is taken as charity to support the community. Hilson (2002) concluded that most of mining companies in Europe are quite active in the areas of environmental protection as well as relations with their employees. However, most of the initiatives taken outside the normative requirements in the area of community involvement have a charity character, not always consistently present in a broader strategy for managing a company. A lack of a holistic approach to CSR and the treatment of these standards as a way of managing business is obviously present. As elucidated by Jenkins Yakovleva (2006), most mining companies in Poland and in Europe are still adolescents in the field of CSR with host communities and shows how many of the challenges associated with CSR still lay ahead for mining companies.

## **2.5 Studies in Asia**

Studies in this region have shown that the mines have a direct effect in increasing the employment opportunities to the host nation. This then affects the subsequent industries. Chibuye (2016) indicates that in India, mining companies view education and economic development as being positive factors towards achieving real progress and development. A deep analysis of the results in India shows that the main positive impact of mining companies is that of the generation of employment opportunities for local people, which consequently benefits the education sector, because parents can afford to send their children to school (Cuartero and Leva, 2014). In addition to funding the school district as described previously, the mine provides various training and apprenticeship programs, scholarships for youth, and tuition assistance programs for mine employees. One of the important high school programs

is a job shadow opportunity in which high school students come to the mine for a week and shadow employees to understand the skills and work environment (Loeffler, 2015).

The research by Akkala Surendra Babu (2016) on the impact of corporate social responsibility initiatives of Indian coal mining industry on society indicates that there is no gap between the real benefits the villagers are getting from CSR initiatives and the benefits that the coal company perceives that the villagers would have got from the CSR initiatives. The conclusions of this study in this scenario is worth noting because it is clear that the targeted beneficiaries are not satisfied with the quality of services or they are not aware of the quality the services inherit. This is because despite the infrastructure development in the mining area, this infrastructure development has not answered the root needs of the people. Therefore, mining firms must always consult the local communities on their social and economic needs.

## **2.6 Studies in Australia**

Studies have shown that mines in Australia have positively impacted the communities through various CSR activities. The study carried by Margaret Lyons (2016) on Six mining companies in Australia and their practice of CSR reveals that coercive or regulatory pressures were key drivers to companies' implementation and understanding of CSR to host communities (Margaret Lyons (2016). As such, due to ambiguity of CSR definition and understanding, most extraction firms and other multinational companies apply CSR to communities depending on the company leaders. These individuals may be deeply influenced by their own observations of the treatment of communities in developing nations and, to some degree, frame CSR in terms of how companies should not behave as a result (Margaret Lyons, 2016). This means that many companies operate on a workable balance between compelling moral and ethical demands and profits.

Working in partnership with Australian Academy of Technological Science and Engineering (ATSE) Mineral Council of Australia has introduced science and technology education to hundreds of schools. The minerals industry makes a significant financial contribution to Australia's higher education sector to ensure a high-quality supply of Australian graduates in mining. However, this education is mining related and this poses a serious limitation to young people who would wish to explore technology studies other than in mining.

As a large employer and industry presence in the regional and remote locations, mining firms in Australia typically provide an array of support with contributions that often include donations to local health services and infrastructure provision, such as housing, roads and small business development, as well as support and sponsorship of community sporting teams, schools and other fundraisers (Minerals Council of Australia, 2015). Additionally, mining companies in Australia are leading in community-led cultural heritage management for the local people. This is a way of support to the local culture and tradition of the host indigenous communities.

## **2.7 Studies in Africa**

Africa is known for its large deposits of minerals. This has increased mining activities on the continent. Studies have shown that Mines in Africa have done CSR activities in Human resource, education, infrastructure and many other sectors. Newenham-Kahindi (2011) reviews that the mines in Tanzania use 1% of their royalties to sponsor students for higher education as well as construction of classrooms, provision of housing for teachers and provision of building materials to various schools. This is aimed at improving education levels in the mining area. The local communities also benefit from CSR provided by transnational mining companies through the cattle restocking programs aimed at increasing milk yields through cross-breeding of local animals. This is helping families gain sufficient nutrients for themselves.

According to the research done by Yaw Brew et al., (2015) concludes that Mining companies in Ghana seem to have responded somehow over the years to the Corporate Social Responsibility (CSR) call but some companies still face open resistance from members of the communities who see them (mining companies) as socially irresponsible. Ghana is the 9th largest world producer of gold (Aryee, B.N.A. (2001) with its output increase by 2.1 percent to 97.8 tonnes in 2013 but its share in total gold output remained constant at 3 percent.

The total foreign direct investments (FDI) into the minerals and mining sector, from 1984 to 2011 amounted to some US\$11.2 billion with the large scale mining and the mine support services sub-sector employing about 27,000 people (Aryee, B.N.A. (2001). The minerals sector in Ghana continues to exert significant influence on the country's current account position. Contributing 37.6 percent of total merchandize exports in 2013 as compared to 43

percent in 2012, the minerals sector continues to be a leading source of foreign exchange for the country (Yaw Brew et al., (2015).

However, despite the Gold mining doing so well in Ghana, the study by (Yaw Brew et al., (2015) reveals further that while these extraction companies claim of significant contribution to CSR to the local communities in education, further analysis revealed that most of the school building projects are renovations to existing school buildings or an extension of a classroom block and not a complete school. It was also revealed in the Western region data analysis that the award of scholarship was an ad hoc and not a permanent activity (Yaw Brew et al., 2015).

The highest contribution made by mining companies for the local communities has been the construction of boreholes. There two reasons to this being that water is one great source of livelihood but that borehole construction is the cheapest on the side of many companies. However, mining companies in Ghana offer employment and vocational and technical training for the local people as well as training in mobile repairs and plantation projects (Yaw Brew et al., 2015). From this analysis, local communities in mining sites in Ghana are not satisfied with CSR offered by mines in social development because only a few people benefit in the mining community initiatives and the expense of huge mineral profits companies make.

The research by Mensah Victoria (2009) on Gold mining in Obuasi region in Ghana reveals that Mining companies make huge profits from the mining of gold, whereas the communities where these mines are located get very little (if any) of such huge profits made. The host communities of these mines are considered as encroachers on the concession lands of mining companies and have suffered various degrees of consequences including being shot at and injured.

In the absence CSR legislature in Ghana, Victoria Mensah (2009) concludes that such mines that violates human rights and abuses host communities must not be allowed to operate.

Jones, B., Bowd, R. and Tench, R. (2009) emphasizes that development of positive relations with the local community and thereby the accumulation of social capital is particularly relevant for non-local companies. This is because the multinational companies increasingly use these relations to support the integration of their affiliates into various markets in which

they are present. The familiarity of companies with the local actors, the local environment traditions and strengths is an asset from which companies must capitalize.

Kiikpoye (2012) states that Oil Transnational Companies (Shell and Chevron) in the Niger Delta in Nigeria, engage in diesel powered electricity for rural communities who are too poor to buy diesel, when solar or gas turbines would be more sustainable. In this scenario, CSR is being implemented but it does not meet the needs of the people in the Niger Delta. In fact, it exacerbates the volatile security and poverty situations. Carmody (2011) describes overall operations of ExxonMobil in Niger Delta as being responsible for devastation of local communities and vegetation due to oil spills and an increase in the number of people killed each year due to conflict.

Marais (2010) carried out a research in South Africa on the Mining CSR impact on sustainable community development. She acknowledges that mining companies have significantly applied CSR focusing on community social initiatives as their impact in economic, social and environmental terms. However, her study strongly questions CSR as on its own cannot constitute substantial local sustainable community development. The World Business Council for Sustainable Development (WBCSD) defined CSR as “...the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as the local community and society at large...” (WBCSD, 2003). However, even with this clear definition, multinational companies still do not seem to have a clear perception of what constitutes CSR in South Africa (Marais, 2010). Therefore, the companies’ planned implementations differ in offering services to beneficiaries.

In South Africa Anglo American contribute to the “economic, social and educational well-being of the communities” surrounding their operations, by providing a framework for Anglo managers to promote training programs, community partnerships, and small business development, among others. (Marais, 2010).

The Socio-Economic Assessment Toolkit (SEAT) was developed in South Africa to maintain the companies ‘social license to operate’. It is a tool to help Anglo to earn and retain the trust of communities in which it operates through improved management of its social and economic impacts, enhance partnerships and environmental stewardship (Marais, 2010).

While some mines in South Africa, like Anglo-America/ De Beers (Marais, 2010) small business initiatives (SBI) were developed to assist small scale businesses for the local people as well as offering provisions for small business loan funding they are far from meeting expectations of the local community. Bhattacharyya, (2004) observes that while these are good initiatives by mining companies often times these activities are implemented by mining companies with less involvement of the government and community consultations. Marais (2010) critiques the Mining companies' agenda for CSR as she notes that:

Donations and philanthropic social spending are the easy part of contributing to what might be seen as sustainable community development. The reality however is that in these poorly planned community development projects, the community's role is mostly that of benefactor and not stakeholder, specifically if it's someone else's money. Sustainable community development is about making communities part of the decision making process on issues that directly affect the quality of their lives and the sustainability of the capital on which their livelihoods depend. Trust and co-operation are essential for achieving sustainable development at community level.

What is clearly noted above is that CSR creates a dependency syndrome on local communities which is not long term sustainable in improving and sustaining the livelihood of the poor. This is more apparent especially when the mining firms do not involve people in decision making and implementation and ownership of the development programmes.

Kenya's mining industry is dominated by non-metallic minerals such as soda ash, fluorspar, kaolin and some gemstones. These minerals represent a small percentage of the Gross Domestic Product (GoK, 2015). Kenya has proven deposits of titanium, gold and coal, and is estimated to hold significant deposits of copper, niobium, manganese and rare earth minerals. The local share of mining revenue helps to diversify and expand the economy (Oxford Business Group, 2014).

Accordingly, the country has enacted mining law which is envisioned to protect the environment, ensure compliance with regulations and standards in the sector and lead to the equitable benefit sharing of proceeds from mining resources in order to improve the welfare of the people living in mining areas (GoK, 2016). The constitution of Kenya 2010 (GoK, 2010) declares that every person is entitled to a clean and healthy environment and the current legal framework established a robust institutional framework to manage and protect the environment and the welfare of each person.

Maarifa Ali Mwakumanya et al., (2017) indicate that the government of Kenya has allocated pieces of land in Kasigau area for small scale mining among women for their social and economic empowerment. The mining companies and the government of Kenya apply strategic collaborative actions which include organizing and galvanizing women's groups for capacity building through training and awareness creation, which would boost the confidence of donors and lead to the provision of financial and credit facilities as envisaged in the African Mining Vision (African Union, 2009).

Maarifa Ali Mwakumanya et al., (2017) further advocated for women's groups to be empowered on human and mining rights to safeguard against the violation of women rights in the mining sites. Strategic education and training, for women, to focus on the basic geological knowledge and skills including the identification of mineral sites and minerals, evaluation of the value of minerals, the use of mining tools and equipment, value addition and marketing are critical strategic actions that stakeholders should use to engage women groups in Kasigau ( Maarifa Ali Mwakumanya , 2017). It is observed that this situation in Kenya depicts that government action, both in enacting mining laws and regulations and enforcing them, is an important factor that must influence mining companies to implement CSR initiatives and so become agents of social change and development for the local communities.

The study done by Mushi Elad (2015) and Gwanyemba (2008) in Tanzania over the contribution of mining companies to the local communities reveal that most companies were appreciated by the local communities due to their contribution in the construction of schools, teachers' houses and their involvement in health programs working together with the government. The mining companies have also helped the education promotion for the host communities by donating various educational materials to primary schools and in the rehabilitation of school infrastructure in Geita region of Tanzania (Mushi, 2015). However, to the contrally, Gwanyemba (2008) revealed in his research that most local communities in Nzega District did not see any relationship between the mining companies and their effort in reducing poverty levels in the community. The people complained that the mines were not concerned with poverty reduction and that the implementation of CSR for social development in the area was just a routine.

Aloysius Marcus Newenham-Kahindi (2011) applauds the mining firms in Tanzania for their practical involvement in CSR within the communities they operate. In 2008 Barrick Gold Multinational Corporation constructed a local institution in Moshi to provide training to local artisanal miners and to students coming fresh from colleges of engineering. This institute promotes mining knowledge and train high school graduates and ex-college students in mining studies and gain employment with mining firms inside and outside the country (Newenham-Kahindi, 2011).

Yirenkyi (2008) in Ghana having discovered the effects on surface mining which include relocation/resettlement of host communities and its negative effects, disturbance to flora and fauna, disturbance to sacred places, land degradation, noise and air pollution and water pollution conducted a study to investigate measures put in place by the mining company to mitigate the above effects in order to ensure peaceful coexistence between the mining company and its host communities as part of its corporate social responsibility.

The findings were that Gold Fields Ghana Limited had a model that involved continuous community engagement, conflict resolution and comprehensive environmental monitoring programme, which all lead to effective community relations. The strategies to ensure socioeconomic development involved community development programme, livelihood restoration programme and community training and employment. This company took the community's social economic livelihood seriously by ensuring skills training programmes for the locals. With this model, the community feels they are part of the company and the social license of the company is guaranteed.

## **2.8 Studies in Zambia**

Emphasis of CSR activities in Zambia has been on education, infrastructure development and community support. Chibuye (2016) citing The Germany bulletin magazine called the GIZ (2013:1) in discussing the Sierra-Leone mining industry reported that “the problem; is that a weak education system hampers job creation by mining industry.” The use of modern and proficient management practices requires highly qualified staff. However, Sierra- Leone like many developing nations has a shortage of well-trained professionals to work in the extractive industries. Due to the skills gap, currently only 23% of the middle level and 12% senior staff in the mining sector are Sierra-Leone nationals (Chibuye, 2016). This raises

several challenges, including insufficient personnel, financial in existing institutions of both technical and vocational education and training as well as higher education.

The other challenge is lack of alignment between government initiatives and mining companies' social investment. As may be noticed from the Sierra-Leone situation, lack of trained human resource may greatly hamper the much-needed development in a country; this may lead to hiring of labour or expatriates to fill up some of the local positions where the local citizens may not be trained. Hiring of labour costs lots of money which can be used for other developmental endeavors. Therefore, there is need to train the local man-power so that resources can be used for other developmental aspects of the economy (Chibuye, 2016).

In terms of educational facilities, Mopani and KCM each became responsible for two primary schools at the time of privatization but both have extended these facilities to include secondary schools, (CCJDP, 2013). Currently, each mine runs four schools (two primary and two secondary schools), providing education to around 3,600 students. The schools are open to the public (around half the students are not dependents of mine employees) and charge user fees that are heavily subsidized by the mining companies. They are considered well-resourced with well-maintained facilities and have low pupil–teacher ratios. The quality of education provided at mine schools is reflected in the 100 per cent pass rates and the long waiting lists for entrance into the schools, (Central Statistical Office 2013).

The early childhood care, education and development project takes a holistic approach to addressing one of the major challenges faced by market traders who operate in KCM's surrounding areas while also addressing the educational and nutritional needs of traders' young children. Market traders at Lubengele market in Chililabombwe and Chiwempala market in Chingola found that their ability to trade was limited by a lack of available childcare for their pre-school age children, (CCJDP, 2013). The project was set up to fill this gap in childcare. In addition to providing childcare facilities, the project also ensures that the children are provided with early childhood education and nutritional support, and are linked to health campaigns run by the mine. Currently, 360 vulnerable pre-school children whose parents or guardians work as market traders are provided with support through the project, (World Health Organization, 2013). The project benefits the children who now have access to early learning but has additional benefits in terms of improving the livelihoods of the traders (who are able to earn more money) and the children's health, education and nutrition, (CCJDP, 2013).

The Chamber of Mines Zambia (2014) report on the major mines on the Copperbelt and North-western province alludes that the mines have had an impact on the local community in many ways other than employment opportunities. Skills development and the purchasing of goods and services have been key in their corporate social responsibility agendas. Skills development has been through scholarships for further education, on-the –job training, apprenticeship and secondment, technical and managerial training and support for trade schools. Konkola copper mines for instance has partnered directly with government to run the Solwezi technical training institute.

Chibuye (2016) further observed that Kangwa (2001) noted then that the level of social investment by mines in Zambia’s Copperbelt was significant. Newer mines in the North-Western province make contributions of around 2% of pre-tax profits towards social investments, a figure similar to that of other countries. This represents between 10% and 16% of the pre-tax profits. However, social investments made by mines are largely voluntary although there are some legacy obligations for the Copperbelt mines, which are responsible for running several hospitals, schools and health clinics. The educational investments made by Lumwana in Solwezi have contributed to a reduction in pupil- teacher ratio despite large increases in pupil numbers. While on the Copperbelt the social investment is that of infrastructure, for example, the roads, water and sanitation (Chibuye, 2016).

As regards the mining company’s social investments, (Chibuye, 2016) noticed that quite huge amounts of resources are spent towards health facilities and support by all the four companies this translates to about 43% of the total investment. This entails that the mining companies wish to see a very healthy work-force and the surrounding communities in which they operate. This is a good gesture by the mining companies as it shows that there is need for a healthy population which leads to wealthy community. According to available literature, the mining companies spend about 14% of their social investment, Lumwana mine’s educational investments in Solwezi have contributed to a reduction in pupil –teacher ratio despite large increases in the pupil numbers in most of the schools as a consequence of the free education policy (CSO, 2012).

Silavwe, (2012) indicates that Kansanshi, Mopani and KCM provide scholarships for further education. Kansanshi currently sponsors employees for further study in a variety of disciplines ranging from diplomas in specific technical areas to graduate and post-graduate qualifications. The majority study at Zambian institutions but some study outside of Zambia

Mopani actively identifies promising high school and university students for sponsorship in technical and post-graduate qualifications. Scholarships are provided in a variety of disciplines and are given on condition that the person receiving the scholarship works for Mopani for a period of time upon completion of their studies. KCM scholarships are wide-ranging and distributed across employees, dependents of employees and promising students at KCM trust schools. Some scholarships are provided to people who are not connected to the mine in any way, such as high performers at local public universities. Currently, KCM sponsors Zambians, most of who study in Zambia, India or Namibia, (Kangwa, 2005).

Several mining companies provide support for technical trade schools, either directly ( For example, KCM runs Kitwe Trade School and Kansanshi runs the Solwezi Technical Training Institute in partnership with the government, and Mopani planned to open a new trade school in 2014 or indirectly. In addition to the training provided for direct employees, several mining companies actively invest in the skills of those they employ as contractors, thus making a further contribution to human capital development in Zambia, (Silavwe, 2012).

Social investments made by mining companies are voluntary aside from some legacy obligations for Copperbelt mines as the Minerals and Mining Development Act of 2008 does not set out requirements for mandatory investments. Although the Mineral and Mining Development Acts were repealed in 2008, KCM and Mopani have both continued to run, and in some cases have expanded, the health and educational facilities for which they are responsible under the previous system. While communities acknowledge some of the positive contributions that these have made, perceptions of the mines remain largely negative. Recent surveys have shown that there is widespread mistrust and, in several cases, open hostility towards the mines (Mondoloka, 2013). This is partly because positive contributions are offset by concerns over the negative impacts of mining on surrounding communities, such as pollution and resettlement. But many of the problems stem from the approach taken to social investments, which could be improved upon.

Since mining companies are encouraged to work under the auspices of being ‘good citizens’ many mining companies on the Copperbelt and North-western Provinces apply CSR by providing employment creation and offering scholarships (Kangwa 2005) for the workers as well as offering skills training to mining employees (Silavwe, 2012). The study by Chibuye (2016) observes that there is need for mining companies on the Copperbelt to do more in education promotion in the country.

However, the study by Mayondi (2014) and Chibuye (2016) both reveal that mining companies on the Copperbelt and North-western provinces are engaged in CSR in the areas of education, health and community development but education is prioritized to mine workers (Chibuye, 2016) and these schools are flooded by so many other people who may have migrated to such area to seek for employment (Mususa, 2012). However, these studies do not mention the benefits of host communities and what would be the sustainable livelihood of the people beyond the lifespan of the mines in terms of education, skills training and micro savings for the people.

In response to the infrastructural challenges in their regions, Kansanshi and Lumwana have each set up a trust fund for infrastructural investment. Lumwana has set up the Lumwana Development Trust Fund. It operates on a 75/25 principle whereby Lumwana contributes 75 per cent towards the cost of a project and local communities contribute 25 per cent in-kind (such as in the form of bricks, stones and sand), (First Quantum Minerals, 2014). Projects are identified by a committee consisting of mine management, local government and local chiefs. Local chiefs and local government make the final decision about which projects to take forward and are responsible for supervising and monitoring projects, while Lumwana is responsible for contributing towards and running the fund. Over US\$800,000 was spent through the trust fund in 2012, on educational facilities (schools and staff housing), health facilities, agricultural services, roads and market infrastructure, (Silavwe, 2012).

High levels of in-migration have put huge strain on the limited existing health and education facilities in North-Western province. For example, the primary catchment population of the Solwezi General Hospital has increased from 200,000 people in 2000 to over 700,000 in 2010 (LCMS, 2010). Kansanshi has responded by investing US\$2.2 million over five years in upgrading the Solwezi General Hospital, (Central Statistical Office 2013).

Chibuye (2016) alluded that according to the International Council of Mining and Metals (ICMM, 2014), the mining companies' contribution towards infrastructure development are about 24% of their total investment. The business development of 8% is where the mining companies offer business dealings to the mines for example, the supply of goods and services to the mines ranging from machinery to stationery; these are used to keep the mines afloat so that copper production continues because this is the main stay of Zambia's economy.

Mwitwa and Soko (2015) carried out a research on socio-economic impact of small scale emerald mining on local community livelihood in Lufwanyama District, where it was observed that though Lufwanyama was mining some of the best emeralds in the world, there was little local economic development. The research meant to investigate the economic, environmental and social impacts of small-scale emerald mining on local community livelihoods in Lufwanyama district. Their findings were that mining in the area had not brought about infrastructure and community development such as roads, tertiary education institutions and hospitals. Corporate social responsibility in the area was negligible. Even with the presence of the mine, the local people benefited very little from its operations. Though this study highlights the lack of any corporate social responsibility even in education and skills training of the local people in Lufwanyama district, its findings cannot be generalized to all mining firms and communities hence the need to conduct this study in Maamba district.

Mining companies in Zambia also contribute to local economic development through the training they provide to direct employees and contractors. Such investments in human capital – through formal training activities as well as “learning on the job” – create a direct benefit for mining companies but also have positive externalities for the country as a whole. Many of these skills developed are transferable and can be passed on to others and applied in other sectors, thereby promoting diversification away from (finite) mining industries, (Kangwa, 2005).

The mining companies around Lake Victoria Zone have initiated CSR in education, community development, health and infrastructure development. In his study, (Newenham-Kahindi, 2009) attests that companies around the Lake Victoria introduced social entrepreneurship skills in finance, accounting and marketing. This is in view of assisting the local communities to improve business and financial management skills with the aim of improving their living standard. This would create jobs for other local members and other communities in the country. The mining companies in Tanzania also sponsor students residing around the mines to access education for long-term benefits in various learning institutions in the country.

In Zambia, there is no existing CSR legislature that compels mining firms to apply social responsibility to host communities. The CSR is practiced in Zambia as a moral obligation. The law is very silent on CSR. This means that there is no legal framework that ensures that local communities receive optimal benefits from mining firms in their communities. What

is interesting, however, is that mining firms decide what to do for the community on the basis of wanting to be good corporate citizens. This means that host communities have little suggestions to what needed to be done in their communities. As observed by for CSR policies of mining companies to attain sustainable development, there must be collaboration with civil society in which they operate. Thus, if corporate firms just feel a sense of responsibility towards their society and therefore make contributions to the society without involving them (society), what we will have is a development which is not community owned and therefore not sustainable (Victoria Mensah, 2009).

Kansanshi has set up a non-profit organization called the Kansanshi Foundation to channel investments. The initiative was initially considered “top-down”, but since 2014 it had become more consultative. Chiefs now play a key role in identifying infrastructure needs and submit requests for infrastructural improvements to the foundation on behalf of the community. Kansanshi allocates a discretionary budget to the foundation every year (just under US\$1.5 million in 2012) (ZEITI, 2013).

Mining is a large industry in Zambia and therefore the contribution through CSR is arguably beneficial, especially for rural host communities because they have fewer services than those in urban areas. Kiikpoye (2012) states that CSR is not just a means of addressing negative externalities generated by a business in its engagement with stakeholders but is also a tool for international development and in turn for poverty reduction in developing countries. This is because in many developing countries the government is struggling to provide sufficient social services, such as in Zambia, assistance from the private sector can be useful source of funding (Alstine & Afionis, 2013). CSR implementation is often on the premise that society expects corporations to provide safe and meaningful jobs, safeguard the environment and provide charitable donations (Lungu & Mulenga 2005).

De Haan (2007) suggests that it is necessary to integrate economic and social policy so that economic development can directly link to social sectors such as health and education. Mining is the largest industry in Zambia and it accounts for 68 percent of the country’s total export earnings (Zambia Central Statistical Office Bulletin, 2013). It is therefore imperative to explore how economic and social policy can be integrated for the benefit of the people in the host community.

Additionally, the vast literature on CSR practices reveal that most extraction companies claim to engage and partner with local communities but frame CSR as a risk management

exercise intended to overcome opposition from the host communities and facilitate the development of resources. Many companies, however, insist that impoverished local communities benefit from the company's presence, but rely on subjective and ambiguous evidence to support this claim (Yakovleva, & Vazquez-Brust, 2012).

Some findings have showed that mines carry out social programmes in the host communities for example, those living in the three chiefdoms surrounding the Lumwana mine have always had limited access to health facilities. The issue is particularly severe in these chiefdoms, where the total number of students in schools increased by 21 per cent over three years. The Lumwana Development Trust Fund has funded the construction of several education and health facilities, as well as staff housing, in the three chiefdoms near Lumwana mine and several facilities have been connected to electricity (Central Statistical Office 2013).

However, the demands are large and challenges remain. Although Lumwana's program has brought down the pupil-teacher ratios in the area (from 1:63 to 1:53), the severity of the shortages and the growth in student numbers mean that the ratios remain high and pass rates low even after these additional investments have been made (CCJDP, 2003).

The implementation of HIV programs by these mining companies across both the Copperbelt and North-Western Province is carried out in partnership with an established NGO (the Comprehensive HIV/AIDS Management Program) and by working closely with the Ministry of Health, within a single coordinating framework (WHO, 2013). The government provides the overall operating framework and helps set priorities, the private sector commits financial and human resources towards implementation, and the non-profit sector is able to draw on its detailed understanding of communities and approaches to successful implementation. Within this framework, Kansanshi supports a mobile health unit that provides HIV and malaria services to surrounding communities who have traditionally been discouraged from seeking medical treatment as a result of the transport costs involved in accessing facilities, (Central Statistical Office 2013).

Zambian mines have also focused on Agricultural CSR activities. One of Lumwana's larger initiatives is the Agri-Foods Innovators program, for which Lumwana has set up a revolving fund (ZRA, 2014). This program promotes the use of small-scale irrigation systems to support agricultural activities to take place throughout the year and not only on a seasonal basis. It aims to promote agriculture as a business rather than at a subsistence level. An NGO

(Microfin) implements the project (by providing training and loans to farmers) and the Zambian Cultural Research Institute carries out high-value crop research and provides subsidized seeds to the initiative.

The technical interventions have improved agricultural yields but the program goes a step further by ensuring that farmers have a ready market for their produce. The mine buys all of its fruit and vegetables from farmers in the surrounding areas. The combination of improved agricultural practices, access to training and finance, and the linkages to a market for the produce has shown positive results, with several farmers expanding their operations and opening business bank accounts. IDE, formerly International Development Enterprises, has recently become involved in the project with funding from the EU. This involvement seeks to scale up the activities, including a target of reaching 3,500 farmers in Solwezi (including 1,000 in the area surrounding Lumwana), (ZRA, 2014).

The recent study by Womba Mayondi (2014) on the mining and corporate social responsibility in Zambia: a case study of Barrick Gold Mine in North-western Province indicates that corporate social responsibility (CSR) has become a widely accepted non-core but essential part of profit making corporations. This study clearly elucidates that although CSR has become a way of giving back to the community and it is more pronounced during times when copper prices are high and the profits are lucrative. However, CSR in Zambia is voluntary and the mining companies are not obliged by law or any other policy framework to implement it. Mayondi (2014) further, acknowledges that CSR practices vary in different companies and different countries and that the motivation for each is different but nonetheless, there is agreed unwritten code about being good corporate citizens.

## **2.9 Summary and identified Gap in Literature Review**

The concept of CSR is wide and there has not been a common agreement on what should be constituted in CSR for common adoption. However, companies who practice CSR for community development do so to boost the company's image as well as to avoid fierce criticism by host communities. As observed in the literature review, many transnational mining companies do not apply CSR in education and national development for the communities within which they operate but do so only for their workers to improve efficiency in the production of the company. There is insignificant involvement of mining companies in education, skills training and micro-social investment in view of national

development in both developed and developing countries as they are not obliged by law to do so.

Therefore, this has created a gap in the literature on mining corporations' involvement in education and skills training as a way of empowering the local people (the host community) with sustainable livelihood beyond the lifespan of the mines in their area. Furthermore, the literature does not show how extraction firms mitigate the community dependency syndrome on the mining social programs and activities. This is a serious problem should the mine close at a given time. The study by Chibuye (2016) on the contribution of Mopani and Konkola Copper Mines' enhancement of corporate social responsibility cites that both mines own schools whose priority is given to mine workers and their children but there is very little mention of the real benefit for the host communities surrounding the mines.

In some cases, funding for projects under a Corporate Social Responsibility program never materializes. Other critics argue that Corporate Social Responsibility programs divest profits from companies' shareholders and diminish efficiency of the market economy, (Brereton, D. 2002). Further research needs to be done to explore to what extent Corporate Social Responsibility programs take away from company profits.

The high levels of poverty and illiteracy are quite visible in most countries in Africa, including Zambia. The literature review does not show governments' mandate to partner with mining firms to largely invest in lowering poverty and illiteracy levels in the local communities where these mining companies operate. Based on the many gaps reviewed in this literature, the study on Maamba Colliers Limited's contribution in enhancing education and national development in Sinazongwe District, as a host community, is important, in reviewing how the mine is co-existing with the local community and offering empowerment to the local people in education, human resource, infrastructure development and micro-socio investment.

# CHAPTER THREE

## METHODOLOGY

### 3.1 Overview

The previous chapter reviewed literature relevant to the study. The methodology used in the study is discussed in this chapter. In this chapter the research design, study site, study population, sample size, sampling techniques, data collection methods and instruments, validity testing and reliability, data analysis techniques, ethical considerations are described. The chapter ends with the summary.

### 3.2 Research Design

A research design is a programme designed to guide the research in collecting, analysing, interpreting observed facts and specifies which of the various types of research approach to be adopted (Moore and McCabe, 1989). In other words, it is a plan on how an investigation will take place. It specifies the procedure to be taken in carrying out the research. The study adopted a mixed method design known as an embedded design. However, the study is heavily dependent of qualitative data. A mixed method research design is a procedure for collecting, analyzing, and “mixing” both quantitative and qualitative research methods in a single study to deeply understand a research problem (Creswell, 2012).

The study thus employed qualitative approach which is viewed as an investigation that involves studying people’s experiences as they occur in their natural setting, the meaning that they attach to the experiences, and the multiple contexts within which these experiences occur (Chilisa and Preece, 2005). Mwansa (1985) defined qualitative approach as the type of inquiry in which the researcher carries out research about people’s experiences in natural settings, using techniques like interviews mostly in words rather than statistics. It is the glue that holds the research together (Kasonde-Ng’andu, 2013).

Feelings and insights are considered important in qualitative research. Sometimes qualitative research is called naturalistic inquiry or field studies. Bryman (2008) alluded that qualitative research usually emphasizes words as opposed to quantification in the collection and analysis of data.

### 3.3 Study Site

Sidhu (2005:59) describes study site as:

The physical, social and cultural site in which the researcher conducts the study. In qualitative research, the focus is mainly on meaning-making, and the researcher studies the participants in their natural setting.

The research was conducted in Sinazongwe district of the Southern Province of Zambia where Maamba Colliers Limited is located.

### 3.4 Target Population

Borg and Gall (1979) viewed population as all the numbers of a hypothetical set of people, event or object to which we wish to generalize the results of our research. In this study the target population were the 240 employees of Maamba Colliers Limited and the local leaders of the people of Sinazongwe District as key stakeholders as well as a host community to Maamba Colliers Limited.

### 3.5 Sample size

A sample is the number of participants or elements selected from a universe to constitute a desired representation of a given population (Kasonde-Nga'ndu, 2013). The population sample was subjected to Yamane (1967) formula to calculate the actual number of respondents to be interviewed. This formula had been picked because the desired population of respondents was calculated using the desired margin error of 0.05. The sample size was arrived at using the formula by Yamane (1967) as shown below.

The formula: 
$$n = \frac{N}{1 + N(e)^2}$$

Whereas: N= Target population (240)

n=Total sample size

e = Desired margin error (0.05)

n = 240.

$$1 + 240(0.0025)$$

n = 240

1.6

n = 150 Respondents

The sample size for this study comprised of the company manager, 2 Human Resource Managers, The DEBS, DESO at the Ministry of Education, 150 employees, 10 company employees on FGDs. Others are the 10-local people.

### **3.6 Sampling Procedure**

According to Bryman (2008), a sample is a segment of the population that is selected for investigation. It is a subset of the population. It is part of the population from which information is to be gathered. The method of selection may be based on a probability or a non-probability approach. A probability sample is a sample that is selected using, random selection so that each unit in the population has a known chance of being selected. Non-probability sample is a sample that has not been selected using a random selection method. Essentially, this implies that some units in the population are more likely to be selected than others. In sampling procedure, the researcher employed both probability (simple random) and non-probability (purposive) in this study.

#### **3.6.1 Purposive Sampling**

The study used purposive sampling (non-probability) to ensure an inclusion of relevant individuals only. In this sample method, the researcher purposely targeted a group of people believed to be reliable for the study such as the senior managers, supervisors, programs managers, long serving employees and retired managers as well as the headmen and the traditional chief. These stakeholders were interviewed as they were critical to the subject. Bryman (2008) stated that most writers on sampling in qualitative research based on interviews recommend that purposive sampling is conducted. The researcher sampled on the basis of wanting to interview people who were relevant to the research questions.

#### **3.6.2 Random Sampling**

Kombo and Tromp (2006:79) argued that random sampling is a procedure in which all individuals in a defined population have an equal and independent chance of being selected as a member of the sample. Simple random sampling was specifically used in this study in selecting 150 employees for questionnaire interview.

### **3.7 Sample Characteristics**

The Table 3.1 shows the sample characteristics. These include the sex, education and employment status. The table shows that 125 respondents representing 83 percent were

males. The table also shows that 42 percent had done some tertiary education while another 31 percent had some university education. Lastly the table shows that 140 respondents representing 93 percent were on contract.

**Table 3.1 Demographics**

<b>Sex</b>	<b>Frequency</b>	<b>Percent</b>
Female	26	17%
Male	125	83%
<b>Education</b>	<b>Frequency</b>	<b>Percent</b>
Grade 9	6	4%
Grade 12	33	22%
Tertiary college	64	42%
University	46	31%
None of the above	2	1%
<b>Employment</b>	<b>Frequency</b>	<b>Percent</b>
Permanent and pensionable	3	2%
Contract	140	93%
Casual basis	5	3%
Sub-contracted	3	2%

The majority of the respondents were males, had at least some tertiary education, and were on contract.

### **Interview and Focus Group**

There were Ten (10) people who participated in the focus group discussions. Of the ten, five were members of the community and five others were miners. Additionally, the interviews were conducted with five (05) personnel who included; the Human Resources Manager,

Mine Manager, Corporate Social Responsibility Manager, District Education Board Secretary, District Standard Officer. Furthermore, documents, News and Pictures of what Maamba Collieries have been involved in were reviewed to establish the findings.

### **3.8 Research Methods and Instruments**

According to Kasonde-Ng'andu (2013), research instruments refer to the tools a researcher uses in collecting the required data. This study employed the following research instruments: questionnaires, Interview guide, Focus Group Discussion guide and Document analysis (see appendices).

#### **3.8.1 Interview Guide**

Interview guide is a technique in which the researcher faces a respondent during an interview (Mushingeh, 2000). Therefore, one-on-one interviews were conducted with key stakeholders that is; the company manager and two human resource managers for MCL as well as the DEBS and DESO at the Ministry of Education and the FGD so that the researcher could explore the subject at hand in depth and ask follow up questions. This was very useful for this research because it enabled the researcher to explore, confirm ideas and in-depth information about particular issues of interest. However, the interviews in this research were conducted in English.

#### **3.8.2 Focus Group Discussion**

FGD is carefully planned and designed to obtain information on the participants' beliefs and perceptions on a defined area of interest (Kombo and Tromp, 2006:95). Nigel (2009:508) views it as:

A group interview or discussion consisting of a group of individuals usually six and ten people who meet together to express their views about a particular topic defined by the researcher.

In this study, the researcher used this method to collect information from the local people of Maamba-Sinazongwe district, Zambia. These were 10 local people and 10 MCM employees.

### **3.8.3 Questionnaires**

Sidhu (2005:131) defines a questionnaire as:

A form prepared and distributed to secure responses to certain questions. It is a device for securing answers to questions by using a form which the respondent fills by himself. He describes it as a systematic compilation of questions that are submitted to a sampling of population from which information is desired.

This method included a schedule of closed questions for the respondents to answer. The questionnaires were given to 151 MCL workers.

### **3.8.4 Document Analysis**

This study adopted document analysis method in order to supplement and compliment on the first-hand data that was collected through interviews, questionnaire and Focus Group Discussions. The Document analysis was used to collect secondary data using published literature on MCM such as books, journals, quarterly bulletins and magazines and any other official reports available. This method was used to validate the data obtained from interviews, FGD and questionnaires.

## **3.9 Data Collection Procedure**

Kombo and Tromp (2006) defined data collection as the process of finding information for the research problems. It may involve conducting an interview, administering a questionnaire or a focus group discussion or observing what's going on among the subject of the study. The study used qualitative and quantitative approaches that were employed questionnaires, interviews, focus group discussions and documents analysis which brought out critical information on the research study.

## **3.10 Data Analysis**

Data analysis entails categorizing, summarizing, and ordering the data and describing them in meaningful terms. The process of evaluating data using analytical and logical reasoning to examine each component of the data provided. This form of analysis is just one of the many steps that must be completed when conducting a research experiment. Data from various sources is gathered, reviewed, and then analysed to form some sort of finding or conclusion. There are a variety of specific data analysis method, some of which include data mining, text analytics, business intelligence, and data visualizations. In this study, data was

collected through audio recorded interviews, field work notes. Then thematic analysis was used to analyse qualitative data.

### **3.10.1 Qualitative analysis**

In this study qualitative analysis involved the use of themes that were used to summarise the findings of the study. Document analysis was used to investigate, confirm or relate the reported and collected from the respondents and from other studies.

### **3.10.2 Quantitative analysis**

Quantitative data was entered in SPSS to generate comparative bar charts, means, modes and standard deviations. Factor analysis, using the rotated component matrix, was used under each research question to ascertain which variables made a significant contribution to answering of the research question.

Factor analysis could be described as orderly simplification of interrelated measures. Traditionally, factor analysis has been used to explore the possible underlying structure of a set of interrelated variables without imposing any preconceived structure on the outcome (Child, 1990). By performing exploratory factor analysis (EFA), the number of constructs and the underlying factor structure are identified. Factor Extraction Factor analysis seeks to discover common factors. The technique for extracting factors attempts to take out as much common variance as possible in the first factor. Subsequent factors are, in turn, intended to account for the maximum amount of the remaining common variance until, hopefully, no common variance remains. Direct extraction methods obtain the factor matrix directly from the correlation matrix by application of specified mathematical models.

Most factor analysts agree that direct solutions are not sufficient. Adjustment to the frames of reference by rotation methods improves the interpretation of factor loadings by reducing some of the ambiguities which accompany the preliminary analysis (Child, 1990). The process of manipulating the reference axes is known as rotation. Rotation applied to the reference axes means the axes are turned about the origin until some alternative position has been reached. The simplest case is when the axes are held at 90° to each other, orthogonal rotation. Rotating the axes through different angles gives an oblique rotation (not at 90° to each other). In this study an orthogonal design was used.

### **3.11 Validity and Reliability**

Reliability is a measure of how consistent the results from the test are and the validity of data. The data collection instrument is the extent to which data collection instrument measures what it is intended to measure (Kombo and Tromp, 2006). Reliability is concerned with the degree of consistency to which a particular measuring procedure gives equivalent results over a number of repeated trials (Bless and Achola, 1988). It depends on the *trustworthiness* of the research instruments, whether a research instrument is consistent and able to generate the same data when repeated several times.

Parallel forms are a type of reliability. Multiple methods of data collection validate research. More than one research instrument was used to collect both qualitative and quantitative data. Combination of methods ensures that inconsistencies are removed and thus valid and reliable data emerges (Patton, 1990).

### **3.12 Ethical consideration**

Consent was sought from relevant research authorities before going in the field for data collection. Permission was requested from Humanities and Social Sciences Research Ethics Committee (HSSREC) of UNZA and an introductory letter from the Assistant Dean Post Graduate in the School of Education was also given. The authority of Maamba Colliers Limited was asked for permission to conduct the research. No coercion was exerted on the respondents. Every participant in this research was protected and their confidentiality respected.

### **3.13 Summary**

This chapter has presented the research methodology used in the study, highlighting the research design, research site, sampling procedures, research instruments, data collection procedure, data analysis techniques and reliability and validity of measurements. The chapter ends with ethical issues. In the next two chapters, the findings of the study will be presented and discussed, respectively.

## **CHAPTER FOUR**

### **PRESENTATION OF FINDINGS**

#### **4.1 Overview**

This chapter presents the findings of the data from questionnaires, focus group discussions, interviews and document analysis which have all provided several themes. This chapter firstly presents the objective analysis, and later conclusions. Each objective analysis outlines the quantitative findings and then later presents the qualitative findings.

#### **4.2 MCL contribution to Infrastructure Development**

The first research objective of this study is to establish the contribution of Maamba Colliers Limited towards corporate social responsibility in infrastructure development in Sinazongwe District of Zambia.

##### **4.2.1 Quantitative Results**

The quantitative results are presented here. Questions regarding the Mines contribution towards infrastructure were asked to the respondents. The responses were based on a five-point Linkert scale (1=Strongly Disagree, 2=Disagree, 3=Not sure, 4=Agree and 5=Strongly Agrees). In this study, the mean is used to assess the average response from the respondents. Therefore, a mean of 1 - 2.49 represents a Disagree, 2.5 - 3.49 represents Neutral, and mean 3.5 - 5 means Agree. A standard deviation of less than one (1) means that there was less variation in the responses. On the other hand, a standard deviation value of more than 1 signifies much variation in the responses.

The Table 4.1 shows that the respondents agreed that the mine had constructed some primary schools. The mine is involved in the rehabilitation of some schools in the district. This is shown by the mean which is ranging from 3.5 – 5. However, there was much variation in the responses as the standard deviation is more than one (1). The table also shows that the respondents stated that the mine was involved in the construction of bridges, rehabilitation of roads and shelters for marketeers.

**Table 4.2 1 Contribution of MCL towards CSR in Infrastructure development**

<b>Statement</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
Maamba Mine has constructed Primary school(s)	1	5	4.1 2	1.056
Maamba Coal Mines has built secondary school(s)	1	5	2.6 6	1.296
Maamba Coal Mine constructed college	1	5	2.4 8	1.346
Maamba Coal Mine is involved in rehabilitation of some schools in the district	1	5	3.7 7	1.086
Maamba Coal Mines has constructed housing for Teachers in some schools	1	5	2.3 8	.923
Maamba Coal Mine has constructed some Health Centre(s) in the district	1	5	3.0 9	1.133
Maamba Coal Mine rehabilitated some Health Centre(s)	1	5	3.1 1	.974
Maamba Coal Mine Has constructed some bridges	2	5	4.2 6	.653
Maamba Coal Mine has rehabilitated roads	3	5	4.4 2	.605
Maamba Coal Mine is involved in rehabilitating shelters for Marketeers	1	5	3.5 4	1.034
Maamba Coal Mine has rehabilitated some teachers' houses	1	4	2.4 7	.885

These responses had no much variation. The findings also show that the respondents disagreed that the mine constructed a college, and that the mine constructed and rehabilitated some houses for teachers. The table also shows that some respondents showed some neutrality in the responses. The respondents were not sure if the mine had constructed and rehabilitated some health centers. This is evident by the mean of 3.09 and 3.11.

## Exploratory Factor Analysis

The factor analysis is done to establish which variables are relating to each other. In this section the rotated component matrix is used to get the factors.

### Rotation Method

The rotation method used in this factor analysis is the varimax method. This is because the component matrix under direct oblimin showed that variables were less than absolute value of 32%. The sample size for this study is 151 which is considered to be a poor sample for factor analysis using the direct oblimin.

Table 4.2 shows the result of the KMO test. The Kaiser-Meyer-Olkin measure is used to test for sampling adequacy. The test results show a KMO value of 0.518 or 51.8% which is desirable. This means that the sample is adequate for a factor analysis to be done. The Bartlett's tests for sphericity is also significant as shown by the value of .000 which is considered as less than 0.001

### Test for Adequacy

**Table 4.2. KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.518
	Approx. Chi-Square	425.993
Bartlett's Test of Sphericity	Df	55
	Sig.	.000

**Table 4.2 Communalities**

	Initial	Extraction
Maamba Mine has constructed Primary school(s)	1.000	.630
Maamba Coal Mines has built secondary school(s)	1.000	.807
Maamba Coal Mine constructed college	1.000	.905
Maamba Coal Mine is involved in rehabilitation of some schools in the district	1.000	.807

Maamba Coal Mines has constructed housing for Teachers in some schools	1.000	.755
Maamba Coal Mine has constructed some Health Centre(s) in the district	1.000	.549
Maamba Coal Mine rehabilitated some Health Centre(s)	1.000	.720
Maamba Coal Mine Has constructed some bridges	1.000	.733
Maamba Coal Mine has rehabilitated roads	1.000	.772
Maamba Coal Mine is involved in rehabilitating shelters for Marketeers	1.000	.755
Maamba Coal Mine has rehabilitated some teachers' houses	1.000	.786
Extraction Method: Principal Component Analysis.		

The communalities table in 4.3 shows the proportion of variance that can be explained by the factors. The extraction values are high as they are all above 0.50. This is a desirable.

### Total Variance Explained

The Table 4.4 shows the variance that the factors explain. The table shows that the factors explain up to 74.7% of the variations.

**Table 3.4 Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.586	23.513	23.513	2.586	23.513	23.513
2	2.163	19.659	43.173	2.163	19.659	43.173
3	1.256	11.420	54.592	1.256	11.420	54.592
4	1.198	10.895	65.487	1.198	10.895	65.487
5	1.016	9.239	74.726	1.016	9.239	74.726

### Rotated Component Matrix

The rotated component matrix shows the factor loadings each variable. In this study the values of more than .50 are considered to be significant.

**Table 4.5 Rotated Component Matrix**

	Component				
	1	2	3	4	5
Maamba Coal Mine has rehabilitated some teachers' houses	.778				
Maamba Coal Mines has built secondary school(s)	.737				
Maamba Coal Mine has constructed some Health Centre(s) in the district	.706				
Maamba Coal Mine has rehabilitated roads		.782			
Maamba Coal Mines has constructed housing for Teachers in some schools		.724			
Maamba Mine has constructed Primary school(s)		.711			
Maamba Coal Mine is involved in rehabilitating shelters for Marketeers			.846		
Maamba Coal Mine is involved in rehabilitation of some schools in the district			.837		
Maamba Coal Mine rehabilitated some Health Centre(s)				.811	
Maamba Coal Mine Has constructed some bridges				.797	
Maamba Coal Mine constructed college					.932

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 8 iterations.

The Table in 4.5 shows that the first factor, which is on ‘Construction and Rehabilitation’, has the following questions that are loading with high values; rehabilitation of some teacher’s houses, building of secondary school, and Maamba Colliers limited constructing a health Centre. The second factor which is on ‘Teachers houses and Schools’ contains questions on rehabilitation of roads, construction of teacher’s houses, and construction of secondary schools. The remaining factors are shown in the table.

**Summary**

The quantitative findings show that the respondents generally agreed that MCL has been involved in construction, rehabilitation of roads and shelters for marketeers. Further analysis

using the factor analysis shows that the five factors are emerging from the findings. The first two factors relate to questions that deal with construction and rehabilitation.

#### **4.2.2 Qualitative Findings**

The qualitative findings are those that emerged from the interview guides and focus group discussions. The first research question sought at establishing the contribution of MCL to infrastructure development. The major themes that emerged from the findings included Road construction and rehabilitation. Other themes that subtly emerged from the findings were that of infrastructural development to education, health and the community.

#### **Roads Rehabilitation and Construction**

The first emergent theme was that of construction and rehabilitation of roads. This was confirmed by all the respondents that participated in the discussions and interviews. Under this theme the respondents stated how the mine has maintained, rehabilitated, and constructed roads in some parts of the district. One of the managers interviewed stated that:

*MCL has constructed 32 km long Maamba- Masuku road and foot bridges in Maamba town. A 28 km long road from Maamba to Lake Kariba is under construction and a water reticulation system for the benefit of the local communities is under implementation by MCL*



**Figure 4.1 Foot Bridge for pupils constructed by MCL in Siankodobbo Village**

The figure 4.1 shows an example of the construction works done by MCL in Siankodobbo village in helping the pupils access education from the school across the stream.

Further talks with the Human Resource Manager also reviewed that MCL is constructing townships roads covering 5.1 Kilometers at the cost of Twenty Million Kwacha (K20M).

Furthermore, the employees of MCL stated that the company maintains Maamba-Batoka road. The Head men that took part in the study also maintained that the mine had contributed to the construction of roads. One Head man stated that *MCL constructed roads in the rural villages for easy transportation for people*. These findings are further supported by the pictures that were taken by the researcher during the data collection. Refer to the figure below:



**Figure 4.2 Pictures of roads that the mine has constructed in the township**

The Figure 4.2 shows, among many pictures, how the mine has contributed towards construction and rehabilitation of roads.

### **Infrastructure Development in Education**

The other theme that emerged from the findings was that of the mines' contribution towards infrastructural development in education. Under this theme, respondents stated how the mine has shown support to educational infrastructure through building and rehabilitation of schools. The theme emerged strong among the respondents as all of the respondents posted a contribution towards this.

Another manager at the mine stated that;

*Maamba Collieries Limited has built two Kindergartens, it has also built classroom blocks at Siankodobbo and Mweela Primary Schools.. MCL has renovated and upgraded the infrastructure at Maamba high School, Maamba Government School, Nkandabbwe Primary School, Mayanda Community School and Mweemba Primary School.*



**Figure 4.3 Constructed 1x3 Classroom block at Mweela Primary School**

The Figure, 4.3 shows an example of a constructed classroom block at Mweela Primary School through its CSR activities.

These findings were also evident from the respondents that stated that the mine has constructed a private school and nursery school which were affordable even to non-employees of the mine. Despite all this, some respondents felt that there was still more to be achieved in the area of educational support as some stated that the schools still lack some items that needed support.



**Figure 4.2 Maamba Private School constructed by MCL**

Figure 4.4 is a private school constructed by the mine which educates both children of the mine employees and the community. At this school, the mine subsidises the education of children from vulnerable families in the community.

## Infrastructural Support to Health

The other theme that emerged from the findings was that of infrastructural support to health. Under this theme the respondents stated how the mine has contributed to health development. This theme was however, only supported by four (04) respondents out of the 20 people representing a 20 percent.

Under this theme the respondents stated how the mine has built and supported clinics in the district. Various statements were observed from the respondents. However, the following was stated by one official at the mine that;

*Our mine has built a clinic at Mweela which was handed to the government with modern equipment, the mine also provides water reticulation and has built water tank at Maamba General Hospital.*

In line with this theme, the mine has also stated that it plans to carry out further infrastructure development projects towards health. Another official at the mine narrated that;

*MCL is in the process of constructing an eye clinic and mother Shelter at Maamba General Hospital. MCL is building a clinic at Kafwambila in Maiba Village and another one called Kariba Clinic in Chief Mweemba's Village. MCL has also donated \$5000m for the construction of Lusaka eye clinic at University Teaching Hospital.*

The pictures in the Figure 4.5 below show the clinic that the mine constructed and the water reticulation system in place at Maamba General Hospital as a contribution to the host community.



**Figure 4.3 Contribution to health (a) Mweela Rural Clinic, (b) Water Reticulation at Maamba General Hospital by MCL**

## Infrastructure Development for the Community

The last theme that emerged under infrastructural development was that of various developments to the community. These developments included the construction of houses for the displaced people, construction of a golf course, and general construction. This finding was subtly mentioned among the respondents as only three (03) respondents mentioned about it. One of the community members stated; *the mine has built a meeting Hall in the Village of Mweela for Social Welfare to raise funds for the villages, it has also built a small bridge for pupils to use.*

The Figure 4.6 is a community Hall that has been constructed by MCL for the resettled families at Mweela Village. This hall is used for community meetings and the village hires it to generate funds for community development.



**Figure 4.4 Constructed Hall for village meetings at Mweela Village**

Other members of the community stated that the mine has continued to support the community by helping people carry out social activities such as the golf course and the play fields in some surrounding schools and villages.

## Summary of Qualitative Findings

The following table shows the summary of all the qualitative findings

Theme	Content	Percentage that mentioned
Educational Support	MCL has Constructed schools, teachers house	100%
Roads rehabilitation and construction	MCL Construction of roads, foot bridges, rehabilitated and maintained roads	100%
Health infrastructure	The mine has built clinics	20%

General infrastructure	MCL constructed golf course, children play ground, community hall	15%
<b>Theme</b>	<b>Content</b>	<b>Percentage that mentioned</b>
Educational Support	MCL has Constructed schools, teachers house	100%
Roads rehabilitation and construction	MCL Construction of roads, foot bridges, rehabilitated and maintained roads	100%
Health infrastructure	The mine has built clinics	20%
General infrastructure	MCL constructed golf course, children play ground, community hall	15%

### 4.3 MCL Contribution to Human Resource Development

The second research question was to establish Maamba Colliers Limited's contribution towards Human Resource Development, through education, for national development in Sinazongwe district of Zambia.

#### 4.3.1 Quantitative Results

The quantitative results are presented here. Questions regarding the Mines towards Human Resource development through education in Sinazongwe District of Zambia. The responses were based on a five-point Linkert scale (1=Strongly Disagree, 2=Disagree, 3=Not sure, 4=Agree and 5=Strongly Agrees). In this study, the mean is used to assess the average response from the respondents. Therefore, a mean of 1 - 2.49 will represent a disagree, 2.5 - 3.49 will represent neutral, and mean 3.5 - 5 will mean agree. A standard deviation of less than one (1) will mean that there was less variation in the responses; on the other hand a standard deviation value of more than 1 will signify much variation in the responses.

**Table 4.1 Contribution to HR**

Statements	Minimum	Maximum	Mean	Std. Deviation
Maamba Coal Mine Sponsors youth in primary education	1	5	2.64	.956
Maamba Coal supports some pupils in secondary schools	1	4	2.53	.847

Maamba Coal Mine Sponsors some youths to colleges and universities	1	4	2.35	.834
Maamba Coal Mine sponsors its workers for colleges and university education	1	4	2.46	.985
Maamba Coal Mine educates Vulnerable and disabled people	1	5	2.75	1.234
Maamba Coal mine offers education loans to viable but stranded students	1	4	2.26	.814
Maamba Coal Mine offers literacy program for the local people through the Ministry of Education	1	5	2.83	1.038
Maamba Coal Mine offers literacy program for its workers	1	4	2.66	.930
Maamba Coal mine sponsors teachers in continuing professional training programs	1	5	2.73	1.194
Maamba Coal Mine has a skills training Centre	1	5	4.11	1.036
I know that Maamba Coal Mine trainees the public with building skills	1	5	3.28	1.001
Maamba Coal Mine offers training in electrical engineering	2	5	3.87	.789
Maamba Coal Mine trains the vulnerable youth in carpentry	1	5	3.53	1.169
Maamba Coal Mine offers training workshops in metal fabrication (welding etc.)	1	5	3.64	1.134

My Spouse/friend is running metal fabrication due to the skills offered by Maamba Coal Mine	1	5	2.76	1.242
Maamba Coal Mine trains only its workers in skills training	1	5	2.36	1.104
The existence of the Mine is appreciated by many people because of skills training	1	5	3.37	1.147
The skills are relevant to our economic situation in the district	1	5	3.56	1.093
The skills training is offered for free by Maamba Coal Mine	1	5	2.76	1.056
The displaced people have been empowered with skills for their livelihood	1	5	3.78	.958
Many displaced households are economically doing better because of the skills they have been offered	1	5	3.59	.995
Maamba Coal Mine facilitates programs in Health and entrepreneurship for the local people	1	5	3.30	.863
Maamba Coal Mine offers capacity building programs for its workers	1	5	3.09	.962
Maamba Coal Mines assist some schools with reading materials as books	1	5	3.05	.989
Maamba Coal Mine assist schools with desks	1	5	3.12	1.070

The Table 4.1 shows the responses to various statements that relate the human resource development. The table shows the mean response and the standard deviation. From the table it is clear that the respondents agreed that the mine has a skills training institute. This is shown by the mean of 4.1 which is categorized as an “agree”. The respondents also agree that the mine offers training in electrical engineering, trains the vulnerable youth in carpentry, offers training workshop in metal fabrication, and that the displaced people are trained with skills for their livelihood. This is evident by high means that are ranging from 3.5-4.11 representing agree. The table also shows that the respondents were neutral about most of the questions posed to be them.

### **Factor analysis results**

This study implores the exploratory factor analysis as described in the methodology. The analysis is based on establishing underlying contributions to factors that could emerge from the quantitative findings.

### **Rotation Method**

The rotation method used in this factor analysis is the varimax method. This is because the component matrix under direct oblimin showed that variables were less than absolute value of 32%. The sample size for this study is 151 which is considered to be a poor sample for factor analysis using the direct oblimin.

### **Test for Adequacy**

**Table 4.1 KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.636
Approx. Chi-Square		2815.813
Bartlett's Test of Sphericity	Df	300
	Sig.	.000

The Kaiser-Meyer-Olkin measure is used to test for sampling adequacy. The test results show a KMO value of 0.636 or 63.3% which is desirable. This means that the sample is adequate for a factor analysis to be done. The Bartlett's tests for sphericity is also significant as shown by the value of .000 which is considered as less than 0.001

**Table 4.3 Communalities**

	Initial	Extraction
Maamba Coal Mine Sponsors youth in primary education	1.000	.841
Maamba Coal supports some pupils in secondary schools	1.000	.833
Maamba Coal Mine Sponsors some youths to colleges and universities	1.000	.846
Maamba Coal Mine sponsors its workers for colleges and university education	1.000	.817
Maamba Coal Mine educates Vulnerable and disabled people	1.000	.758
Maamba Coal mine offers education loans to viable but stranded students	1.000	.714
Maamba Coal Mine offers literacy program for the local people through the Ministry of Education	1.000	.774
Maamba Coal Mine offers literacy program for its workers	1.000	.799
Maamba Coal mine sponsors teachers in continuing professional training programs	1.000	.850
Maamba Coal Mine has a skills training center	1.000	.750
I know that Maamba Coal Mine trains the public with building skills	1.000	.730
Maamba Coal Mine offers training in electrical engineering	1.000	.775
Maamba Coal Mine trains the vulnerable youth in carpentry	1.000	.723
Maamba Coal Mine offers training workshops in metal fabrication (welding etc)	1.000	.833
My Spouse/friend is running metal fabrication due to the skills offered by Maamba Coal Mine	1.000	.725
Maamba Coal Mine trains only its workers in skills training	1.000	.762
The existence of the Mine is appreciated by many people because of skills training	1.000	.576
The skills are relevant to our economic situation in the district	1.000	.622
The skills training is offered for free by Maamba Coal Mine	1.000	.829
The displaced people have been empowered with skills for their livelihood	1.000	.706
Many displaced households are economically doing better because of the skills they have been offered	1.000	.771
Maamba Coal Mine facilitates programs in Health and entrepreneurship for the local people	1.000	.773
Maamba Coal Mine offers capacity building programs for its workers	1.000	.780
Maamba Coal Mines assist some schools with reading materials as books	1.000	.791
Maamba Coal Mine assist schools with desks	1.000	.750

Extraction Method: Principal Component Analysis.

The communalities Table 4.3 shows the proportion of variance that can be explained by the factors. The extraction values are high as they are all above 0.50. This is a desirable.

### Total Variance Explained

The table below shows the variance that the factors explain. The table shows that the factors explain up to 76.5% of the variations.

**Table 4.4 Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.754	27.016	27.016	6.754	27.016	27.016
2	3.898	15.593	42.610	3.898	15.593	42.610
3	2.349	9.395	52.005	2.349	9.395	52.005
4	2.049	8.194	60.199	2.049	8.194	60.199
5	1.620	6.482	66.681	1.620	6.482	66.681
6	1.246	4.983	71.663	1.246	4.983	71.663
7	1.212	4.848	76.511	1.212	4.848	76.511

Extraction Method: Principal Component Analysis.

The Table 4.4 shows the variance that the factors explain. The table shows that the factors explain up to 76.5% of the variations.

### Rotated Component Matrix

The rotated component matrix shows the factor loadings in each variable. In this study the values of more than .50 are considered to be significant.

**Table 4.2 Component Matrix**

	1	2	3	4	5
Maamba Coal Mine Sponsors some youths to colleges and universities	.811				
Maamba Coal Mine sponsors its workers for colleges and university education	.758				
Maamba Coal mine offers education loans to viable but stranded students	.740				
Maamba Coal Mine offers capacity building programs for its workers	.734				
Maamba Coal Mine offers literacy program for its workers	.734				
Maamba Coal Mine Sponsors youth in primary education	.678				
Maamba Coal Mine educates Vulnerable and disabled people	.667				
Maamba Coal supports some pupils in secondary schools	.650			-.541	
Maamba Coal Mines assist some schools with reading materials as books	.631				

Maamba Coal Mine offers literacy program for the local people through the Ministry of Education	.624				
Maamba Coal mine sponsors teachers in continuing professional training programs	.607				
The existence of the Mine is appreciated by many people because of skills training	.591				
Maamba Coal Mine facilitates programs in Health and entrepreneurship for the local people					
Maamba Coal Mine offers training workshops in metal fabrication (welding etc)		.829			
Maamba Coal Mine has a skills training centre		.821			
Maamba Coal Mine offers training in electrical engineering		.666			
The displaced people have been empowered with skills for their live hood		.598			
Maamba Coal Mine trains only its workers in skills training		-.597			
Maamba Coal Mine assist schools with desks		.532			
I know that Maamba Coal Mine trains the public with building skills			.599		
Maamba Coal Mine trains the vulnerable youth in carpentry	.532		.551		
The skills training is offered for free by Maamba Coal Mine					
My Spouse/friend is running metal fabrication due to the skills offered by Maamba Coal Mine					.64 3
Many displaced households are economically doing better because of the skills they have been offered			.536		.54 4

The component matrix in table 4.2.5 shows that there are more than 5 factors that emerged from the variables. Among these factors, the first factor had the 11 variables contributed with a high loading of more than 0.50. The second factor had six (6) variables that had high loadings. The remaining factors had very few questions with high loadings.

#### 4.3.2 Qualitative Results

The qualitative findings were collected from the focus group discussions and the scheduled interviews. The major themes that emerged from the findings were that of offering training.

##### **Training**

Under this theme, training came out strong as it was stated by all the respondents of the focus group discussion. All the three mine officials interviewed indicated and confirmed that the mine was heavily involved in the training of the youths, through its skills training institute. An Educational Officer at the Ministry of Education narrated that;

*MCL owns Maamba Coal Mine Training Institute. This Institute Offers training courses which are skills based in Metal Fabrication, Electrical, Tailoring, Carpentry and Bricklaying among others, to the local people. This center is affiliated to Teveta*



**Figure 4.3 7 MCL Training Institute. Picture: Courtesy of MCL**

The Figure 4.7 shows some of the beneficiaries of MCL training institute in electrical and metal fabrication. Further interviews reviewed that the mine sponsors local people to India for further studies in various fields. Apart from having the training institute, the mine has also partnered with other stakeholders in paying for the vulnerable trainees. This view is also shared among the community members. The community stated that the mine had trained lots of people in various skills that were offered by the training institute.

#### **4.4 MCL Contribution to Improving Teaching and Learning**

The third research question sought to investigate if Maamba Colliers Limited integrated material and social development activities and programs in its business bench mark in improving teaching and learning in schools of Sinazongwe District of Zambia.

##### **4.4.1 Quantitative Results**

The quantitative results are presented here. Questions regarding the Mines contribution towards improving teaching and learning. The responses were based on a five-point Linkert scale (1=Strongly Disagree, 2=Disagree, 3=Not sure, 4=Agree and 5=Strongly Agrees). In this study, the mean is used to assess the average response from the respondents. Therefore, a mean of 1 - 2.49 will represent a disagree, 2.5 - 3.49 will represent neutral, and mean 3.5 - 5 will mean agree. A standard deviation of less than one (1) will mean that there was less

variation in the responses; on the other hand, a standard deviation value of more than 1 will signify much variation in the responses.

**Table 4. 1 Contribution to Improving Teaching and Learning**

Statements	Minimum	Maximum	Mean	Std. Deviation
Maamba Coal Mines assist some schools with reading materials as books	1	5	3.05	.989
Maamba Coal Mine assist schools with desks	1	5	3.12	1.070
Maamba Coal Mine assist schools with Computers	1	5	3.18	.919
Maamba Coal Mine assists some schools with sports equipment for pupils	1	5	3.18	1.030
Maamba Coal Mines supplies some schools and community with clean drinking water	1	5	3.14	1.077
Maamba Coal Mine provides internet services to some schools	1	5	2.73	1.052
Maamba Coal mine supplies electricity to some local schools	1	5	2.64	1.168
Valid N (listwise)				

The findings in Table 4. 1 shows the results to the questions that dealt with the contribution of the mine towards improving of teaching and learning through provision of material and infrastructural support. The findings show that all respondents were neutral. This means that some of the respondents agreed while the others disagreed. This is evident by the large standard deviation values that are greater than one.

#### **4.4.2 Qualitative Findings**

The qualitative findings were extracted from the focus group discussions and the interview guides. The questions were aimed at establishing the contribution of MCL and how it has integrated material and social development activities and programs in its business benchmark in improving Teaching and Learning in schools of Sinazongwe District of Zambia. The major theme that emerged was donations. The majority of the respondents mentioned that the mine had donated materials in some schools. The second theme that emerged from the findings was that of unsatisfactory feeling with the mine’s efforts in material support towards the schools. This was suggested by two respondents during the focus group discussions.

#### **Donations**

Under this theme respondents stated how the mine has made donations to the schools and how they have enhanced education in the district. These statements were echoed by all the respondents that participated in the focus group discussions and interview guides. One female respondent passionately expressed gratitude to the mine through its intervention;

*MCL has built Mweemba School classroom block, toilets and supplied water to the same School. We are very grateful for this gesture.*

Other respondents stated that the mine has donated toys for the pupils which have been useful in enhancing the education of the pupils. Below is a picture of the mine donating some toys to the children in school.



**Figure 4.8 Donation of (a) Generator to Maamba Special School and (b) toys to other schools.**

As shown in Figure 4.8 the mine was also reported to have made contributions towards teaching and learning. Computers were also acknowledged to have been donated by the mine. Other materials donated by the mine were, a class room block, a laboratory and electrical generator at Maamba Special School.

### Unsatisfactory

However, there were few respondents that felt that the mine was not doing enough to support education through material support. This was stated by two respondents of the 20 people considered in the focus group discussions and interviews. Under this theme one male respondent stated that; *MCL can still do more in terms of building primary Schools to reduce congestion in existing schools and reduce distances pupil have to travel for school.* Another respondent stated; *The schools, have no desks for pupils and the mine has done nothing in that area adding that even the new 1x3 classroom built by MCL at Mweela has no desks and pupils sit on the floor.*

However, these are only two respondents and may not fully represent the majority.

## Summary

The summaries of the qualitative findings are shown in the Table 4.2 below.

**Table 4.2 Summary**

<b>Theme</b>	<b>Content</b>	<b>Percentage of respondents that mentioned</b>
Donation	MCL has donated materials, toys, classrooms, and desks	100%
Unsatisfactory efforts	MCL has not done enough to help with material support to education	10%

## 4.5 Policy Guidelines

The fourth research question aimed at establishing policies Maamba Colliers Limited has put in place in enhancing education and infrastructure development for the local people of Sinazongwe District. This section of the study presents a document review of the mines policies. The findings generally indicate that the mine has policy that has been drafted up. The policies are mainly targeted towards education, agriculture, health, and business. These are the strategic points of the policy framework of the mine. The section now presents the policy review in line with the strategic components.

### Educational Policy

The mine has put up strategies and objectives that address the need for the mine to support education development. In its CSR policy document of 2017, MCL states that its objective is; *To promote quality education and improving educational infrastructure in Maamba District.*

This objective is highlighted firmly in the policy document and will be addressed through a strategy of improving educational standards of the local schools particularly the Maamba trust school and Maamba basic school. The policy document has also revealed that the mine has put affirmative actions on the vulnerable by providing them with support. This is stated in the policy as follows that the mine shall commit itself to;

*Sponsoring school students and teachers for educational tours. Providing infrastructural and economic support to the disadvantaged and deserving*

students. *Extending support for education in Sinazongwe District (MCL, 12:2017).*

Furthermore, the policy also seeks to help the extra curricula activities of the schools.

### **Agricultural Infrastructural Policy**

Document analysis also revealed that the mine has put in place some policies to help in infrastructural development in agriculture. The aim of the policy is to lend a helping hand to people by providing means of livelihood and empowerment through entrepreneurship. The mine has stated one of its strategies as; *facilitating establishment of dairy, cattle, goats and poultry units by vulnerable and poor women. (MCL, 12:2017)*



**Figure 4.9 Provision of water for domestic animals, Mweela village**

Through this policy the mine aims to sponsor the farmers in setting up the agriculture projects.

### **Policy on Health**

The mine has also established a policy that seeks to help with health development. The findings show that the mine has policy that addresses health policy. The mine has put in place strategic plans and policy towards health support through the provision of health care facilities. The mine policy states that; *MCL strives to create awareness and improve health standards through support and improve existing health care facilities (MCL, 17:2017).*

Among the strategy that the mine is putting in place is the conducting of medical camps and spreading the awareness of malaria, cervical cancer, and other diseases. The mine has also

put in place a strategy to provide clean drinking water. Through this policy the mine has managed to build a clinic, carry medical camps for villagers, and offers free medical camps to the villagers. The effects of this policy are evident in the picture that shows the mine's banner in Sinazongwe district.



**Figure 4.10 Medical camp banner**

### **Policy to Support Local Community**

The mine also has policy to support the local community through business. The mine has policy that firmly recognises the SMEs in the district. The MCL commits itself in enhancing local business. To do this, MCL has put in place a strategy to improve business multipliers and reduce unemployment by implementing a procurement strategy.



**Figure 4.11 Resettled households**

The Figure 4.11 shows the 62 households that have been built by the mine to accommodate displaced families in Maamba.

### **Summary**

The findings show that the mine has policy on infrastructure development and education.

### **4.6 Summary**

The findings have been presented. The quantitative findings have shown the frequencies, factor analysis, and mean and standard deviations. These have coupled with the qualitative findings. The factor analysis was used to make generalizations on the explanatory factors that were underlying in the responses. The rotated component matrix was used. These findings were then compared to the qualitative themes that were emergent. Now that the findings have been presented, a discussion of the findings is given in the next chapter.

## CHAPTER FIVE

### DISCUSSION OF FINDINGS

#### 5.1 Overview

This section of the paper shows the discussion of the findings. The chapter first presents the discussions according to the research questions. The discussions are coupled with some literature reviewed to show how the study's findings are relating to other study findings.

#### 5.2 MCL Contribution to Infrastructure Development

The Zambia Development Agency (ZDA) categorizes infrastructure development into; energy infrastructure, transport infrastructure, housing and real estate, education infrastructure, health and telecommunications (ZDA, 2014). Generally, infrastructure development cuts across all sectors of the economy. Businesses are the main drivers of the economy and at the same time they become the main deliverers of infrastructure development in the sector and to the communities in which they operate. MCL is the largest business house in the district of Maamba. In line with this, it acknowledges the need for corporate social responsibility in the community. The study findings have revealed that the mine has contributed to infrastructure development.

The quantitative findings show that the mine has been involved in various infrastructural development activities. This was evident by the high means that was observed in table 4.1.1 that shows that the respondents agreed that the mine had constructed some primary schools and that the mine was involved in the rehabilitation of some schools in the district. The descriptive findings showed that the mine is involved in construction of schools and rehabilitation of schools. The factor analysis findings also show that the major factors that emerged from the questions were relating to construction of schools, rehabilitation of schools and roads.

The qualitative findings also show that two major themes emerged. The first theme was that of construction and the other was on rehabilitation. Under construction the respondents stated that the mine is involved in construction of roads, schools, and clinics. The other theme established that the mine is involved in rehabilitation of the roads, clinics, and schools. In line with these findings other studies have shown that the mines have contributed towards infrastructural development. This is mainly driven by the fact that these mines have a large

impact on the environment and the community. As observed in the reviewed literature, studies in Poland, especially by Marzena Majer (2013), indicate the mines have embraced the strategy of constructing schools as a CSR activity. However, the researcher observed that the mine has applied CSR activities much more towards infrastructure development. Further observation and analysis show that MCL has concentrated its educational infrastructure development and road maintenance within urban area and has not done much in the peri-urban areas.

Nonetheless, the commitment of MCL towards infrastructure development is consistent with the CSR activities of other Zambian mines. For example, the Konkola Copper Mines reports that in 2012 it invested in road infrastructure, reconstructing 7.5 kilometres of road network in Chingola and targeting roads leading to densely populated areas at a cost of US\$ 4.5 million (Central Statistical Office, 2012).

Corporate Social Responsibility programs usually invest in infrastructure (potable water, electricity, schools, roads, hospitals, hospital equipment, drainage repairs, etc.), building social capital (providing high-school and university education, providing information on HIV prevention, workshops on gender issues, information on family planning, improving hygiene, etc.), and building human capital (training local people to be employed by the mining enterprise or to provide outsourced services, promote and provide skills on microbusiness, aquaculture, crop cultivation, animal rearing, textile production, etc.), (Scherer, A. G., & Palazzo, G. 2008).

Research findings in other studies have shown similar findings that show that the mines have concentrated on infrastructure development. Mushi Elad (2015) and Gwanyemba (2008) state that some mining companies in Tanzania have greatly been appreciated by the local communities due to their contribution in the construction of schools, teachers' houses and their involvement in health programs working together with the government. These mining companies have also helped in education promotion for the host communities by donating various educational materials to primary schools and in the rehabilitation of school infrastructure in Geita region of Tanzania. This is mainly common in remote mining places as other studies show that the CSR activities of mines mainly deliberated by the main factors including the community needs, location, the social and economic status of the people living in that community.

Dashwood (2010) also states that the benefits of CSR can vary significantly from one project to another depending on the design, local suitability, and community support. CSR projects are most likely to be successful when the specific needs and comparative advantages of local communities have been considered in their design. Therefore, MCL has to ensure that its infrastructural development projects are done according to the needs of the communities.

As observed by the researcher, CSR policies of MCL are not known by the local people. As it is, CSR activities are carried out only as when the mine feels so. Therefore, the mine cannot be held accountable by the communities when it is not seen to be doing something for the people.

Therefore, CSR projects should also be location specific. This means that the projects should be guided by the needs of the society (World Bank, 2002). The World Bank further reports that the mine-work training program is more likely to enjoy long-term success when a series of mines is being developed; and an infrastructure project such as pipelines for electricity, or roads, schools, and health centers can be the most important contribution of CSR programs in remote areas. The successful implementation of these CSR projects also results from a series of failures in a process of trial and error. For these reasons, successful projects are usually designed in participation with beneficiaries, who then feel connected to these projects and believe that the projects address their most important needs (Hamann, 2003).

The study has established that the commitment of MCL towards infrastructure development is in tune with the Stakeholder Theory of Edward Freeman (1984), which encourages corporate firms to plough back into the communities within which they operate. The stakeholder theory states that the purpose of a business firm is to create as much value as possible for stakeholders but keeping the interests of the communities, employees, the government and the customers at the Centre of its business for its long term survival and success.

However, the researcher observed that MCL has paid much attention and it is more active in primary school education and less active in secondary school education.

In summary, the results obtained in the previous chapter have clearly shown that MCL concentrates on infrastructure construction and rehabilitation of the roads and schools. These themes were also obtained in the qualitative findings that showed construction and

rehabilitation as a strong theme. This can be attributed to the location and the needs of the society.

### **5.3 MCL Contribution to Human Resource**

Human resource is defined as the resource that resides in the knowledge, skills, and motivation of people. Human resource is the least mobile of the four factors of production, and (under right conditions) it improves with age and experience, which no other resource can do. It is therefore regarded as the scarcest and most crucial productive resource that creates the largest and longest lasting advantage for an organization (Business Dictionary, 2018). Hence the second objective of this study was to assess the contribution of MCL towards human resource development. The quantitative findings in chapter four highlighted several factors that showed MCL's commitment to human resource development.

Although the respondents showed neutrality on the mine's contribution towards human resource, the qualitative results indicate that the mine has constructed a training institute, where it offers skills such as tailoring, metal fabrication, carpentry and electrical courses. The findings showed that the respondents agreed that the mine has skills training center which offers electrical and engineering and other courses to the youths and the vulnerable. This is a major contribution of the mine towards enhancing the skills of the human resource in the district. This finding is also revealed in other findings that have shown that mines do contribute to the development of skills among the people in the community.

A study by Chibuye (2016) shows that from 2005 to 2015 Mopani Copper Mine had the following measures put in place in enhancing corporate social responsibility to education in Zambia:

- Establishment of Mufulira Central Training centre in 2014,
- sponsoring employees to acquire necessary skills in Trades institutions,
- Training mine captains and riggers upgrading their skills to meet modern technological needs and training centre in 2014.

Furthermore, Mopani Copper Mine sponsored employees to acquire necessary skills in Trades institutions and manages trust schools both at primary and secondary in Mufulira and Kitwe (Nkana). In the same period KCM embarked on a programme to run a scholarship and sponsorship scheme for its employees and their dependents, managing Trust schools in

Chililabombwe, Nampundwe and Kalulushi. In addition, the company runs its own Trades school- Kitwe Trades School.

A study in Chile revealed that mines spend a considerable amount of money in training skills for their existing workforce and the community (Newenham-Kahindi, 2011). These findings are in line with the Stakeholder Theory (Edward Freeman, 1984) which strongly suggests that business entities that empower the local community through social investing tend to exist longer in business and woo local community support than those that do not.

Results from the focus group discussions reveal one strong theme of training. The study findings reveal that training was major human resource activity that the mine has used to ensure that the livelihood of the people is changed. In some instances, the respondents stated that the mine had sent its workers to foreign countries for studies. This is also in line with the findings in Chile where the Collahuasi Mine Reports (2016:10) reports that it invested US\$1.6M in training and development in 2015 –over 30% more than in 2014. 318 different training courses were offered, ranging from technical skills to conduct and safety, totaling 70,601 hours of training – over 52% more than 2014. Collahuasi Mining Company trained 49 young people through its apprenticeship programme. Investment in training enables Collahuasi's existing workforce to develop their skills.

These findings are in line with the stakeholder theory which suggests that business entities that empower the local community through social investing tend to exist longer in business and woo local community support than in its profit making. This explains the rationale of practising corporate social responsibility by some firms. Under this theory some firms practice CSR to gain social acceptance of the firm.

In line with training and sponsorship, the mines have also embarked on a program by which the mine offers scholarship to the students to go and study abroad. This is a common trend among the mine firms as also shown. This finding is also in line with KCM reports that showed the mine had awarded scholarships to eight students to pursue university degrees at the University of Zambia (UNZA) starting from the 2017 academic calendar (Chibuye, 2016). KCM further reported that this act was part of its continued commitment to promoting education in its areas of operation. This means that mines mainly offer sponsorship in certain fields that are beneficial to the mine. However, some respondents also showed that they were not happy with the selection process of awarding of scholarships as these awards did not benefit the local but rather those that come from outside the district.

#### **5.4 MCL Contribution towards improvement of Teaching and Learning**

There are many ways in which Social Corporate Responsibility can be achieved by the firms. Many organizations focus on different approaches based on various factors. Hence the third research objective aimed at establishing if Maamba Colliers Limited has integrated material and social development activities and programs in its business bench mark in improving Teaching and Learning in schools of Sinazongwe District of Zambia. This objective was tackled by various questions in the research instruments. The findings were presented in both qualitative and quantitative parts.

The findings in quantitative results ascertained that the respondents were neutral with all the questions that were posed. This is shown by the mean of the variables in table 4.3.1 which shows that the lowest mean observed as 2.64 and the highest mean as 3.18. These means fall within the range of neutrality described as 2.5-3.49. On the other hand, the standard deviation is more than One (1) which means that there was variation in the answers from the employees.

Despite having a mean of neutrality, some respondents had extreme responses of neutral. In this research question, a factor analysis was not conducted due to the fact the questions were few and were all neutral therefore; they did not give the researcher enough impetus to investigate underlying patterns.

The qualitative findings on the other hand showed that three strong themes emerged from the discussions. The first one was that of donations, the second one was relating to “sponsorships,” and the last one was that of “unsatisfactory” help from the mines. These themes are discussed below.

Donation was the first strong emergent theme that was generated from the findings. Under this theme the respondents in focus group discussions and interview guides indicated that the mine, MCL, had contributed material support in form of donations to some schools in the district. The picture in the findings shows that the mine has contributed and donated power generator, toys, upfront building materials and actual classroom blocks for the target beneficiaries. This finding is in line with Silavwe (2012) who confirms that several mines have provided material support to technical schools in the Copperbelt. Zambia has over 10 large mines that are involved in the donation of materials to the communities in which they operate from.

The second major theme that emerged from the findings was that of Scholarships and sponsorships. The findings showed that the mine does sponsor people for further education.

Silavwe (2013) indicates that Kansanshi, Mopani and KCM provide scholarships for further education. Kansanshi currently sponsors employees for further studies in a variety of disciplines ranging from diplomas in specific technical areas to graduate and post-graduate qualifications. The majority study at Zambian institutions but some study outside of Zambia (Silavwe, G. W. (2013). Mopani actively identifies promising high school and university students for sponsorship in technical and post-graduate qualifications.

Contrary to Shareholder Theory of Milton Friedman (1970) which emphasis only on profit making by corporate firms and companies, the study has established that MCL has responded, though at a lower percentage, in supporting the local schools with teaching and learning materials. Additionally, MCL is deemed to be applying both the Shareholder Theory and Stakeholder Theory as stated by one of the managers at the mine that “*MCL donates 3 percent from each ton of coal sold to CRS activities for the local community.*” This means that as the mine strives to survive on profit, like any other firm, MCL carries along it the needs and concerns of the local needs for the host community.

The researcher, however, observed that MCL has not done much in supporting peri-urban schools compared to the schools within Maamba Township. This is at variance with its educational policy that strongly aims at improving education in the district, especially in the rural areas and in high schools.

Furthermore, the researcher has established that although MCL has constructed and in some case rehabilitated some classroom blocks in the district, it has not donated any desks and chairs to those schools. For example, a physical check at Mweela Primary School by the researcher revealed that pupils sit on the floor in some classes for lack of desks and chairs.

## **5.5 Policy**

A policy is defined as an instrument for a course or principle of action adopted or proposed by an organization or individual. The last research question aimed at establishing policies that Maamba Colliers Limited has put in place in enhancing education and infrastructure development for the local people of Sinazongwe District. This research question was investigated using document analysis.

The study has established that the mine has put in place policies that help in addressing the educational and infrastructure development for the people in Sinazongwe district. Document analysis further ascertained that the mine is focused on various strategies that address the multiple needs of society. The policies were categorized into education, infrastructure, health, and social. These policy guidelines have helped the mine address the core needs of society.

For instance, the mine has managed to build a classroom, a clinic, and houses for displaced people and roads. These findings are evident from the previous objectives. These policies have helped the mine to execute its CSR duties. However, CSR policy is only left at the disposal of the company. It is also important that the government tries in establishing some guidelines towards policy structuring of CSR in the communities. This will help the government have firm approach in establishing CSR activities.

Policy on CSR may also benefit the mines in several ways. Firstly, they help build better relations with the local communities in which they operate (McKinley, A. 2008). The economic risks of not having good community relations include project delays and even mine closure. Significant delays may cost up to two-thirds of the mine project's initial value. According to the World Bank, the mining industry has become a very technologically complex sector which employs considerably fewer people than in the past and, therefore, needs to provide other benefits to local communities "in order to obtain a 'social license' to operate (Ali, S.H. & O'Faircheallaigh, C. 2007). Secondly, it provides a way of responding to increasing consumer concern about how the products they buy are produced, combined with the fact that the internet allows consumers to scrutinize mining companies' operations ( Peter S. & Blair G, 2009).

The Civil Society for Poverty Reduction (2011) observed that while significant investment occurs in the mining, it was clearly observed that investors had not fully taken note of the country laws and failed to honor the commitments they made in the development agreements. Some investors took advantage of the fact that Zambian state institutions were too weak to effectively regulate their activities. The presence of the government in the establish CSR policies aims at safeguarding the needs of the community as governments pose a higher bargaining power through regulation and policy.

This is evident in other countries like Poland. Dżoga et al. (2010) observed that in Poland CSR was only developed in 2009. Firstly, the government established the Inter-Ministerial Team for Corporate Social Responsibility (IMTCSR) under which were formed four Working Groups for the promotion of CSR, education, responsible investment and sustainable consumption. Although CSR is a relatively new approach to mining companies in Poland and is based on including social interests and environmental protection, the mining firms have adopted social involvement in the management of the mines by focusing on building the right relationships with employees, respecting their rights and involving them in the process of business management.

The study has further established that MCL is keen in helping SMEs in the district. In its Environmental Impact Statement Report (EIS, 2011), MCL has shown commitment in creation of employment opportunities for both skilled and unskilled labor force as providing market for local products. This has increased people's disposable income and thus improving household economy. Additionally, MCL contracts local service suppliers who earn income as they are contracted to supply services such as food, transport, fuel, extraction and blasting operations.

MCL Environmental Impact Statement report (2011) under social-economic plan, states that: *The mine shall employ local people for the project operation unless the required expertise cannot be sourced locally.*

The researcher observed that although the MCL has a good will towards the local people, by providing training and developing programs for its employees in order to acquire transferrable skills in meeting personal and company's competitive, key positions are still held by expatriates. The Daily Nation Newspaper (2017, Vol.3, Issue 1702) reported that Africa shall be facing a shortfall of Fifty Million jobs by 2040. This observation is a serious threat to the economic growth for every African Nation. Therefore, African Nations, including Zambia, must pay particular attention in providing policy direction that aims at producing viable and diversified skills and human resource key to economic development. On the other hand, the Jesuit Centre for Theological Reflection (JCTR) states;

*CSR should be linked to the government's development goals of poverty reduction. The government should create an environment where clear and*

*meaningful partnerships are established with the private sector and civil society organizations (JCTR, 2018:3)*

This observation is cardinal because if CRS is left out and not linked to the government's development agenda, CRS in mining host communities can be ineffective in enhancing meaningful and sustainable development. This is because, CRS has remained philanthropic exercise by mining companies as observed with Maamba Colliers Limited.

While Shareholder Theory of Friedman (1970) encourages maximum profit making by corporate firms by keeping key positions in the company for the purposes of maximum production, the Stakeholder Theory of Edward Freeman (1984) encourages involvement of local communities as a way of keeping the company in business for a longer period. This not only favors stability of the company but it is one way the company has to pay back to the community which is a key stakeholder. This connotation of paying back to the communities is very relevant because host communities are not only empowered in terms of education, knowledge and development but it makes such communities less dependent on the mining company itself such that even when the lifespan of the mining firm comes to an end or closes down for economic reasons, the communities can still go on and earn a livelihood.

## **5.6 Summary**

As Dashwood (2010) states that the benefits of CSR can vary significantly from one project to another depending on the design, local suitability, and community support, CSR initiatives are most likely to be successful when the specific needs and comparative advantages of local communities have been considered in their design. Thus, in view of Stakeholder Theory, of compelling mining firms to pay back to the host communities, it can be said that the objectives of this study were achieved.

# CHAPTER SIX

## CONCLUSION AND RECOMMENDATIONS

### 6.1 Introduction

This last chapter of the study presents the study summary and conclusions. The first part of this study chapter presents the summary of the study while the second part of the chapter outlines the suggested recommendations based on the findings of the study.

### 6.2 Conclusion

The study was aimed at assessing the contribution of Maamba Colliers Limited (MCL) towards Corporate Social Responsibility (CSR) in education in Sinazongwe district of Zambia. The study defined CSR as Movement aimed at encouraging companies to be more aware of the impact of their business on the rest of society, including their own shareholders, the stakeholders and the environment. Corporate social responsibility (CSR) is a business approach that contributes to sustainable development by delivering economic, social and environmental benefits for all stakeholders (Louche, 2018). The study focused on MCL as no known study has ever been carried out to investigation the mine's contribution towards education and national development for the host community.

The study's concern was that there has been a huge rise in the illiteracy in the district which have been attributed to poor educational infrastructure and lack of proper learning materials. Although mining firms are legally not bound to carry out CSR activities, they are, however, morally persuaded and encouraged to respond in action to the needs of the communities within which they operate. This is in line with the stakeholder theory as it was used as the guiding framework for the study. The stakeholder theory (Edward Freeman, 1984) suggests that business entities that empower the local community through social investment tend to exist longer in business and woo local community support than those that do not. In line with this the research questions for this study were;

- i. What are the contributions of Maamba Colliers Limited towards corporate social responsibility in infrastructure development in Sinazongwe District of Zambia?
- ii. What is Maamba Colliers Limited's contribution towards Human Resource development through education in Sinazongwe District of Zambia?

- iii. How has Maamba Colliers Limited integrated material and social development activities and programs in its business bench mark in improving Teaching and learning in schools of Sinazongwe District of Zambia?
- iv. What policies has Maamba Colliers Limited put in place in enhancing education and infrastructure development for the local people of Sinazongwe District?

The literature review showed that many mines around the world have taken part in CSR activities. The findings from Chile show that coal and copper mines in the country have focused on training as their main CSR activities. Local studies have indicated that CSR is mainly targeted at attending the needs of the locals (CMDNCNIC, 2014). This is confirmatory in many other cases. However, a huge gap lies in the context of Zambian coal mines hence the need for conducting this study. The study used an imbedded design which sort to investigate both the qualitative and the quantitative parameters. Convenient sampling was used to select the employees of the mines which purposive sampling was used to handpick the members of the focus group discussions.

The study used questionnaires and interview guide as tools for data collection. The data collected from the questionnaires was analyzed using qualitative methods and quantitative methods. The qualitative methods included themes, document analysis, and presentation of verbatim. Quantitative data was analyzed using SPSS to generate descriptive statistics and an exploratory factor analysis. Ethical considerations were considered during the process of the research.

The study findings established that the mine is involved in the infrastructure development of the town through the maintenance and rehabilitation of roads, the expansion and construction of classrooms in some schools. The findings from the communities showed that the mine is involved in the construction of roads, bridges, schools, and clinics. The results further showed that the mine is involved with the training of the residents through its training institute. With regards to the contributions towards improving education, the results indicate that the mine is greatly contributing to the improving of education through the provision of teaching and learning aids. Lastly the study established that the mine has put in place policies that help with the fostering of education, health, agriculture and general infrastructure such as roads and bridges in place.

However, the observations reveal that the mine has paid much attention to primary school education than to the secondary and tertiary education. Further observations indicate that most

of the infrastructure development, in terms of roads and schools, including material development to schools has been done largely in the urban area than in the peri-urban schools.

The study concludes that the mine is greatly contributing towards educational infrastructure development and human resource in the urban areas; however, it has not done so much with education materials in the peri-urban areas.

## **6.1 Recommendations**

Based on the study findings the following are suggested recommendations to the various stakeholders:

### **Maamba Colliers Limited**

Based on the Study findings the researcher;

- i. Commends the mine for its efforts in infrastructure development through the construction and rehabilitation of roads, schools, and other amenities. Its efforts are greatly important in the community of Sinazongwe which is largely rural. Roads are important to the growth of rural economies as they provide a gateway to the outside market through the efficient transportation of goods and services.
- ii. Encourages the mine to largely have an inclusive process in the identification and implementation of CSR activities. Currently the mine only gets suggestions on the needs of the community through its CSR task (MDT) team that constitutes the mine representatives and the community representatives. However, implementation of these activities is largely left at the disposal of the mine. This leaves a lot to be desired in the implementation as the community involvement at all stages is cardinal in ensuring a fully inclusive CSR program.
- iii. The researcher recommends that the mine awards scholarships to deserving students through a clear and transparent process. This can help in addressing any queries that would come from possible contenders and rejected students.
- iv. Recommends mining companies to ensure that scholarship they award to students is transparent and gets to the right people. The mining companies should do background checks of workers who are recruited because some of them seek employment under the guise of being community members. This means that people who may be in real need for jobs and scholarships are avoided and omitted.

- v. Demonstrations and agitations of mining communities against mining companies have to be well reported by the media. These agitations and demonstrations do not normally end well and at the end deepen the negative perceptions people have about mining in the country, and most of these demonstrations border on issues of social responsibility.
- vi. Mining companies must come out with clear guidelines on CSR, so that it takes care of the critical needs of the communities. It is important to note that investment in CSR benefits the company in the long run.
- vii. Despite its great contribution towards infrastructure development, the mine needs to pay more attention to the needs of schools as described by the interviewees. The basis of this study was to assess the mines reaction towards the educational support. It is also noted that this recommendation remains only as a persuasion as there is no law.
- viii. Lastly the study recommends that the mine restructure its CSR policy to meet the educational needs of the community.

## **Government**

It is recommended that;

- i. The government should help the mines in meeting their CSR activities through proper use of funds collected from taxes.
- ii. CSR is not an obligation in many countries as the only obligations that companies have are through remittance of taxes and fines. Therefore, the government should create an enabling environment that seeks to encourage the CSR activities of mines. This can be achieved when the government puts up affirmative policies and clear guidelines that shall compel mining firms to carry out corporate social responsibility that would take care of critical needs of the communities especially towards enhancement of education and national development to host communities
- iii. Lastly, the government through its local government should identify the areas of need in the establishing of CSR activities so that the mines' efforts are complimented.

## **The Communities**

The study also encourages and recommends the communities to;

- i. Understand that CSR from the mines only helps to alleviate the harsh conditions of the society. This will help the communities appreciate the efforts that the mine has done at the same time ensure that they guard jealously what the mine have given to them.
- ii. Participate and lobby for CSR activities that will address the needs of the society and further foster human development such that even when the lifespan of the mine comes to an end or closes down, the community can still strive economically, at least, at household level.
- iii. Continue the support that they give to the mine in understanding the needs of the community.

## **Further Studies**

Further research is in order to ensure that knowledge gaps are filled. The following recommendations are given for further study;

- i. Further study should be done on the comparative analysis on the contributions of several mines towards development through CSR. While this study only concentrated on Maamba Colliers Limited, it is important that other mines are considered in this study.
- ii. Further study should also be done to assess the mines' guiding framework for CSR among the communities. This is important in establishing the most effective guidelines in carrying out CSR.

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## APPENDICES

### Appendix I: CONSENT FORM

I am **Joseph Simweleba**, a postgraduate student at the University of Zambia studying for Master of Education in Education and Development. My topic of research is “*Contribution of Maamba Coal Mine towards Corporate Social Responsibility in Education in Sinazongwe District of Zambia.*” I am kindly requesting for your voluntary participation in this study. Please read the information below and ask for clarification about anything you do not understand before deciding whether to participate or not.

- i. There are no risks in taking part in this study. Actually taking part in the study will make you a contributor to the body of knowledge on the subject matter.
- ii. If you do not want to be in this study, you do not have to participate. Remember, participation in this study is voluntary and you have the right to discontinue if you decide otherwise. But I am counting on your contribution for this project to be successful.
- iii. All the responses will be highly appreciated, treated confidentially and used for academic purposes only.
- iv. If you have any questions about this study, kindly contact me on **+260967490781**.
- v. If you consent to take part in this study, kindly answer the questions.

**Appendix II: Plc: Self-Administered Questionnaire**

**THE CONTRIBUTION OF MAAMBA COLLIERS LIMITED  
TOWARDS CORPORATE SOCIAL RESPONSIBILITY IN  
EDUCATION IN SINAZONGWE DISTRICT OF ZAMBIA**

**(150 workers)**

Plc: Self-Administered Questionnaire

Questionnaire No: [ ][ ][ ][ ]

**SECTION A: Social Demographic Information** (tick the appropriate answer)

---

1. Sex of respondent:

(a) Female [ ] (b) Male [ ]

2. How old are you? (Indicate years) [ ]

3. What is your current marital status?

(a) Never married [ ] (b) Married [ ]

(c) Divorced [ ] (d) Widowed [ ]

(e) Separated [ ] (f) Engaged [ ]

4. What is the highest level of education you have attained?

(a) Grade 7 [ ] (b) Grade 9 [ ] (c) Grade 12 [ ]

(d) Tertiary college [ ] (e) University [ ] (f) None of the above [ ]

2. How did you attain the education?

(a) Mine sponsorship (trades schools) [ ] (b) Government sponsorship [ ]

(c) Self-sponsorship [ ] (d) International Scholarships [ ]

3. What is your employment status?

(a) Permanent and pensionable [ ] (b) Contract [ ]

(c) Casual basis [ ] (d) Sub-contracted [ ]

4. How has Maamba Coal Mine helped to sharpen your skills?

- (a) Through job on training [ ]      (b) After being sent to a trades school [ ]  
(c) Through inductions at work [ ]      (d) Through aptitude tests

5. What should the Mines do in order to help the workers go beyond their initial educational Level?

- (a) Send the workers for refresher courses [ ] (b) send workers to trade schools [ ]  
(c) Give workers more work [ ] (d) send workers to the Universities [ ]

6. What do you think the Mines should do in order to help their prospective/ would-be employees?

- (a) Employ workers according to their field of study [ ]  
(b) Employ them as general workers [ ]  
(c) Employ them according to their educational backgrounds [ ]  
(d) Send these workers for further education [ ]

7. What have your employers done to enhance your professionalism at work?

- (a) Imparted skills through tertiary education [ ] (b) induction courses [ ]  
(c) Through exchange programs (d) through job on duty

**SECTION B:**

Below are statements regarding Maamba Coal Mine's contribution in enhancing education and skill training, that is, factors enhancing community empowerment of by Maamba Coal Mine through its Corporate Social Responsibility. Kindly read each statement carefully and **circle** or **tick one** appropriate number that suits your opinion. **Kindly make sure all statements are answered.** Use the following five-point scale of the agreement and disagreement with the statement.

**1= Strongly Disagree, 2 = Disagree, 3 = Not Sure, 4 = Agree, 5 = Strongly Agree**

S/N	Corporate Social Responsibility	Five Point Scale				
	<b>General Education</b>					
8.	I am aware that Maamba Mine has constructed Primary school(s)	1	2	3	4	5
9.	I know that Maamba Coal Mines has built secondary school(s)	1	2	3	4	5
10.	I know that Maamba Coal Mine constructed college	1	2	3	4	5
11.	I am aware that Maamba Coal Mine is sponsoring pupils in Primary school	1	2	3	4	5
12.	I know that Maamba Coal Mine is assisting schools around with education materials	1	2	3	4	5
13.	I know that Maamba Coal Mine is financially assisting pupils in secondary school	1	2	3	4	5
14.	I know that Maamba Coal Mine is involved in rehabilitation of some school in the district	1	2	3	4	5
15.	I know that Maamba Coal Mines has constructed housing for Teachers in schools	1	2	3	4	5
16.	I know that Maamba Coal Mines assists schools with sports equipment for pupils	1	2	3	4	5
17.	Maamba Coal Mine supplies schools with clean drinking water for pupils and teachers	1	2	3	4	5
18.	Maamba Coal Mine supplies electricity to local schools	1	2	3	4	5
19.	Maamba Coal mines provide Internet services for schools	1	2	3	4	5

20.	Maamba Coal Mines provides learning materials to schools	1	2	3	4	5
	<b>Beneficiaries of Maamba Coal Mine in education</b>					
21.	Maamba Coal Mine sponsors youths in primary education	1	2	3	4	5
22.	Maamba Coal supports some pupils in secondary schools	1	2	3	4	5
23.	Maamba Coal Mine sponsors some youths to colleges and Universities	1	2	3	4	5
24.	Maamba Coal Mine sponsors its workers for college and university education	1	2	3	4	5
25.	Maamba Coal mines educates vulnerable and disabled people	1	2	3	4	5
26.	I know that Maamba Coal Mine offers literacy programs for the local people through the Ministry of Education	1	2	3	4	5
27.	Maamba Coal Mine offers literacy program for its workers	1	2	3	4	5
	<b>Micro-economic contribution and benefits</b>	1	2	3	4	5
28.	I belong to social club run by Maamba Mine	1	2	3	4	5
29.	My spouse is a member of Maamba Coal Mine club for economic empowerment	1	2	3	4	5
30.	Maamba Coal Mine has been giving soft loans for small businesses to local people	1	2	3	4	5
31.	Maamba Coal Mine has loaned farmers with agriculture inputs	1	2	3	4	5
32.	I choose to be in Maamba because the Coal Mine sponsors applicants for small business	1	2	3	4	5
33.	I manage to send my children to school through the business sponsored by the Mine	1	2	3	4	5
34.	I know my friend running a small business( shop, fishing, wielding etc) through the loan scheme from the mine	1	2	3	4	5

35.	Maamba Coal mine buys products locally produced by people	1	2	3	4	5
36.	The soft loan provided by the mines are affordable	1	2	3	4	5
37.	Maamba Coal Mine conducts business workshops for small businesses for the people	1	2	3	4	5
38.	Maamba Coal Mines repairs drainages and roads in the township	1	2	3	4	5
39.	Maamba Coal Mine offers education loans to viable but stranded students	1	2	3	4	5
40.	Maamba Coal Mines is involved in Agricultural support programs e.g. agricultural inputs (seed, Fertilizers or information)	1	2	3	4	5
42.	Maamba Coal Mines has built Health clinics	1	2	3	4	5
43.	I know also that the company supports in the maintenance of clinics and the hospital	1	2	3	4	5
44.	I know the Company support in health workers housing	1	2	3	4	5
45.	People who have been displaced have been built houses by the mine company	1	2	3	4	5
	<b>Skills Training</b>					
46.	Maamba Coal Mine has a skills training Centre	1	2	3	4	5
47.	I know that Maamba Coal Mines trains the public with building skills	1	2	3	4	5
48..	Maamba Coal Mine offers training in electrical engineering	1	2	3	4	5
49.	Maamba Coal mines trains the vulnerable youth in carpentry	1	2	3	4	5
50.	I know that Maamba Coal Mine offers training workshops in metal fabrication (wielding etc)	1	2	3	4	5
51.	My spouse/friend is running metal fabrication due to the skills offered by Maamba Coal Mine	1	2	3	4	5
52.	Maamba Coal Mine trains only its workers in skills training	1	2	3	4	5

53.	I am happy with the training skills offered by the mine	1	2	3	4	5
54.	The existence of the Mine is appreciated by many people because of skills training	1	2	3	4	5
55.	The skills are relevant to our economic situation in the District	1	2	3	4	5
56.	The skills training is offered for free by Maamba Coal Mine	1	2	3	4	5
57.	The displaced people have been empowered with skills for the livelihood	1	2	3	4	5
58.	Many displaced households are economically doing better because of the skills they have been offered	1	2	3	4	5

### SECTION C

Below are other questions regarding the contribution of Maamba Coal Mine in enhancing education and skills training through Corporate Social Responsibility. **Tick** or **circle** the answer you would agree with.

59. Have you ever been sponsored by the mine to the primary, secondary, college or University?

Yes [ ] No [ ]

60. Was your sponsored course in skills training?

Yes [ ] No [ ]

61. Should Maamba Coal Mine have internal continuous skills training for its workers?

Yes [ ] No [ ]

62. Should the Government demand (in its Mining Policy) mining companies offer education and Skills Training for the communities within which they operate?

Yes [ ] No [ ]

63. Has Maamba Coal Mine got education policy for the workers?

Yes [ ] No [ ]

64. Should the government demand that every mining company construct school (s) in the

Communities within which they operate in order to reduce illiteracy levels in the country? Yes [ ] No [ ]

65. Do you think Maamba Coal Mine is doing enough in enhancing education and skills Training for the local people of Sinazongwe District? Yes [ ] No [ ]

66. Do you think it would be a good idea for the mining companies to run Trades/Technical colleges in Zambia to propel skilled labour force? Yes [ ] No [ ]

67. Has Maamba Coal Mine paid particular attention to the school dropouts/leavers in the Community? Yes [ ] No [ ]

68. What other contributions (other than those stated above) has Maamba Coal mine made in Enhancing/ promoting corporate social responsibility in **education, micro economic**

**Investments and Skills Training?**

*Explain briefly*

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

**The End**

**Thank you for participating in this interview!**

### Appendix III: INTERVIEW GUIDE

#### INTERVIEW GUIDE FOR CURRENT CEO, 2 CURRENT MANAGERS, (2) RETIRED MANAGERS AND 2 HUMAN RESOURCES MANAGERS

Interviewer: \_\_\_\_\_ Interviewee: \_\_\_\_\_

PLACE: \_\_\_\_\_ Date: \_\_\_\_\_ Start Time: \_\_\_\_\_

My name is Joseph Simweleba. Please note that this is purely an academic study which seeks to assess Maamba Coal Mine's contribution in enhancing education and skills training in Sinazongwe district of Zambia. During my interview I would like to use audio recorder to get the information accurately.

1. What are the contribution of Maamba Coal Mine in the promotion of education and skills training for the local people?
2. What is the type and number of beneficiaries of Maamba Coal Mine's contribution to education and skills training in Sinazongwe district of Zambia?
3. How has Maamba Coal Mine's contribution to education and skills training improved the lives of the local people in Sinazongwe district of Zambia?
4. What training policies has Maamba Coal Mines put in place towards enhancing corporate social responsibility in education and skills training?
5. Has Maamba Coal Mine constructed any school for the local community?
6. Does Maamba Coal Mine offer skills training for the local people and the workers?
7. What are some of these skills being offered?
8. Does the company have education and training policy? Any policy on poverty and illiteracy reduction in the community?
9. Does the company have a particular concern for school leavers and dropouts in the community? How many people has MCM trained in Vocation and skills training programs? **Men, women and youth.**
10. Are there any deliberate small business entrepreneur activities for the local people in terms of short loans, business activities, community clubs etc for micro empowerment?
11. Which are some of those activities? How many people are benefiting from those interventions?
12. How many **men, women** and **youths** has the mine sponsored for education? Primary? Secondary? Higher education?

13. How can the mining companies contribute to the education development in Zambia?
14. What future plans does your company have as regards enhancing corporate social responsibility to education in Zambia as a whole?
15. Is the company involved in offering short loan schemes to the local people as micro-economic investment for their livelihood?
16. Is the company involved in agriculture support programs? What are those programs?
17. Is the company also involved in health programs? If yes, what are they? What about construction of health centre(s)?

Now that we have come to the end of discussion, may I firmly reassure you that all the responses will be kept **highly confidential**.

**THANK YOU FOR YOUR COOPERATION**

## **Appendix IV: FOCUS GROUP DISCUSSIONS**

### **INTERVIEW GUIDE FOR FGD WITH 10 LOCAL PEOPLE, 10 EMPLOYEES**

Interviewer: \_\_\_\_\_ Group: \_\_\_\_\_  
PLACE: \_\_\_\_\_ Date: \_\_\_\_\_ Start Time: \_\_\_\_\_

My name is Joseph Simweleba. Please note that this is purely an academic study which seeks to assess Maamba Coal Mine's contribution in enhancing education and skills training in Sinazongwe district of Zambia. During my interview I would like to use audio recorder to get the information accurately.

1. What are the contribution of Maamba Coal Mine in the promotion of education and skills training for the local people?
2. What is the type and number of beneficiaries of Maamba Coal Mine's contribution to education and skills training in Sinazongwe district of Zambia?
3. How has Maamba Coal Mine's contribution to education and skills training improved the lives of the local people in Sinazongwe district of Zambia?
4. What training policies has Maamba Coal Mines put in place towards enhancing corporate social responsibility in education, micro investment and skills training?
5. Has Maamba Coal Mine constructed any school for the local community?
6. Does Maamba Coal Mine offer skills training for the local people and the workers?
7. What are some of these skills being offered?
8. Does the company have education and training policy? Any policy on poverty illiteracy reduction in the community?
9. Does the company have a particular concern for school leavers and dropouts in the community?
10. How can the mining companies contribute to the education development in Zambia?
11. What future plans does your company have as regards enhancing corporate social responsibility to education in Zambia as a whole?
12. Is the company involved in offering short loan schemes to the local people as micro-economic investment for their livelihood, E.g. Agricultural Support programs? What are some of those activities?

Now that we have come to the end of discussion, may I firmly reassure you that all the responses will be kept **highly confidential**.

**THANK YOU FOR YOUR COOPERATION**

**Appendix V: PROPOSED RESEARCH BUDGET**

	<b>BUDGET ITEM/ RESEARCH ACTIVITY</b>	<b>QTY</b>	<b>UNIT PRICE</b>	<b>TOTAL</b>
A	<b>STATIONERY</b>			
	Reams of paper	4	80	320
	Writing pads	3	30	90
	Pens	5	2	10
	Ink Cartilage	2	380	1,140
	USB 8 GB	2	60	120
	Envelops	120	.5	60
	Pencils	3	2	6
B	<b>PILOT RESEARCH</b>			
	Transport (Mamba)		1000	1000
	Lodging		1500	1500
	Food		900	900
C	<b>MAIN FIELD DATA COLLECTION</b>			
	Transport		2500	2500
	Lodging		2000	2000
	Food		1500	1500
	Airtime		500	500
D	<b>DATA ANALYSIS</b>			
	Data Entry, Processing, Analysis,		-	-
	Consultations		500	500
	Lodging		-	-
	Airtime		150	150
	Internet		300	300
E	<b>CONTINGENCY FUNDS</b>			1500
	<b>Total</b>			<b>10, 796.00</b>

## Appendix VI: WORK PLAN

<b>S/N</b>	<b>ACTUAL ACTIVITY</b>	<b>TIME FRAME</b>	<b>DATES</b>
1	Topic identification, Formulation of the Research proposal Title/ Consultation from the supervisor	2 Months	April-June, 2017
2	Testing through piloting and fine tuning of Data collecting instruments	2 Months	July-Aug 2017
3	Data Collection from the sites of research and through with in-depth interviews	2 Months	Sept- Oct, 2017
4	Data entry and analysis	1 Month	Nov-Dec, 2017
5	Report writing of Research findings	1 Month	January, 2018
6	Proof reading, preparation and submission of first draft	2 Months	Jan-March, 2018
7	Oral and Poster presentation	1 Week	April, 2018
8	Submission of final draft of the dissertation for examination	3 Months	April-June, 2018

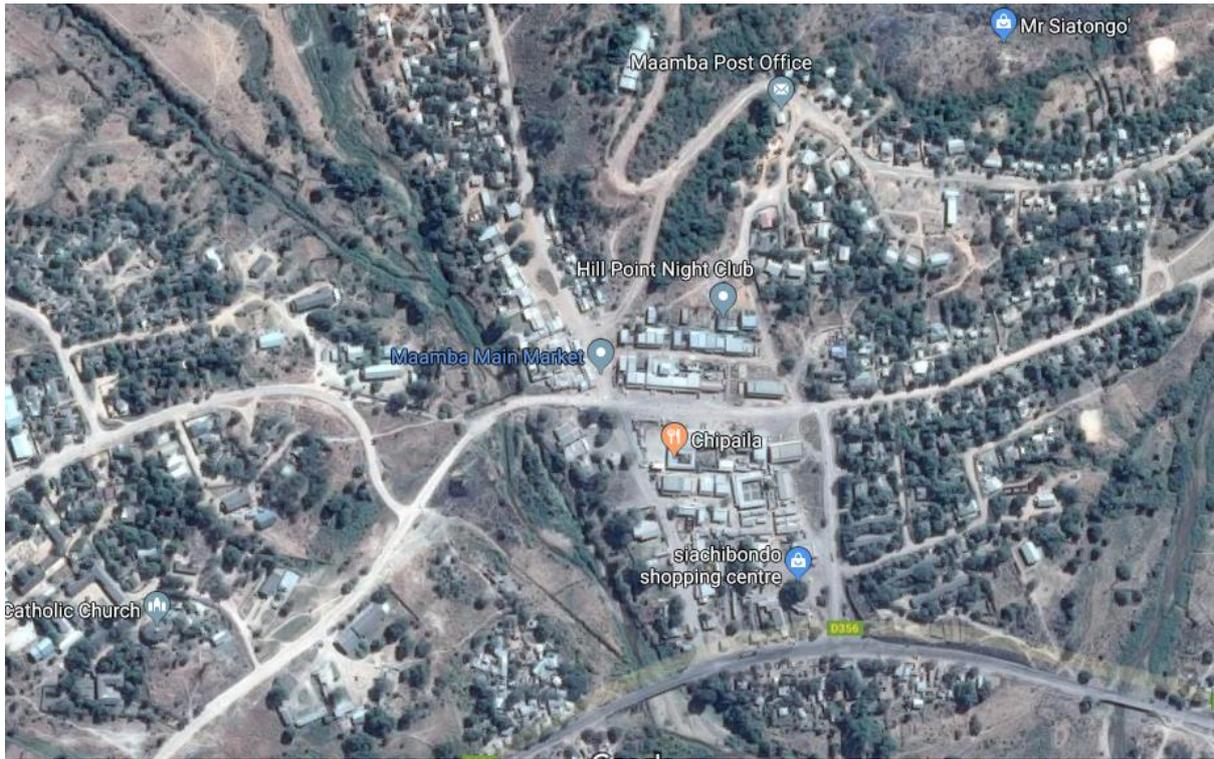
## Appendix VII: Photos and CSR activities



**Location of Sinazongwe District**



**An Ariel View of MCL**



**An Ariel View of Maamba Town**



**Repair of Roads by MCL**



**MCL contribution to UTH through infrastructure**



**Graded road by MCL to Kariba Dam**



**Carpentry training at MCL training institute**



**Tailoring training to the vulnerable by MCL in collaboration with the Catholic Church in Maamba**