

THE UNIVERSITY OF JYVASKYLA

Finland

**Analysis of socio-economic impact of Konkola Copper Mine (KCM)
on the mining community in Zambia; a Case Study of Chingola
Town**

Dominic Kangongo

A Pro Gradu Thesis

Social and Public Policy

Department of Social Sciences and Philosophy

MA Programme in Development and International Cooperation

Autumn 2008

Dedication

This Thesis is dedicated to my beloved wife, Grace, my daughter Tendai and my son, Simba who were very understanding and supportive to me during the course of my physical and emotional absence. I am also dedicating my work to my Beloved Sisters, Elina and Mervis for their unflinching support and encouragements.

ACKNOWLEDGEMENT

This thesis greatly benefited from a number of individuals whose assistance cannot go unnoticed. Although the final work including shortcomings could be attributed to me as a researcher, I would like to express my sincere gratitude to all those who helped me in different ways.

First and foremost, I would like to convey my gratitude to Professor Marja Jarvela of the University of Jyväskylä for her unlimited time she spent supervising my work. The advice from her greatly helped me to come up with the current version of my thesis. I wish to thank Dr Lauri for his quick response to read through my document. I was grateful to him for the wonderful comments he made regarding the structure of the thesis. I wish to express my warmest thanks for his constructive and careful review of my thesis. I would be failing in my duty if I fail to acknowledge the invaluable advice I received from Professor Pekka Valtonen. His advice determined the final structure of my thesis. Once again I am very grateful to him. I would also like to thank Bidemi Coker for her invaluable advice and guidance during my thesis writing. She was always there to advise and responds to my queries. I would also wish to thank Mr. Tapiola Laitmanen whose technical assistance provided the background of the study. Many thanks too go to my supportive Wife, Grace, for her financial and moral support she gave me while at the university especially during my extremely hard times. I am extending my special thanks to Angela Jackson, Fiona Young and Annie Nyirenda for their special support and opportunity they gave me to travel with them to Zambia where I had a chance to collect my data. Special thanks too, go to the TTEACH Programme at the Centre for Studies in Enterprise, Career Development and Work at the University of Strathclyde in Glasgow, UK. I also wish to thank Strathclyde

Abstract

This thesis focuses on the impact of Konkola Copper Mine (KCM). This company is a Multinational Mining Corporation. It is based in Chingola town in Zambia. The study seeks to establish whether the Mining company is contributing to the development of the town or not. It also examines the development agreements which the company entered into with government and show how this commitment has affected the company's contributions to the local community. Specifically, the study seeks to critically examine the development agreements with a view to establishing whether these agreements emphasized strict observance of corporate social responsibilities or not. The methodological approach used in this study was mainly qualitative which was basically participatory and descriptive; however, this approach did not prevent the use of quantitative approach which was necessary in validating the arguments. The methods used included interviews, observations and review of research and media reports. Theoretical literature was used to develop the framework of the thesis. Study findings demonstrated that the multinational corporation has been actively involved in implementing developmental programmes in Chingola, notable among them is malaria roll back programme, HIV/AIDS, as well as running schools for the community. However, due to weaknesses in the development agreements and legislations, the company has not been able to make significant contributions to the community. Notable among the company's failures include inconsistency in meeting its financial obligations to the government through corporate tax, royalties and dividends. For example, the study findings showed that the company pays royalties at a rate which is lower than the internationally set rate. Other failures include the repeated pollution of the environment.

Acronyms

CDC	Commonwealth Development Corporation
CSR	Corporate Social Responsibility
DA	Development Agreements
CSR	Corporate Social Responsibility
ECZ	Environmental Council of Zambia
EMP	Environmental Impact Programme
FGDs	Focus Group Discussions
GRZ	Government of the Republic of Zambia
IFC	International Finance Company
IMF	International Monitoring Funded
KCM	Konkola Copper Mine
LA	Local Authority
MNCs	Multinational Corporations
MUZ	Mine Workers' Union of Zambia
MMSD	Minerals and Mining Sustainable Development
NGOs	Non-Governmental Organizations
OECD	Organization for Economic Cooperation and Development
UNDP	United Nations Development Programme
UN	United Nations
UK	United Kingdom
WB	World Bank

Table of Contents

CHAPTER 1: INTRODUCTION

1.1 Background.....	1
1.2 Aims/Objectives.....	6
1.3 Research Questions.....	7
1.4 Significance of the study.....	7
1.5 Statement of the Problem.....	8
1.6 Conceptual Framework.....	9

CHAPTER 2: MULTINATIONAL CORPORATIONS AND CORPORATE SOCIAL RESPONSIBILITY

2.1 Mining and the Community.....	14
2.2 Corporate Social Responsibility.....	18

CHAPTER 3: THEORETICAL AND METHODOLOGICAL APPROACH

3.1 Theoretical Frameworks; Resource Base Theory.....	21
3.2 Philosophical Epistemological Assumption	23
3.3 Methods and Data Collection.....	27
3.3.1 Approaches and Instruments for Material Collection.....	28
3.3.2 Triangulation in Confirming Findings.....	33
3.3.3 Limitation, Validity, Reliability and Ethical Issues.....	33

CHAPTER 4: SELECTION OF THE STUDY AREA

4.1 Chingola Town and Region.....	36
4.2 Social Economic Characteristics.....	41
4.3 Livelihood and Strategies.....	44
4.4 Land and Land Use.....	46
4.5 Households Assets	47

CHAPTER 5: KONKOLA COPPER MINE AND COMMUNITY DEVELOPMENT

5.1 KCM Investment	47
5.2 Local Business Linkages	51
5.3 Financial Agreements.....	53
5.4 Education Programmes.....	54
5.5 Health Programmes.....	55
5.6 Konkola Copper Mine and Local Authority Relationship.....	57
5.7 Environmental Concerns	58

CHAPTER 6: IMPACT OF STUDY APPROACH

6.1 Analysis of the study approach..... 60

CHAPTER 7: DISCUSSIONS AND CONCLUSIONS

7.1 Discussions.....65

7.2 Conclusions70

BIBLIOGRAPHY.....79

APPENDIX.....88

CHAPTER 1: INTRODUCTION

1.1 Background

This chapter is an overview of events that characterized the mining industry prior to the sale of the mines to the Multinational Corporations (MNCs). It is an account of the difficulties that the mining industry faced in Zambia and how those problems led to the subsequent sale of the mines. Specifically, it tries to highlight some common difficulties the industry faced while it was in government hands and how the international community pressured the government to privatize the industry. This study therefore, is an attempt to establish the extent to which KCM, a Multinational Mining Corporation operating in Chingola town has contributed to community development. It also seeks to identify the relationship that exists between the MNC and the Local Community. While the World Bank and the International Monetary Fund (IMF) were on hand advising the Zambian government on how to proceed with the privatisation process, little attention was paid to the socio-economic impact of transferring the management of the Mining companies into the hands of the Multinational Corporations (MNCs). They failed to inform government the truth about the intended and the unintended consequences of the move, especially as regards the social and environmental consequences. They did not put in place necessary measures to caution the social impact of the process.

Mining has been the major economic backbone of Zambia since early 1930s. It accounts for (Undermining Development; 2007) 80 per cent of export earnings, 13 per cent of the GDP and about 15 per cent of total formal employment. Bernd (2001) reports that in 1997, the mining sector alone contributed \$822M US dollars (78.3 per cent) to the total export earnings of \$1.050 million. Of this, \$798M came from the sales of copper and cobalt only. The remaining earnings came from the sales of gold, silver and selenium. The mining community in Zambia is divided into large and small- scale mining according to investment capacities and capabilities.

Mining activities in Zambia are carried out mainly on a large scale basis. However, Small Scale Mining activities are carried out too in rural areas. Taupitz (1991) explains that Emeralds are said to be among the world's best. And it has been estimated that gemstones alone contribute about 25 per cent of mineral production in Zambia .The Zambian Government has adopted a pragmatic mineral policy which is designed to enhance investment in the mining industry and to ensure the development of a self-sustaining minerals-based industry. The privatization of many state-owned companies is a clear demonstration of this intent. The following are the key objectives of the mining policy in Zambia:

1. To make the private sector the principle producer and exporter of mineral products through putting in place a private sector initiative in the development of new mines in order to increase and diversify mineral and mineral based products and exports. This will maximize long-term economic benefits to the country.
2. To promote the development of the small-scale mining industry which has the potential to significantly contribute to the economy
3. To promote the development of gemstone mining and facilitate liberalized marketing arrangements in order to realize the industry's potential to contribute to the development of the economy.

Background to Privatization of the Mines

In the decade following independence in 1964, copper earnings accounted for 95% of export earnings Lungu and Sialengo (1997) and contributed 45% of government revenue. Penza (1992) observed that following the collapse of world copper prices and rising oil prices in 1975, the Zambian government resorted to heavy foreign borrowing to stave off the effects of the recession. At the same time, Zambia Consolidated Copper Mine (ZCCM) was treated as a 'cash cow' from where government got its means of development. However, there was no corresponding re-investment in the mining

infrastructure (ibid). From the time of its creation in 1981, the Zambia Consolidated Copper Mine (ZCCM) was encouraged to diversify from its mining functions to embrace non-core mining activities such as farming, transportation, maintenance of elevators and dry cleaning apart from its other social welfare roles. As a result more jobs and social services were created and offered to the people.

In a related development, Kienbaum, (1994) explained that as at 1st April, 1993, ZCCM's external debt burden stood at US\$ 518m with an internal debt of K 164.5bn approximately US 41.125,000. The company had incurred losses for the first half of the year to the tune of US\$ 135 m. In the same year, a decision was made to develop the Konkola Deep shaft at a cost of over US\$ 600 m. The action was aimed at increasing the production capacity of the mine. This was because copper production for the year to March 1994 had fallen by 9%. Cobalt production had also fallen by 20% representing a loss in revenue of some US\$ 30 M to US\$ 50.

However, in the early 1990s, Frasier and Lungu (2006) explain that the government started discussing the possibility of privatizing copper mining companies, largely due to pressure from the IMF and World Bank. Privatisation of ZCCM was a condition repeatedly attached to several loans from the two institutions and was a pre-condition for Zambia to qualify for debt relief through the highly indebted poor countries (HIPC) initiative. In 1999, with the Zambian government still reluctant to privatize ZCCM, 'major donors withheld some \$530 million in aid until the government conceded.' ZCCM's assets were split into seven sections and sold to various investors.

In view of these challenges, Simpson (1994) explains that overseas creditors were of the opinion that the needed finance for Zambia Consolidated Copper Mine's re-capitalization could only come by way of Privatisation of the Mines. In this regard, Kienbaum Development Services (GmbaH), a German consulting firm was contracted to assess the options for privatizing the Mining Company. However, it would appear that due to the fact that the report became the subject of public comment before government had made its decision on the options contained in it (Times of Zambia, 14th September, 1994) the report was rejected and the merchant bankers N.M. Rothschild's were instead

commissioned to prepare another report. The latter report has never been made public. Some commentators argue that Anglo-American rejected the Report on the basis of objections. Anglo American was the principal minority shareholders who wanted to have exclusive development rights for Konkola Deep are the ones who objected to the report. Whatever the truth is, the secrecy surrounding the release of the Rothschild's report when it concerned the sale of Public assets casts shadows over the transparency of the process.

The decision to sale Zambia Consolidated Copper Mines (ZCCM) assets by unbundling it entailed the separation of Zambia Consolidated Copper Mines' (ZCCM) commercial and social roles. At the time of the privatisation of the company, water and sewerage services could not be handed over to the local authorities because they were in the process of commercializing their utilities. In addition, the institutional capacity to cope with new responsibilities was inadequate and it was therefore considered unwise to add on to these responsibilities. It is anticipated that this system of dual responsibilities in the water supply and sanitation sector was going to run for four years on the Copperbelt after which a decision would be made concerning a merger of the two services. During the same time, a number of employees were laid off as shown in the following table:

Table 1- ZCCM Redundancies – 1992 to 1999

Division	91/92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	Total
Nchanga	4	0	0	152	569	0	0	638	1363
Mufulira	0	0	6	183	357	0	28	869	1443
Nkana	0	4	7	600	135	2	0	457	1205
Luanshya	3	8	0	457	228	0	0	0	696
Konkola	0	0	1	133	494	0	0	639	1267
Chibuluma	0	0	0	0	0	0	0	0	0
Kabwe	0	0	0	813	101	31	36	0	981
Nampundwe	0	0	0	138	52	0	0	0	190
NCR	0	0	0	0	0	0	0	108	108
Power	1	1	0	26	0	0	0	0	28
OPC/CSD	0	0	7	142	162	0	2	566	879
CHO	0	1	0	25	84	0	26	33	169
TOTAL	8	14	21	2669	2182	33	92	3310	8329

Source: **Mines Union of Zambia, 2000.**

When the retrenchments started, little or no life skills training programmes was made available to the retrenched to enable them adopt alternative lifestyles. Stories abound of former miners who had been paid their packages squandering them on frivolous items or moving away from family homes until they had emptied their purses. The decision to sell mine houses was made later in the process and consequently those who were among the early retrenches did not benefit from this scheme. As a result many ended up in the informal townships surrounding the major towns on the Copperbelt. When the mines were under government, a system of township management operated by township managers was responsible for the maintenance of the housing stock under the company. When houses were sold, some beneficiaries mainly those who were in the higher income categories started adding value to their properties by way of making extensions and other

additions. However, many who could not afford to do this moved out of the houses and put them on the rental market. In the townships where junior employees of the mines lived began to show the classic signs of neglect through cracks.

Following the withdrawal of the Anglo American Corporation, KCM was sold to Vedanta. Vedanta a British based company. At the time of sale of the company, expectations among residents were extremely high. In their view, a new mining company meant doing more community based programmes than the former mine company. However, this high expectation was met with a lot of disappointments ranging from poor road networks in the townships to general lack of maintenance of city facilities.

1.2 Aims/Objectives

This study aims to contribute to the discussion about the costs and benefits of mining industry and what might be done by the Government of Zambia, Konkola Copper Mine (KCM) and Chingola community to secure greater benefits for Zambia, and especially for those working in and living near the Chingola mine. KCM and the Zambian Government both argue that since 1991, under the supervision of the World Bank and IMF, Zambia has been transformed from a socialist economy dominated by the state-owned Zambia Consolidated Copper Mines (ZCCM) into a free-market system. The unbundling of ZCCM into several smaller companies and their sale to Multinational Corporations (MNCs) between 1997 and 2000 marked the completion John (2000) of one of the most comprehensive and rapid privatisation processes seen anywhere in the. The process was thus seen as a major success by the World Bank and IMF, and Zambia is now a favored recipient country for many rich-country aid donors. Privatisation has certainly brought more money into mining. Pits that were threatened with closure have stayed open. New mines have opened up. Production and profits have significantly increased.

The main aim of this study therefore, is to establish the extent to which Konkola Copper Mine a Multinational Corporation (MNC) has contributed to Local Community Development in Chingola town, in Zambia. Furthermore, the study seeks to assess whether Multinational Corporations are better means of developing communities in

developing countries or not. The study further seeks to find ways of enhancing good environmental performance, for sustainable development, with a view to improving public policies for capturing benefits of mineral development..

1.3 Research Questions

The study responded to questions related to the socio-economic impact of mining by the Multinational Corporations.

Main research questions were as follows:

- 1.3.1 Are multinational corporation's better institutional alternatives for socio-economic development in developing countries?
- 1.3.2 How do the working conditions of KCM employees differ from those of KCM Contract employees?
- 1.3.3 What specific gains in terms of social services, economic and infrastructural developments have KCM brought in Chingola?
- 1.3.4 Are there specific changes or risks in terms of socio-economic relations and local system?

1.4 Significance of the study

This study was undertaken in order to generate data on the impact of mining activities by MNCs on the mining community. The findings could be used by the government in partnership with other stakeholders including civil society, the private sector and the international community to redress socio-economic impact relating to access to adequate social services such as piped water, health, education and township maintenance. Since the government is committed to international conventions this study, as a contribution to existing knowledge, could assist government in domesticating international agreements such as the environmental protection, and the achievement of Millennium Development Goals (MDGs) through the development of company – community friendly policies. Such data would also assist the government in particular, the Ministry of Mines and Minerals Development and indeed other stakeholders in the execution of interventions

related to environmental protection, social protections as well as poverty reduction. In addition, the study could be used by other scholars to enrich the literature on Multinational Corporations and the Socio-economic issues for Social and Public policy review and implementation. Although, only 6 out of 12 compounds in Chingola were sampled; generalizations can be drawn from this study. This is so because the Focus Group Discussion (FGD) and the household survey methods that were employed are valid and have led to the generation of both qualitative and quantitative data. The qualitative data especially brings to the fore narratives from the grassroots people in the communities among both the mining and non-mining communities.

The findings could be used in the preparations of future Development Agreements and mining legislations including the international policies on Corporate Social Responsibility as reflected in the European Union Legislations. Mining communities could also use the findings in demanding for their involvement in decision making on matters related to mining. It could also help MNCs make strategic business investment plans in order to be seen to be good corporate citizens concerned with community welfare. The findings could also be generalized to other non-mining multinational corporations in Zambia.

1.5 Statement of the Problem

The presence of MNCs in certain localities has raised high expectations from the communities. It is argued that the presence of MNCs in developing countries contribute positively to the socio-economic development of the areas in which they operate. The practices and policies of these companies could lead to the realization of community development which is necessary to the promotion of sustainable development. The socio-economic benefits of communities are directly or indirectly influenced by their relationship with the multinational corporations. Following the sale of KCM to Vedanta in Zambia there was of enthusiasm amongst the people regarding improvements in their localities. Differing expectations about who should get what benefits from digging the wealth out of the ground are causing serious tensions in the Copperbelt region of

Northern Zambia. Multinational copper-mining companies, the Zambian Government, workers and local communities all desperately want recently privatized copper mines to succeed, and for the region to return to its golden age as one of the most developed parts of Africa. Yet all have different beliefs about how to make it happen, and what rights and responsibilities should attach to private companies, the state and citizens.

In Chingola, people have been wondering whether the mining company in their area is doing enough to contribute to community development. This study therefore is an attempt to investigate the extent to which KCM has used corporate social responsibility as a means of contributing to community development to bring about development.

1.6 Conceptual Framework

This section describes the evolution of the key concepts of the study which includes participation, community development and socio-economic dimension empowerment. A brief discussion is also included on the concepts related to community development.

Participation

Participation in community development emerged as key issue in the 1960s. Arnstein (1969) argues that citizen participation means the same thing as citizen power. He argued that the redistribution of power in a community enables the poor, presently excluded from the political, economic and social processes to be deliberately involved in the future development programmes. Citizen participation is a strategy by which the poor in society join in to determine how information is shared, goals and policies are set, tax resources are allocated, programmes are operated and benefits such as contracts are distributed in communities. Arnstein wanted to stress that participation without a redistribution of power is an empty and frustrating process for the weak in society.

Empowerment

The concept of empowerment can be traced back to the self help perspectives of the 1970s. Gutierrez (1990) argues that the concept of empowerment was promoted as a

principal theory of community development because it acknowledged a person as a citizen within a political as well as a social environment. However, in the 1990s, Israel et al (1994) argues that the concept of empowerment became part of the growing general movement towards greater citizen control in many areas of life which included health education, self-help movements, the physical environment and nursing homes.

In spite of extensive research that has been going on for several years now, there is still no operationalisation of the concept of empowerment. The absence of a unique theory and definition goes a long way towards explaining why empowerment has often been discussed but not quantified. Rappaport (1987) however, argues that because it is dependent on the context, empowerment cannot in fact be measured but only considered in each case. Rissel (1994) argues that the difficulties in developing and applying empowerment theory, mainly comes from the lack of clarity regarding the focus of empowerment. The lack of a clearly defined concept also contributes to the misuse of the term (Grace 1991).

Socio-economic Dimension

Huisinga (1997) contends that social economics is defined as interrelations of environment, social and economic dimensions that determine the patterns of developments. It involves the social system where people interact through roles and relationship defined by gender, age, ethnicity, and other social valuables and economic strata. It looks on the society as a complex entity where individuals inter act freely.

Mining Community

A mining community is where the population is significantly affected by a nearby mining operation. For example, the community may be affected through offering them with more jobs or less. It could also be affected through pollution. The community may be associated with the mining venture through employment or though environmental, social, economic or other impacts. The community may range in size from a city which could be

a serving as a base for distant fly-in, fly -out operations or a centre for supplies and financing to a village which relies exclusively on local mining. Communities vary in profiles and perceptions about mining and needs.

Multinational Corporations

These are large business entities with worldwide operations whose activities and operations are centrally controlled by the parent companies. Many Multinational Corporations have annual sales, which are in excess of the annual GDP of developing nations in which they operate. Todaro (1985) has observed that these huge profit margins confers great economic and sometimes political power on them vis-à-vis the countries in which they operate. It is argued that this power is strengthened by the fact that they tend to operate in product markets dominated by a few sellers and buyers. This situation gives them the power to manipulate prices and profits, to collude with other firms in determine areas of control, and in general to restrict the entry of potential competitors by means of their dominating influence over new technologies, special skills and through product differentiation and advertising, consumer tastes.

This chapter has shown that the Zambian government was under pressure to privatize the mining companies. The sale of the mines was inevitable because the mines were making losses due to government interferences and that government was not recapitalizing the industry due to financial constraints. It was assumed that lack of community development was as a result of lack of resources due to the underperforming mining industry. Resources therefore, would come from the taxes the private investors in the mining sector were going to pay. The transfer of KCM to foreign investors was seen to be the sure answer to develop the community in Chingola through corporate social responsibility. This chapter has ended by providing the direction that the study is going to take in determine the socio-economic impact of MNCs in Chingola.

Community Development

Community development refers in a broad definition to the process of purposefully stimulating conditions for change and mobilizing citizens and communities for development. A key element in this process is participation of individuals in voluntary organizations which produce collective and individual goods. It also involves engaging a process of networks of governmental and non-governmental organizations including special interest groups in coordinated efforts to promote greater social control.

Dixon (1989) argues that community development approach has been used when national interest is at stake and for the introduction of innovatory ideas, practices and technologies. He observes that although community development can contribute to planned social change which implies the shaping of community and informal networks rather than of economic and political forces), it is not about the redistribution of power even within an area even though less powerful members may benefit from the innovation. Petersen (1994) identifies the following keys to empowerment in community development: consciousness raising, and gaining access to resources. However, in the absence of an analytical framework there is no way of gauging the strength of these claims or knowing exactly how power relations have changed and how enduring these changes have been.

Community development therefore, is an underlying democratic vision and it includes such values as local group involvement in defining objectives and making decisions a more equitable sharing of social resources and opportunities, personal fulfillment defined in terms of being contributory and creative rather than simply in terms of status and material possessions. An emphasis is on the developmental process that accompanies a project rather than simply on measurable outcomes and promotion of the balanced development of all the resources, physical and human in the community. Community development has traditionally been defined as voluntary cooperation and mutual aid efforts among residents of a particular locale which aim at improving the social,

economic and physical conditions of the community. However Petersen's (1994) criticism is that even when adopted by NGOs, community development has been an externally imposed paternalistic intervention for the good of the community rather than an attempt to alter established power relations. Community development therefore is a process that stimulates opportunities for membership and influence mutual needs to be met and shared emotional ties and support.

The concepts and theory in this section had one common element. This was that business organizations should embrace community development in their business plans. The concept of citizen participation argues that for meaningful social change in society to occur, both those with power and without power ought to work together from planning level up to implementation of community programmes. This notion is upheld by the Empowerment concept. This concept argues that companies operating in certain localities should contribute to the provision of skills, resources and infrastructure necessary for local communities to stand on their own. Multinational corporations are expected to do more in helping communities they operate from as a way of showing commitment to Corporate Social responsibility

CHAPTER 2: MULTINATIONAL CORPORATIONS AND CORPORATE SOCIAL RESPONSIBILITY

2.1 Mining and the Community

The Chapter is intended to discuss issues on MNCs and the Communities, clarifying the key problems and the gaps that this current research is seeking to fill. Therefore, it is a review of literature on mining around the world. It attempts to show how mining by MNCs in developing countries have affected the lives of people. It seeks to put the current debate on the socio-economic impact of MNCs on the communities into the global context. It also shows that the politics of mining around the world are increasingly being played out at the local community level. They are also monitored clearly by a variety of media and Non-Governmental Organizations around the world. Investors, insurance companies, banks governments and citizens increasingly want little to do with the industry that is seen to be indifferent to their present and future socio-economic situation. This is a message that has been communicated loudly by the communities. This section also describes the evolution of the key concepts of the study which includes corporate social responsibility, participation and empowerment. A brief discussion is also included on the concepts related to community development. The section ends up with a summary on the main differences between the various concepts

Marcello (2001) argues that most companies around the world are being encouraged to pursue their interest in a way that also promotes those of the local communities in the regions where they are operating. The long term benefits and viability of both mining industry and its related communities justifies serious attention. Improving environmental performance and mitigating environmental impacts of mining are critical but will not necessarily suffice to ensure the social health and welfare of associated communities.

It is necessary therefore to go further in considering how that development entails in the context of mining communities. Education, cooperative decision-making and diversification are all important elements in long-term community sustainability. These

concepts are not new, yet as demonstrated by the following examples from around the world, translating stated goals into reality may not be easy. Nevertheless, certain initiatives in various locations are pointing to positive developments that can serve as models for a more sustainable future. To be effectively realized, such future requires that there be a net improvement in the environment, social and economic health of the local community where mining takes place.

Mining communities around the world, share several common characteristics. Many older well established mining communities have faced reduced employment resulting from increased mechanization and automation or declining world prices. Many companies are seeking economies of scale, exploitation and operations are moving off-shore, as reserves become depleted. In developing countries, serious challenges arise from lack of economic security, stability and from quality of life issues.

Many mining communities are in regions with few opportunities for diversification. There are, therefore, numerous challenges to making a mining community viable. A sustainable mining community is one that could realize a net benefit from the introduction of mining that lasts throughout the closure of the mine beyond. George, F. (1992), contends that in practice, this would mean that the communities adhere to three fundamental prerequisites for sustainable societies outlined by ecological sustainability, economic viability and social equity. The challenges for any mining company today is to engage in an equitable partnership with the associated community thereby leaving them with a lasting legacy of sustainable development and wellbeing to the community through avoidance of environmental degradation and social dislocations. Mining communities in different geographical locations may differ widely in terms of culture, political orientation and environmental characteristics and collective attitudes towards resource development. Nevertheless communities that have had a poor relationship with a mining company tend to share common perceptions that the mining operation is intruding into their environment, culture and history. Such a feeling may be particularly strong where benefits have not been cooperatively determined nor equitably shared. To minimize this perception and create a desirable relationship is key to building a healthy mining community. The following cases suggest that while mining companies are

increasingly aware of this dimension and taking initiatives particularly in the area of corporate responsibility, the industry still needs to develop further and address appropriate principles of community development.

Multinational Corporations and their Influence

Proponents of foreign direct investment argue that Multinational Corporations are a necessary agent capable of filling the gap between the domestically available supplies of savings and foreign exchange earnings. The second argument relates to the filling up of the gap between targeted foreign exchange requirements and those derived from net export earnings plus net foreign aid. By taxing MNC profits and by participating financially in their local operations MNCs are thought to mobilize public financial resources for development projects. While MNCs contribute to the public revenue through corporate taxes, their contributions are considerably less than it should have been as a result of liberal tax concessions, excessive investment allowances, disguised public subsidies and tariff protection provided by the host governments.

Economic diversifications

As noted above, the reaction of a community to a mining operation in its vicinity may be volatile and unpredictable, particularly when the level of poverty is high and mining is a potentially strong economic activity. This is a serious problem for sustainability of mining operations, particularly when one considers the huge numbers of people dependent on marginal forms of mining employment. Today many mining companies that have experienced poor community relations know that sustaining the community is an integral part of an effective and respected operation. As noted earlier, a sustainable mining community should be based on the principles of environmental sustainability, economic vitality and social equity. An examination of case studies shows a wide variation in circumstances and approaches.

The traditional route to sustainable mining community has tended to focus on establishing infrastructure to support and nurture the workforce. For example Mining

Companies in developed countries have set very high standards in creating towns and infrastructure including utilities, medical and educational facilities. The other approach has been to generate sustained employment through discovering and mining all available ore deposits in the locale. Communities such as Flin Flon and Snow Lake have been remarkably sustained by the continued discovery and operation of mining ore deposits within reasonable proximity. The step was generally to leave the infrastructure such as roads, power and housing to local communities when the mine was closed.

In conclusion, proponents of foreign direct investment argue that Multinational Corporations are a necessary agent capable of filling the gap between the domestically available supplies of savings and foreign exchange earnings. By taxing MNC profits and by participating financially in their local operations MNCs are thought to mobilize public financial resources for development projects. While MNCs contribute to the public revenue through corporate taxes, their contributions are considerably less than it should have been as a result of liberal tax concessions, excessive investment allowances, disguised public subsidies and tariff protection provided by the host governments. Unlike government companies, commitment to community work is considered secondary as highlighted by the literature. However, help rendered to communities is considerably small. The chapter shows that the current research is an effort to justify the study to see whether indeed MNC are better agents for community development or not.

This section has proved that the current controversy on the operations and benefits accruing to mining communities working for the MNCs are global in nature. Therefore, solving them requires both local and global solutions. The literature in this chapter is critical to the development of the entire thesis as it provides the linkage between what is happening in Zambia and what is happening outside the country. Furthermore, it exposes the weaknesses in different government systems as regards how they regulate these MNCs.

In the present study, 'corporate social responsibility is seen both as a tool for socio-economic development Bonaroff (1983) and for implementing development programmes. It is also seen as an end to the development process where corporate social responsibility.

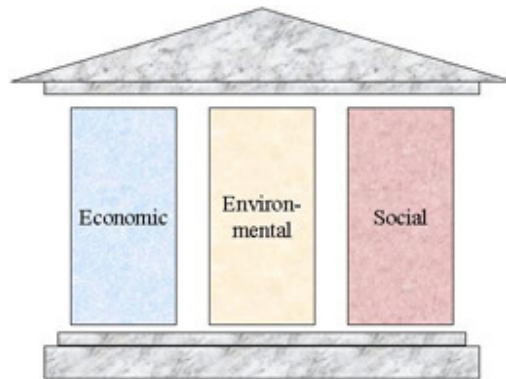
2.2 Corporate Social Responsibility

CSR is the voluntary integration of environmental and social considerations into business operations, over and above legal requirements and contractual obligations. CSR is about going beyond and not replacing or avoiding. The CRS concept refers to companies taking voluntary action towards integrating social and environmental concerns into their business operations and communicating interactively with their stakeholders. One of the main points in CSR is that it includes and goes beyond complying with legal obligations. CSR incorporates taking proactive, long-term measures that base on the organization's operations and field of business. The activities can be seen as related firstly to the business environment (within the company and relations to stakeholders, customers and suppliers) and secondly to the wider community, society and environment (local, national, international).

CSR is a growing political, social and economic issue. The changes in the society bring about the new role of companies in the new economic and social environment. While many individual companies are proclaiming their own codes of conduct as a response to pressure from competitors, customers, NGO's and other stakeholders, many other have found strength in coming together in groups and networks to promote common approaches "Corporate Social Responsibility Main Issues" press release <http://europa.eu/rapid/pressreleaseAction.do>

Three pillars

The concept of CSR is often envisioned as a Greek temple, with its three pillars depicting the three dimensions of CSR: economic, social and environmental responsibility. For CSR to be applied successfully, all pillars should be in balance and grounded on accountability – i.e. the overall reliability and transparency of operations.



Why should companies apply CSR?

CSR is a concern to a wide range of groups such as politicians and decision makers, shareholders, consumers-customers, suppliers, pressure groups and workers. Thus it is not simply a question for individual companies to decide whether and how CSR is relevant to them. From the point of view of companies, there are several reasons for interest. Acting responsibly may have a very direct strategic or economic impact on the company's profitability, e.g. via improved efficiency.

Social Aspects of CSR

Social responsibility is currently the most topical pillar in CSR, as it is getting more attention than it previously has. Social responsibility is the newest of the three dimensions of Corporate Social Responsibility and it is getting more attention than it has previously had. Many organizations are becoming increasingly active in addressing social concerns. Social responsibility means being accountable for the social effects the company has on people – even indirectly. This includes the people within the company, in the supply chain of the company, in the community the company is in and as customers of the company. It refers to the management's obligation to make choices and take actions that will contribute to the welfare and interests of society as well as those of the organization.

Economic Dimension of CSR

The economic dimension of CSR consists of understanding the economic impacts of the company's operations. Economic issues have long been overlooked in the discussion on Corporate Social Responsibility. For many years, the dimension has been widely assumed to be well managed. However, it is actually the least understood by many of those shaping the corporate and public-policy agendas, and underrepresented.

The economic dimension of CSR is often mistakenly considered to be synonymous with financial issues, which is why it has been assumed easier to implement than the other two “pillars of the temple”. However, economic responsibility is not simply a matter of companies being financially accountable, recording employment figures and debts in their latest corporate-responsibility report. The economic dimension of the sustainability agenda should rather consider the direct and indirect economic impacts that the organization’s operations have on the surrounding community and on the company's stakeholders. That is what makes up "corporate economic responsibility".

Environmental Pillar of CSR

Environmental issues have been an important topic of discussion for the past thirty years in the business world – the longest time of the three dimensions of Corporate Social Responsibility. The knowledge and issues within the dimension have progressed across a landscape of changing business realities. Environmental departments were put in place in the 1970s, with the first real understanding of the environmental impacts of business. Now, in the 21st century, we are faced with new challenges.

In this chapter one most important idea has been communicated. This is that companies are expected to make contributions to the welfare of the communities in which they work. This is important to create good reputation for the company as well as cautioning the communities against any social problems.

CHAPTER 3; THEORETICAL AND METHODOLOGICAL APPROACHES

The main thrust of this section is to situate the research within internationally accepted Theoretical and methodological approaches. It sets the parameters of research and shows how the study findings fit in the world view. Within the scope of these theoretical frameworks, local issues in the mining sector are analysed in terms of their implication at community level. Local issues are linked to both policy and practice. Resource base theory is the main theory behind the study. Methodological approaches in this study include both qualitative and quantitative approaches.

3.1 Theoretical Frameworks

Policy makers in developing countries with significant resource endowments often describe Foreign Direct investment in the mineral sector as a key that could unlock the country's buried treasures. Since minerals are buried in the ground, most law makers in developing countries assume that minerals are treasures which are kept by nature. They argue that governments in developing countries should use them to provide the much needed financial resources to provide the social services and capita for reinvestment. Financial resources derived from mining activities could help bring about development through infrastructure development. Bomsel O. (1990) explains that this perception is aimed at setting in motion a virtuous cycle of socio-economic change. This is that mining activities trigger other non-mining activities, which could generate jobs for people as well as providing markets for goods and services which are sold by ordinary citizens. The theory of hidden treasure in the ground is wide spread and gains its justification from a remarkably diverse array of intellectual traditions which include:

The theory of comparative advantage: This theory, Pearson (1969) argues that countries with large natural resource endowments should specialize in extracting and exporting them and use the wealth generated to import other goods and services which other countries can produce. For example, if a country has huge quantities of minerals, it is

reasonable to specialize in extracting them, and use the earned financial resources to import goods and services which the country is not able to produce due to certain limitations.

Braz, SP. (1984) also observes that the Theories of resource based industrialization via autarkic policies of import substitution seek to develop indigenous natural resources and downstream processing capacity as a way to reduce dependence on imports and provide the basis for domestic industrialization. If for example a country has huge mineral deposits, it should through the existing industries get involved in both the production and processing of the resources up to the final products. It is argued that this process could lead to more job opportunities available to the citizens.

Geopolitical theories about national security and state led strategies of resource acquisition in order to stave off resource famines and ensure the availability of strategically significant minerals Freyman, A. (1974), and Growth pole theories that view mining investment as a form of pumps priming to address uneven pattern of development.

The treasure chest theory therefore, is a theory about development. It assumes that resources in the extractive sector should contribute to national and community development. This is that companies operating in certain communities should pay tax to national governments in order to fund the social services needed by various communities. This view is supported by many already stated theories above. This thinking leads to the concept of corporate social responsibility. The wisdom of the concept is that multinational corporations working in developing countries should directly or indirectly contribute to community development through employment creation, procurement of material goods and services from local suppliers as well as providing social services like health centres, schools and sports. The companies should also contribute in the infrastructure development such as bridges, railways, dams and other strategic infrastructures. While these programmes could improve the standard of living for the local communities, the companies should contribute to the upgrading of rural roads in the

nearby areas occupied by ordinary citizens who still feel the resources being mined by the mining companies are theirs too.

3.2 Philosophical Epistemological Assumptions

Lincoln (1994) argues that there are three main activities which determine the process of research. These are articulation of the researchers individual world view, decisions on the theoretical options and techniques of inquiry and finally decisions on methods and data analysis. The study design, expresses the connections between different activities. This section presents the world view of the research design and tries to link this world view to the methods that were used to collect and analyze data. The section concludes with specific methods employed in the field to collect and analyze data.

Patton (1990) argues that the nature of a paradigm behind any study is a philosophy of choices which recognizes that different methods can be used in different situations. In this regard, paradigms become important theoretical constructions for illuminating critical assumptions about the nature of reality. However, at a level of making decisions, the emphasis on strategic choices helps to convey the idea that there is a wide range of possibilities of methods available to choose from. This is an important aspect regarding the study of the socio-economic impacts of multinational corporations.

The pragmatic view defining the nature of the world in this study could be associated with the critical theory which has typical features of the paradigm of Interpretivism and constructivism. Robertson (1996) presents the use of constructivism as the leading paradigm in community based developments. He argues that constructivism has the potential to resolve some tensions between research and practice in community development. Schwandt (1994) argues that constructivism and Interpretivism have similar characteristics which qualify them into paradigms. It is worth noting though that both paradigms are shaped by the intent of the end user. Both interpretivists and constructivist believe that in order to understand the complex meaning the researcher should be able to interpret the materials. These approaches are not seen as methodologies,

but rather as scientific methods characterized as an abstract formal sense of method. They are concerned with issues about knowing and being. The method is predicted on the elimination of personal subjective judgment. The emphasis is generally on the world of experience as it is lived, felt, and undergone by social actors.

Kuhn (1970) defined a paradigm as a worldview, which is believed to be exclusive. It consists of many beliefs which include the ontological (what is the nature of knowable or reality), epistemology (what is the nature of the relationship between the knower and the knowable) and the methodology (how should the one searching for knowledge go about finding out knowledge) assumptions. However, although the two paradigms share the same general framework, they are unique in the way they respond to questions regarding the aims of human inquiry, and the ways how the researcher can know about the world of human action.

Interpretivism

Schwandt (1994) explains that the mainstreams of interpretivism are associated with a German intellectual tradition of interpretivism and hermeneutics. He further argues that interpretivism is associated with the *verstehen* tradition in sociology, phenomenology of Alfred Schutz and Max Weber's theories concerning the relationship between the interpretation of the meaning and causal explanations coupled with the separation of values and facts in a social inquiry. Interpretivists point out that there is a difference between mental sciences and natural sciences. The latter seeks scientific explanation while the other one is anchored on the understanding of the meaning of social phenomena. Interpretivism struggles with maintaining the opposition of subjectivity and objectivity engagement. The emphasis is on drawing a line between the object of the investigation and the investigator. The challenge of how to develop an objective interpretative science from the subjective human experience thus arises..

The philosophical hermeneutics is concerned with being in the world. In this case, the issue at hand is the ontological question of understanding, which comes from the communality, which binds people together to traditions and to the object of interpretation. It also provides a link between a theory and praxis. Kvale (1996) argues that symbolic

interactions are a label for a unique approach to the study of human life and human conduct. Symbolic interactions depend on three principles. The first one is that human beings act towards the physical objects and other beings in their environment on the basis of the meanings that they have. Furthermore, these meanings derive from the social interaction between and among individuals. Communication is symbolic because human beings communicate through languages and other symbols. Finally, meanings are established and modified through an interpretation process where the actor selects, reforms, transforms, regroupes and checks the meaning in light of the situation. Meanings occur through the process of interpretation..

The general assumption in interactionism Bogdan and Taylor (1975) is that people are in constant process of interpretation and definition as they move from one situation to another. The research has to infer the most important features of this operation by collecting all kinds of data through interviewing, observing and examination of personal documents and then extracting from these records the material that is relevant to the question that the researcher asks.

Constructivism

Creswell (2003) argues that deciding on knowledge claim entails choosing certain assumptions and beliefs that are capable of showing the way on how the researcher learns and what is learned during the inquiry process. In this study, the option for certain philosophical assumptions is fundamental to the understanding of the research questions and the final discussions of a study.

Schwadnt (1994) argues that constructivists share the interpretivist's emphasis on the world of experience as it is lived, experienced and undergone by social actors. They are committed to the view that what we take to be objective knowledge and truth is the result of perspective. Knowledge and truth are created not discovered by human mind. Constructivists emphasize the instrumental and practical function of theory construction and knowing. Lincoln and Guba (1985) used the constructive paradigm as a wide-ranging eclectic framework. They originally titled their approach as naturalist inquiry. In the recent years they have used constructivism to characterize their approach as

methodology. They however, acknowledge that constructivist, interpretative, naturalistic, and hermeneutics are all similar notions. The act of inquiry begins with concerns of the stakeholders and develops through dialectic of iteration, analysis, critique and reiteration that leads to a unified reconstruction which is evaluated for its fit with data. The ontological question within constructivism paradigm is relativist. This means that realities exist in the form of multiple mental constructions. The epistemology of constructionism is transactional and subjectivist. This means that the investigator and the object of investigation are assumed to be interactively linked together so that the findings are literally created as a research proceeds. The methodological question of constructionism Lincoln (1994) is hermeneutical technique and are compared and contrasted through dialectical interchange with the aim of generating one construction on which there is substantial consensus.

In this study therefore, I wished to take a position of a social-constructivist. However, I wish to acknowledge the fact that the transformations that have taken place in the mining communities and the interactions, which have taken place, are affected by the interaction of different cultural settings. While adopting this position, I am aware that all other spheres are important, but as I analyzed the transformations in the mining communities much of the changes are connected to the recent economic growth. I adopted both constructivist and interpretivist approaches because I realized that my research was empirical therefore, I would derive the meanings of my study from interpretations and deductions. Furthermore, I took these two positions because I was going to use qualitative approach in my study. In the section that follows, the study seeks to highlight specific methods that were applied in collecting data.

3.3 Methods and Data Collection

Denzin (1994) argues that the choice of a conceptual framework, research questions, samples and of instrumentation involve participatory data reduction which is considered as an essential element of data analysis. The choices made in the study of Konkola Copper Mine had a focusing and bounding function, ruling out certain variables,

relationships, and associated data, as well as selecting others for attention. These measures already required creative, analytical work. At the start of the study, a “loose” more inductive oriented design was selected because the area (socio-economic impact) was unfamiliar and excessively complex, area case in authentic settings was involved, and the intent of the research was exploratory and descriptive, particularly at the beginning of the study. Getting gradually towards (inductively) a description and explanation of the pattern or relationships between the conceptual elements of the development process was the intermediate goal of the research.

Patton (1990) argues that under these circumstances, in the first place, Konkola Copper Mine acted as a descriptive research during the period under review. Both permanent staff, union official and temporary contract workers acted as change agents, who had naturally followed all developmental activities since inception. People in the research period were directly involved in gathering data. (Eklund et al. 1995. After a week the researcher was not involved in conducting interviews anymore. The study consisted of the combination of the review of documents (Patton 1991). The idea was to observe Chingola Community in which data was collected as in time series.

Sometimes “the historical record keeping” does not incorporate the data required, and changing the system, perhaps by expanding could disrupt the programme. Hence the data was obtained by conducting special questionnaires including a wide range of open-ended non-structured questions. Participant questionnaires were made to collect information about the participants’ perceptions about the operations of KCM and about benefits in general, experiences and opinions about the community programmes and about the ways of action in the theme groups during the study. In addition to questionnaires, both FGDs and Theme interviews of the key persons of both KCM and community were made, using an independent recorder.

3.3.1 Approaches and Instruments for Empirical Material Collection

This section presents a set of specific methods that were used to collect data. It highlights procedures and processes the researcher went through to gather the data for the study area. It is a blue print of the whole process of data collection and analysis.

A mixture of random and purposeful selection was adopted to collect data. The process adopted a random approach for household survey in which 13 households were identified per compound in the four selected compounds. In total, the research collected 52 household interview cases. Of these 20 were women and the rest were men. The households were sufficiently representative of the other community members because respondents were carefully selected. Both sub-contract and ordinary citizens were captured. Chiwempala compound houses the busiest and biggest market drawing people from across the town, including peri-urban areas.

The main purpose of conducting a household survey was to generate information for qualitative and quantitative data. The data was necessary to establish the extent to which mining as a male dominated activity has affected women's livelihoods. In particular, the method sought to find out how women particularly those who were not employed or married to miners were coping with their daily lives in the community. Furthermore, the data was also important in assessing the level of expectations from a cross section of residents. While expectations from men would be more important than women given that mining is a male dominated occupation, data on men was necessary in determining employable age groups and ascertain the level of anxiety among the job seeking ages in the community. Although the data generated was not directly related to the research questions, it helped to put the researcher into a clear perspective. Household interviews were conducted in Kabundi East, a traditionally mine compound. Information on gender and livelihood was generated using household survey too. It also produced the information on relationship between KCM, the community as well as different economic

activities conducted by household members. Information on direct and sub-contract workers was also generated using household survey.

Despite the survey, key informant interviews were applied in conjunction with the contact person. Semi structured interviews aimed at involving key informants that included the mine officials, Mine workers, union officials and other key service providers in the area were used. Others interviewed included teachers, nurses and businessmen. Information generated from these sources included the community programmes and relationship between different actors. Other information included the gains and cost of KCM in mining activities, relationship and collaborations.

.

The study also involved the collection of secondary and primary data. Secondary data was obtained through literature review of relevant official documents, publications, reports and various articles, while primary data was collected through the use of Focus Group Discussion (FGD) methods. These FGD methods included semi-structured interviews, and ranking exercises. Both men and women attended the FGDs, although discussions were conducted in women and men only groups. The categorization of the groups on the basis of gender was necessary to allow for both sexes freedom to freely contribute to the discussions. A total of 60 community people (i.e. 40 males and 20 females) participated in 4 FGDs. Table 3 gives the breakdown of the FGD participants.

Table 3 of Breakdown of the Focus Group participants by area and by gender

Community	Total number of people present	Women	Men
Chiwempala	15	6	9
Kasompe	15	5	10
Ipafu	15	4	11
Kabundi East	15	5	10
Total	60	20	40

Source: Field Survey Data, 2007

Through the FGD data collection methods, narrative information was obtained from both men and women in the sampled communities. Ranking exercises were used mainly to gain insights into community prioritised constraints with regard to the issue being investigated as well ascertaining the importance of particular revelations. The study purposefully targeted more men in order to collect more information on men's experiences with respect to both community and working conditions of service.

The study approach for the socio-economic research was participatory, seeking to involve all stakeholders, community and service providers in the community. Different tools were used that included checklists for the review of key documents, and analysis of statistics, which were important for quantitative data. Question guides were developed for both focus group guides and key informant interviews which were useful for qualitative data. Participatory methods were employed to ensure that different interests at the grassroots level were included. A household questionnaire and review of key documents were approaches used to generate quantitative data. For qualitative data, the researcher used focus group discussions, key informant interviews and participatory observation. Cross-sectional walks and observation was conducted in Chiwempala compound and a visit to the waste dumping sites helped to inform the researcher on environment problems.

However, it must be noted that Chiwempala, and Kabundi East are separate compounds housing Miners and non-miners only within Chingola town. Ipafu is a settlement area found on the outskirts of Chingola town. Kasompe too is a compound within Chingola town where individuals both of whom are in employment and not in employment reside. is a residential area within Chingola townships. It is not a different town.

Three weeks before I arrived in Chingola I had communicated with a contact person informing him of my visit in the town. While in there the contact person my introduced me to several key people in preparation for data collection. Union officials encouraged a few miners to cooperate with me and answer questions I would ask. During my data collection the contact person assisted in organising and arranging venues for meetings. The contact person accompanied me to a few household surveys that I conducted. The contact knew who was a direct KCM employee and who a sub-contractor's worker was.

Denzin (1994) argues that the choice of a conceptual framework, research questions, samples and of instrumentation involve participatory data reduction which is considered as an essential element of data analysis. The choices made in the study of Konkola Copper Mine had a focusing and bounding function ruling out certain variables, relationships, associated data, as well as selecting others for attention. These measures already required creative analytical work.

Patton (1990) argues that under these circumstances Konkola Copper Mine acted as a descriptive research during the period under review. Both permanent staff, union official and temporary contract workers acted as change agents who had naturally followed all developmental activities since inception. After a week the researcher was not involved in conducting interviews anymore. The study consisted of the combination of the "historical record keeping" the "periodic inventory" and the "experimental" approaches (Patton 1991). The idea was to observe Chingola Community in which data was collected.

Sometimes "the historical record keeping" does not incorporate the data required, and changing the system. Hence the data was obtained by conducting special questionnaires

including a wide range of open-ended non-structured questions. Participant questionnaires were made to collect information about the participants' perceptions about the operations of KCM and about benefits in general, experiences and opinions about the community programmes and about the ways of action.

The data gathered for this research consists of two sets which includes theoretical and empirical data. Theoretical data originated from my literature and aimed at three goals. These were to give the reader a background to the main theories on the subject analysed and introduce the historical background of the mining industry, elements and dynamics of activities in Chingola and answer the research questions. The literature review was based on articles published by the Zambian print media and civil society movements. I constantly referred to a reference list of journals, articles and books. Online versions of journals were also searched to access further articles on the subject.

Data analysis

The analysis of the impact of KCM in Chingola was conducted using content analysis Miles and Huberman (1994). The categories used in the analysis of this study were raised from the data of the semi – structured questions of the qualitative approach. The content analysis was not limited to calculate singular words, but the context was taken into consideration too. In order to interpret and understand the sentences, whole sentences were taken for analysis. Swan (1994) argues that a word could only be understood if it is used in connection with the context the semantic environment in which it is expressed. This is why the analysis method used here could also be described as content analysis.

Content Analysis through deduction

To analyze data is basically to make sense, to interpret and to understand what the entire field notes, the interview and group discussion reports mean. The interview data in this study was analysed deductively using the literature based operationalisation of the main concepts. For the analysis of the Interviews, an operationalise conception about corporate

social responsibility, empowerment, participation and community development was developed based on the literature. Indicators of socio-economic impact such as participation and empowerment were elaborated. This part of analysis could be labeled as deductive.

Data obtained from FGDs and key informants interview was qualitatively analysed and incorporated in the narratives contained in this report. The analysis of the quantitative information was done using SPSS (statistical programmes) while qualitative data was analysed by categorisation and coding against the set parameters of the research objectives. The data analysis focused on one main framework of corporate social responsibility. Quantitative data generated using household survey were represented in tables whereas a descriptive approach and direct quotes were used to discuss qualitative data

3.3.2 Triangulation and confirming Findings

Triangulation is a technical term used in surveying and navigation to describe a situation whereby two known or visible points are used to plot the location of a third point (Knafl and Breitmayer 1989). It was first used in the 1950s in Social Sciences to measure a single construct. Garner (1954) and Campbell (1956) noticed triangulation as a tool to confirm and validate the results of a study. Fielding and Fielding (1986) argue that the important feature of triangulation is not the simple combination of different kinds of data, but the attempt to relate them so as to counteract the threats to validity identified in each.

As part of crosschecking the information of previous sources, three focus group discussions (FGD) each with four people were conducted to generate perceptions from community members, miners and service providers on socio-economic gains and cost attributable to KCM. This was done to triangulate information from other sources and get more qualitative information. FGD were instrumental in putting views on how best actors can harness community development in the area. Visits to the mining community settlement, social services and other areas found in the community were conducted.

3.3.3 Limitation, Validity, Reliability and Ethical Issues

Study Limitations

In this study, the major limitations were in the general lack of access to reliable data on the community's access to education and health. Similarly there were no records in Government and most scheme offices to show gender disaggregation. Further, the study focused on socio-economic impact in Chingola town only rather than communities in peri-urban areas too. As the study was focused on urban community, all the household questionnaires were administered to residents in urban areas only. Men were included and were the majority (30) among the key informants. In addition, the period allocated to the field work, the administration of financial resources including the complexity associated to the issue of HIV/AIDS pandemic, made it very difficult to fully investigate the impacts of the MNC on employees with HIV/AIDS.

Reliability and Validity

Stevenson (1996) argues that the concept of reliability is placed under the concept of validity which means that if the validity is considered to be good then the reliability is equally good. However, if the reliability is good, the validity is not necessarily good. High reliability means to satisfy the requirement of objectivity within the quantitative research tradition. Measures and procedures must be reliable. This means a repeated measure with the same instrument on a given sample of data should yield similar results.

This study used one coder. The reliability of the study was improved by literature review and reading the data several times before the final coding. Category and reliability depend on the analyst's ability to formulate categories for which the empirical evidence is clear enough. This means that when the whole data was coded in full, the researcher re-examined the entire data and made corrections through reading the literature. If necessary, the researcher returned to the theories and definitions of socio-economic

impact and other concepts. Also the operationalisation of empowerment was used as an instrument of interpretation to determine whether the sentence, word or phrase belonged to a code or category. It must be noted that the categories were in certain parts overlapping so that the unit of analysis could be categorized in some cases under more than one category. In his speculations on reliability Stevenson (1996) concludes that reliability should be considered as encompassing a meaning which approaches the meaning of validity. The reliability of a qualitative study cannot be judged without considering the validity of the study at the same time. Validity is usually defined as the extent to which an instrument is measuring what it is intended to measure (Starrin 1994).

In this study therefore results were based on the empirical data of written reports and newspaper articles. The trustworthiness of the data was improved through the interviews with the participants. The interviewed persons were selected on the basis of them being representative groups. In addition the validity was improved through the use of annual reports, newspapers. They were read through without necessarily coding them. The interview of the residents was used to confirm the findings. The negative opinions of those interviewed were also analysed and used as one factor in validating the results.

Ethical Issues

In order to promote confidentiality, names of interviewees were not used in this study. Participants were informed in advance that disclosure of their identities was not allowed and therefore, they freely participated in the different activities of the study.

This chapter has shown that both interpretivists and constructivists emphasize on the world of experience as it is lived, experienced and undergone by social actors as a basis of positioning any research situation. They are committed to the view that what we take to be objective knowledge and truth is the result of perspective. Knowledge and truth are created not discovered by human mind. Constructivists emphasize the instrumental and practical function of theory construction and knowing. This chapter has demonstrated

how data was collected in the field. The main research approach was participatory. This was to allow payers to participate in the research process.

CHAPTER 4: SELECTION OF THE STUDY AREA

4.1 Chingola Town and Region

This chapter presents an account of the approach which was used to collect data. The chapter begins with the identification of the site in order to situate the study into perspective. It ends with the various methods that were used to collect data.

The study was carried out in Chingola town. It was assumed that the town could have experienced more socio-economic problems that threaten the livelihoods of the community than any other mining towns in Zambia. The town also hosts Zambia’s largest MNC in the mining sector. While in Chingola, four compounds each with two communities (one being mine area and another one being none mine area) were sampled. Considerations were made to include in a sample both men and women. A total of four communities were visited in the course of field work. The four study sites within Chingola community were Chiwempala, Kabundi East, and Kasompe and Ipafu settlement scheme. In consultation with the contact person, a purposive selection of participating communities was done. Table 2 provides a summary of each of the selected study community.

Table 2; Studied communities and respondents

Compound	Type of settlement	Number of respondents in sampled communities
Chiwempala	Municipality	5
Kabundi East	Mine	17
Ipafu	Settlement	17
Kasompe	Municipality	17
Total		56

Source: Field survey data, 2007

Table 2 illustrates the type of compounds and communities of respondents that were interviewed. Significant observations were that in each compound two communities (mine and non mine) were surveyed apart from Ipafu which had no miners at all. The purpose was to identify the differences both in livelihood and general social developments taking place in these places.

Population Distribution

Chingola has a total area of 167,800 hectares with a population of approximately 181,881 (Census, 2000), and a growth rate of 0.5% per annum projected from the 2000 census report. Of the total population, 49.89% are females, while 51.11% are males. In comparison to other towns on the Copperbelt, Chingola ranks 3rd in terms of population after Ndola, and Kitwe with approximately 393,793 and 388,648 people respectively. Currently, the district is experiencing immigration of skilled labour especially from the mines to Solwezi district where a new mining company has opened a mine. The Peri-Urban rural parts of Chingola are sparsely populated and dominated by farmers while the urban parts are densely populated. A number of settlements exist in the district and notable among them are Mutenda Rural Reconstruction, Muchinshi, Ipafu, Kalilo and Munsenga

Boundaries

Chingola town is located in the Copperbelt Province of Zambia. The District lies approximately 450 kilometres North- West of Lusaka, the capital city of Zambia and 51 kilometres West of Kitwe. It is on the boarder with Chililabombwe in the North, Lufwayama in the South-West, Mufulira in the East, Kalulushi in the South East and Solwezi in the North- West. It lies on the latitude of 12 degrees 30 minutes south and longitude 27 degrees 50 minutes east and is generally at an elevation of 1300 metres above sea level. Chingola, like any other local town enjoys two districts seasons, namely the wet and dry season. The dry season runs from May to October and the wet season

runs from November to April. The District lies in the Region 3 of the agro-ecological zone and has an average rainfall range between 1000 mm to 1200mm and temperatures range from 10 degrees Celsius to 37 degrees centigrade depending on the time of the year.

Map Showing Chingola



Source: Zambian atlas

Chingola district can be divided into three different parts. Area one is the eastern part of North West of Chingola with a lot of hilly and steep slopes along Kafue River. The soils in this part of Chingola are sandy, particularly in Luano and sandy loam soils in Muntipa. This area accommodates the copper mines and open pit mines. Area two covers the south to west and is relatively flat and covers the commercial farming and ranching schemes. The soils are good varying from deep red clays to heavy dambo clays. These lands drop into the Mutenda Swamps bordering the Lamba headwaters. The grass cover is relatively sparse in virgin bushes. Dambo areas have thick grass cover providing valuable grazing material during the dry season. The last area covers artificial mining dams, which have

transformed the originally flat land into hilly land scopes. This lies in the northeasterly and north-westerly of the town.

The Local Government

Chingola is administered by two systems. And these are the Central government and Local Authority (Council). There are no Chiefs in the District. Administratively, local government structures starts from ward level. The availability of enough revenues enables the smooth running of development activities and provision of quality of social services to its constituencies. It is the overseer of all development activities, controls and maintains the environment for sustainable development. Usually each ward has a representative who sits in the full council meeting, which is the topic decision making organ, where community interests are represented. Technical staff in various departments represents the council on a range of matters including natural resources, tax and revenue. Two sets of policies govern the local government, the national and locally adopted policies. In cases where the local-by-laws are in conflict with national level policies the latter superseded.

This system includes all government departments and is headed by the District Commissioner. Under this system a Technical committee called the District Development coordinating committee (DDCC) chaired by the District Commissioner comprises all heads of government departments, Council, NGOs, Churches and the Private sector, which should have included Konkola Copper Mines. The DDCC has eighty sub-committees. These are the Planning, Environmental, Agriculture, District Aids Task Force (DATF), While KCM has not been a member of the District Aids Task Force, it has been actively involved in implementing some activities of DATF on HIV/AIDS. Other committees include Finance, Gender, D-Washe, Infrastructure and Technical Committees. It is also in the process of constituting a District Disaster Management Sub-committee (Chingola District Development Plan, 2006 – 2010). The main aim of the Technical committee is to coordinate the development activities in the district, which should help improve the basic social services to the communities.

Social services and social institutions

Chingola has mixed indication on access to social services. Mining activities and the presence of different actors contribute to availability and access to essential services and opening up of important public and private institutions. Such services include the health care centres, schools, roads and water, improved housing and recreational centres. The type of social institutions currently found in Chingola can be attributed to mining activities because under normal circumstances it is only the regional towns which have access to such institutions

Konkola Copper Mine (KCM)

In this study Konkola Copper Mine was chosen as a case study because it is one of Zambia's largest copper mine. It is almost totally owned by foreign companies. It is the largest producer of copper and cobalt in the country and accounts for 80 percent of Zambia's exports. According to 2007 Vedanta Annual Report (Undermining Development, October 2007), Konkola Copper Mine's parent company Vedanta's revenue in financial year 2006/07 was US\$6.5 billion which almost matched Zambia's entire gross national income of US\$7.4 billion in 2006. The company accounts for one-sixth of Zambia's GDP and one-third of total exports. The company's ownership was and continues to be dominated by UK companies initially Anglo American (whose subsidiary owned 65 per cent of shares from 2000-2002 and subsequently Vedanta Resources, which became the main shareholder in 2004.

Vedanta currently owns 51 per cent of shares and was in negotiation with the other private shareholder a Bermuda-based company called Zambia Copper Investments to increase its ownership to 79 per cent (ibid). Zambia Consolidated Copper Mines Investment Holdings (ZCCM-IH) holds the remainder of shares. According to the Post (Sunday Post 19, 2006) KCM is a subsidiary of Vedanta Resources Plc, a London listed

metals and mining company with annual sales of over US dollars 1.9 billion. Headquartered in UK its principal operations are located in India with a major market share in each of the main metals such as aluminum, copper, Zinc and lead. Its operations in Zambia are substantial. Subsidiary companies owned by Vedanta Resources include Bharat Aluminum Company, Konkola Copper Mines, Sterite Industries, and Madras Aluminum Company. The founder of Sterite Industries and Vedanta Resources is an Indian national.

Vedanta is a vertically integrated company with impressive international portfolio comprising copper, bauxite (aluminum) zinc, lead and gold. It has raised billions of dollars on the London Stock Exchange. The company also plans to start a massive captive mine in the Niyamagiri hills of Orissa. The affected human population includes impoverished tribal communities, some of whom charge that Vedanta's projects are illegal, and that the state and central governments are colluding with the environmental protections.

However, Vedanta states that it aims at reducing the impact of its activities on the environment wherever possible. According to Vedanta, the group is committed to managing its business in a socially responsible manner. The management of the environmental, employee, health and safety and community issues in respect of our operations is central to the success of our business. The company aims at reducing the impact of its activities on the environment wherever feasible. "The majority of the sites are certified to the international environmental management's systems standard ISO 14001. This includes the requirements that the environmental impacts are identified and that there are ongoing programmes for improvement across key impact areas' Sunday Post, (November 19, 2006).

As for KCM, it states that it is undertaking several projects such as recycling of water intake, increasing sulphur dioxide capture target to 75 per cent, reducing total suspended solids levels in mine water and effluent. Sunday Post, (November 19, 2006) reported that Chingola, once Zambia's cleanest town is no longer clean. It has increasing number of unemployed people and occasional environmental pollutions due to KCM operations.

4.2 Socio-economic Characteristics

This section summarizes evidence from various sources that the Chingola community is not receiving a fair share of revenue from copper mining contracts entered into under pressure from the International Monetary Fund (IMF) and World Bank. It highlights the experiences of employees working for Zambia's largest copper mining company – Konkola Copper Mines (KCM) – in particular those employed through contract firms. Many contract workers told us that, while they are grateful for the employment opportunities created by the mining companies, they have to endure poor wages, terms and conditions. Furthermore, the chapter highlights concerns that members of local communities have about the environmental impact of KCM operations, and how this is affecting them. In short, this section argues that Chingola society is deriving few of the advantages of copper mining while suffering many of the disadvantages. The chapter presents empirical findings of the study. It highlights the evidence on the ground. It shows the answer to the research questions in the study. The empirical findings are instruments of confirmation of the theoretical and concepts in the study. The chapter portrays respondents' responses and views on the presence and operation of KCM. The chapter begins with household information, followed by economic and general findings about the study area. In the context of the whole study, the chapter presents a linkage between the research questions, objectives, theoretical and conceptual frameworks and the effect of the methodological approach in the entire study

Household details

What follows in this section are household survey results. The Survey was conducted in order to obtain quantitative data. This data was important in determining the approximate make up of the local populations. This was necessary in assessing the level of expectations from the community both on direct employment as well as other job economic activities. The household survey was aimed at getting a snapshot picture on the composition of the population in terms of productive and unproductive age groups.

Although the survey data did not have a direct linkage to the set questions, it helped in validating the notion that many people in the area felt that they were not benefiting from the MNC. Specifically, it was aimed at establishing the socio-economic impact of having KCM in Chingola community particularly among single women. Single headed households were targeted in order to rule out direct effects on account of husbands working for the company.

The targeted population was about 45 households. Although the sample was not statistically representative, generalizations can be drawn from this study. This was so because the household survey of FGDs that were employed is valid and has led to the generalizations of both quantitative and qualitative data. The qualitative data generally brings to the fore narratives from the grassroots people in the town. The reason why the emphasis was on women was that, mining being a male dominated career, obviously more women were the ones feeling the pain of not benefiting from the company. The targeted population was not statistically representative because comparing 45 to a population of about 100, 000 people, the sampled number was obviously insignificant. However, this data could lead to further investigations on the population make and the development of interventions necessary to provide livelihood activities to women. The target populations' age and gender was extremely important in identifying opportunities which are available to different age groups as well as different sexes.

Findings in the study revealed that the majority of the respondents in this area were in the productive group. However, due to lack of linkages to various productive activities, the majority of the residents, especially women were not directly benefitting from the operations of the MNC.

The ages of respondents that were interviewed ranged from less than 24 years to 55 years and above. Of these, 26.3% were in the age group of between 25 to 34 years, 21.1% in the age group of between 35 to 44 years, 20.2% were of between 45-55 years age group while another 20.4% constituted the 55 years and above age group. Only 7.3% constituted the less than 24 year olds. This implies that over 66% of all the respondents that were interviewed are aged 25 to 54 years and are therefore still young, productive,

employable and being residents in mining community areas means they would require employment or other economic activities. Lack of access to employment to this group of people exerts increased demand on family income.

4.3 Livelihood Strategies

Main Economic Activities

Mining constitutes a main economic activity for 41.2% of the respondents (refer to table 5) and was also indicated to by 41.2% respondents as a main source of income (table 5 refers) Chingola is the largest copper and cobalt producing town and produces over 60 per cent of Zambia's copper. Mines provide the stimulus for growth of satellite industries thereby creating more employment for the residents of the district.

Table 4 Respondents Main Sources of Income

Activity	Frequency	Per cent
Mining	7	41.2
Selling fish	2	11.8
Not stated employment	1	5.8
Farming	2	11.8
Gardening	3	17.6
Rearing and trading livestock	0	0.0
Renting out houses	2	11.8
Trade in groceries	0	0.0
Total	17	100

Source: **Field Data from Chingola community 2007**

Apart from Mining activities, other sources of income indicated were trade (4.8%), not stated, employment (5.8%), farming (11.8%) and selling of fish (11.8%). These sources also included renting houses (11.8%). Less than 5% other respondents derive their incomes from trading in grocery goods as shown in Table 5. Although 24.1% of the

respondents indicated there being no other secondary economic activities, trade in retailing of products such as second hand clothing non food items is on the increase. On the whole, the magnitude of these secondary economic activities is small and contribute very little to community people's livelihoods and thus, to the reduction of poverty. Thus implying that farming and trade are the most important economic activities for rural women and therefore, women need continued access, ownership and control of productive assets.

Residents of Chingola town who are not direct employees of the mine depend on various activities to generate income and support livelihood of the population. They have no single traditional livelihood because this area consists of people coming from different parts of the country with different survival strategies ranging from trade and farming (Chingola District Development Plan, 2006). Following the privatization of the mines, most former and indeed current mine employees practice farming. This is necessary for their survival since their income is considered insufficient. Multinational corporations through direct employees normally conduct mining activities. Most of the other residents of Chingola depend on trading of agricultural products, fishing and farming. To the rest of the population farming constitutes sustainable livelihood and security providing social, financial and natural capital for non - employees.

The second form of livelihood and economy is farming activities, which is vulnerable to climatic changes and fertility depletion due to over use and presence of fine dust particles from the mining activities which force some farmers to migrate to far-flung places. Most of the crops produced are for consumption, and only sell the surplus. Individuals involved in farming sell their products to either miners or local employees of sub- contracted companies. The mining community depends on local food suppliers who reside within the mining community. These include stationeries chemist shops, restaurants markets and other businesses usually sold at hiked prices.

Table 5: Occupations of Respondents

Occupation	Frequency	Per cent
Mining	7	41.2
Gardening	1	5.9
Weaving	0	0.0
Petty Trade	5	29.4
Formal employment	3	17.6
Student	1	5.9
Not stated	0	5.9
Total	17	100

Source: **Field Data, 2007**

Other occupations as shown in Table 6 above are formal employment (17.6%), mat weaving (0.0%), gardening (5.9%), petty trading (29.4%) and being students (5.9%). Although, there is no direct correlation between the various occupations of respondents with employment in the mines, the finding implies that mining constitutes a main vibrant sector dominated by residents. Therefore, it is necessary that more mining related jobs are made available to residents. The other occupational sectors in comparison to the mining sector are also considered to be important economic activities and bases for sustained livelihoods

4.4 Land and Land use

According to the Development Plan, Chingola district (Chingola District Development Plan 20006 – 20109), covers an area of 167 hectares. The tenure of land can be classified under the following categories: Land reserved for state use (forestry reserves) total – 21,023Ha, Luano ZAFFICO Plantation – 1,900ha. State lands (open areas) controlled by Municipal Council includes farming areas, commercial and residential - 109, 377ha.

Of the 109,377ha, 6, 925 ha is under cultivation mainly by small -scale farmers, therefore leaving 102,452 hectares of land available for various land uses.

The district is well placed for growth in Industry, agriculture, Tourism, Mining and Manufacturing. The proximity to the Congo Democratic Republic provides ready market for exports. The release of substantial levels of metal rich suspended solids over a period of time has resulted in severe siltation and loss of aquatic habitat in sections of the river as well as significant economic loss for the farming community (ibid). Pollution control facilities (settling ponds) are historically non-existent or under designed for the task of retaining heavy metals as solids on the mines properties and to control pH, sulphates and metal levels in discharged water

4.5 Household Assets

The main household assets owned by respondents are radios, fridges, stoves TVs, hoes, ploughs, cultivators and harrows. An average number of 5 hoes are owned by married and separated women, 4 hoes by the single, widowed, and divorced women. Except for the 2 ploughs and 2 cultivators owned by widowed and divorced women, respectively, the other categories of respondents are shown to have at least a TV each.

While women indicated owning some farm implements, discussions and interviews with key informants in particular revealed that respondents own very little in terms of household assets (i.e. agricultural implements and livestock). Majority female-headed households own more of the small ruminants such as chickens, goats and pigs, which mainly contribute to household food security.

Respondents indicated using hoes for cultivation. The limited land size cultivated implies that women's agricultural productivity is seriously compromised; yielding low marketable outputs and this generally affects their livelihoods. This finding is in agreement with the 1998 Living Conditions Monitoring Survey that observed that, persons in female-headed households were more likely to be extremely poor than those in

male- headed households. Similar sentiments have also been advanced by the World Bank who explained that “rural households with female- heads are more likely to be poor and have inadequate access to land” (ZARD, 1996, p27).

Furthermore, it was observed that food poverty tends to be more prevalent among female headed-households and stood at 61% compared to male-headed household in which it stood at 52% (CSO, 2003 b, p3). By implication, all the above –mentioned observations suggest that residents are among the most impoverished people in the communities. The use of hoes by farmers translates into such respondents being dependent on the use of rudimentary agricultural implements, which limit the size of land that they can possibly cultivate. This means that these farmers are engaged more in subsistence production rather than production for the market. In this regard, one elderly woman respondent in the community said ‘as we are getting old, it is really hard to be cultivating our fields by hand. We need assistance from government to provide farm implements and establish farm mechanization centers from where tractors can be hired’.

CHAPTER 5: KONKOLA COPPER MINE AND COMMUNITY DEVELOPMENT

This section presents a number of development programmes KCM has been implementing in Chingola for sometime now. Notable among them are education, health and business opportunities. The underlying concept in this study is corporate social responsibility. The Corporate Social Responsibility is a concept which argues that companies operating in certain localities should contribute to community development. Furthermore, the concept seeks to encourage local and MNCs to be community friendly by offering services which agrees with community values and beliefs.

5.1 KCM Investment

On investment, the study findings revealed that while the mining industry has been busy investing in the mining sector, little effort is being made to invest in other sectors. Other investment areas have remained low. For example, apart from the booming housing constructions and trade sector, not much is going on in other sectors like agriculture, tourism, smelting and manufacturing sector. As a result the town has continued to experience reduced employment levels. Findings also showed that the booming construction industry in the housing sector is not attributable to the mining industry. To the contrary, it is due to increased trading sector.

Employment

Regarding employment, KCM is the second largest employer in Zambia after the government. It has approximately (Undermining Development, 2007) 14,000 employees, with 10,000 directly and 4,000 employees employed through sub-contracted firms. However, according to one interviewee, it was suggested that there are as many as 9,575 contract workers. Therefore, KCM is the key employer in Chingola employing about 75% (ibid) of the total workforce in the district and providing a much-needed source of

family income in an area where most women are in informal employment mostly in the trading sector some of which are seasonal. Mine officials mentioned that although the actual total number of employees is not known, KCM has an estimated figure of 16 thousand employees.

Contract Workers and their Conditions of Work

While the company boasts of employing more workers in the country than any other company, not all employees fall under its jurisdiction because other employees are contract employees. The distinction between direct Konkola Copper Mine employees and contract labour is an important one with the later appearing to fair considerably worse than the former. Conditions of service for contract workers are generally poor compared to those of direct KCM employees. For example, some contract workers are sent to work in dangerous places without adequate protective equipment. From safety point of view this is very unfair given the fact that these employees are not well protected. The study showed that although people were happy to have a chance to work this should not be at the expense of safety standards. KCM websites indicate that the company is a member of the British Safety Council (BSC) which is audited by the British Standards Institute and BSC, and OHSAS 18001 Certificate was due to start in 2005. Unfortunately it has not been very strict with safety particularly for the contract workers. The company also emphasis's workers' empowerment and its motto is 'if it is not safe, do not do it'.
www.kcm.co.zm/sheq.php

Although KCM is making huge profits and some benefits have started showing up, only few people are benefiting from its operations. So far the benefits have not yet filtered to a many ordinary Zambians particularly women. For example, most roads in Chingola are still in bad conditions. During ZCCM time the mining conglomerate maintained the infrastructure in the township. It operated as a parallel administration in providing all tasks of municipal services. It also ran schools, hospitals, clinics and other social amenities in mining communities. ZCCM was considered as a “big brother” who provided for most social requirements.

With privatization of ZCCM assets, social services, which were extended to the local communities by ZCCM, have been substantially cut back. Although the company runs one school and two hospitals, not all residents have access to both hospitals. For example ordinary community members are only free to receive medication from Nchanga North hospital. However, Nchanga South is exclusively for miners with non mining community being requested to pay for the services if they decided to go to Nchanga South Hospital. However, the company is still appreciated when it comes to the provision of education and health. Residents interviewed observed that the quality of education being offered by the MNC is extremely high. However, they complained that the school does not have enough capacity to take on almost all the children in the township. Secondary, the fees charged to outsiders are still beyond the reach of an ordinary resident.

The study findings showed that although KCM has continued to strive to contribute to community development, it has shed off a substantial amount of responsibilities that the previous owners, ZCCM implemented.

Investing in the Workforce

In line with its empowerment policy through skills development, KCM Corporate and Social Responsibility literature notes that “Konkola Deep Mining Project was expected to provide 6,000 jobs when complete, with an additional 1,000 needed immediately for shaft sinking.” Furthermore, KCM undertook a countrywide recruitment of 600 school leavers, 300 artisans and 100 professionals for skills development and capacity building. KCM Management also reported that the company was training 40 -50 more ‘young business leaders who they are fast tracking on the management training scheme, and is the only company that has taken Zambians out of the country to work on international programmes to gain international experience (Undermining development, Copper Mining in Zambia 2007). KCM also undertook to strengthen capacities of local communities through local business development. In 2007 alone, the company awarded 70 per cent of service and commodity contracts to local suppliers (ibid).

However, it was not possible to verify these facts during interviews because of lack of data, and failure by people responsible for data keeping to avail them. The impression created by a few interviewees showed that residents were generally happy with the company's investment in the workforce. One clear message was that the company meant well, and was determined to empower the local residents with survival skills.

5.2 Local Business Linkages

In line with the policy of empowerment through job creation and community participation, KCM procures some goods and services from some reputable local companies. Both local and foreign suppliers of goods and services compete for tenders and successful local companies are given tenders to supply goods or services. However, study findings found complaints against competing with foreign firms. It was reported that most local suppliers of goods and services were disadvantaged by foreign suppliers when it came to quality and meeting international specifications. As a result, most jobs were shipped to foreign countries at the expense of local ones. What is not known is the ratio between local and foreign suppliers of such services.

Lack of linkages to local business

Investigations with local people in Chingola revealed that expected benefits from KCM have not materialized because the linkages made by KCM do not favor local businesses. Instead they are offered to the suppliers, manufacturers and markets outside Zambia. Many local suppliers have lost Frasier and Lungu (2007) the business they used to conduct with ZCCM. They are unable to compete on quality and price with foreign suppliers. Although the Zambian Government frequently raises this issue, it seems either unwilling or unable to enforce on the mining companies a system of constraints and incentives that would make up not just a mining policy, or an investment policy, but an industrial policy designed to support local suppliers and to build a local manufacturing base processing copper in Zambia.

At present most *Zambian copper ore* is concentrated and smelted in Zambia. However, an industrial policy for the country Frasier and Lungu (2007) should aim at attracting and supporting not just smelting but manufacturing of copper-based electrical products too. Zambia has a comparative advantage over other countries for such operations due to the presence of the mines. The failure to develop an industrial policy is partly explained by the fact that the country is tied into a number of regional and global free trade deals that prevent Zambia from using tariffs and quotas to manage the flows of goods, services and capital across the country's borders. It is partly explained by the country's dependence on aid and debt relief which has enabled the World Bank and IMF to establish strict control over Zambia's economic policies. It is also partly explained by the Development Agreements that commit the Government to allow companies to move goods in and out of the country with minimal controls and payments of duty

5.3 Financial Agreements

During the study, it was reported that Vedanta the parent company running KCM's annual report does not detail the amount of net profit (Undermining Development, 2007) that KCM has been making in various financial years including how much it has been paid to the *Zambian government* in various forms of revenue transfer. This made it difficult for the *Zambian government* to inform the nation of various contributions the company made. It is also difficult to argue with certainty whether the company is doing more or not through corporate responsibility. Although it is unclear how much the company makes and also contributes to the national coffers, it is necessary to note that the company is contributing to the national coffers which have been used to develop Chingola and other towns.

Royalties

The findings of the study revealed that although Zambia signed development agreements, there so many poorly agreed terms. Mineral royalties provide a case in point. For example, the common rang' for royalty rates in developing countries is 5-10 per cent with some royalties as high as 30 per cent (Undermining Development 2007). However,

Zambia's Mines and Minerals Act stipulates a royalty rate of just 3 per cent of the netback value of minerals produced. Many mining companies in Zambia including KCM under Anglo American's ownership negotiated for different rates other than the one specified in the Act. Ironically, KCM was paying just 0.6 per cent of the gross revenue of minerals produced. However (ibid) the Organization for the Economic Cooperation for Development (OECD) guidelines standards for company behavior signed up to by OECD member governments, expressly state that 'enterprises should refrain from seeking or accepting exemptions not contemplated in the regulatory framework related to taxation, financial incentives (ibid).

Interestingly, Vedanta which is a UK based company managed to renegotiate for royalties which were far below the EU stipulations. This goes to show that while the entire EU is trying to implement good policies, it is not possible to control the activities of these MNCs.

Corporate Tax

While KCM's corporate income tax rate is set at 25 per cent there were several exemptions and allowances the company made with the Zambian government. .Abi (2007), argues that while it is standard practice to allow losses to be carried over and offset against future profits, the net effect of this and other tax exemptions according to the World Bank's International Finance Corporation, is that mining companies in Zambia KCM included can legally enjoy a marginal effective tax rate of 0 per cent.

Although it is not possible to access documents both from the Zambian government and the Konkola Copper Mine, study findings showed that Zambia's royalty rate would translate into payments by KCM to the Zambian government of less than US\$6.1 million in financial year 2006/07 despite the company extracting ore that generated revenues in excess of US\$1 billion. It is not clear, however, that the mining companies have paid even these low rates of royalties. Another example of lack of benefits to the Zambian government is the rate of corporate income tax. While KCM's corporate income tax rate

is set at 25 per cent, there are several exemptions and allowances for example, an extended carry-over loss period, which can lead to the headline rate not being paid in practice

5.4 Education Programmes

As part of community contribution KCM owns and operates one school in Chingola called Chingola Trust School. The schools provides basic primary school education to over 1,000 (Undermining development, October 2007) children of both mine employees and non- mine employees. However, non-mine employees pay for school fees for their children and the prices are fairly high for an average Chingola resident.

5.5 Health Programmes

During the study, it was reported that KCM owns and operates 2 hospitals. These are Nchanga North and Nchanga South Hospitals and clinics in Chingola. The health facilities provide free health care to its employees and their dependants. However, health facilities are also accessible to non-employees on cost recovery basis (Undermining development, Copper mining in Zambia 2007). Residents talked to expressed appreciation to the company for continuing to run the two hospitals.

Malaria Rollback Programme

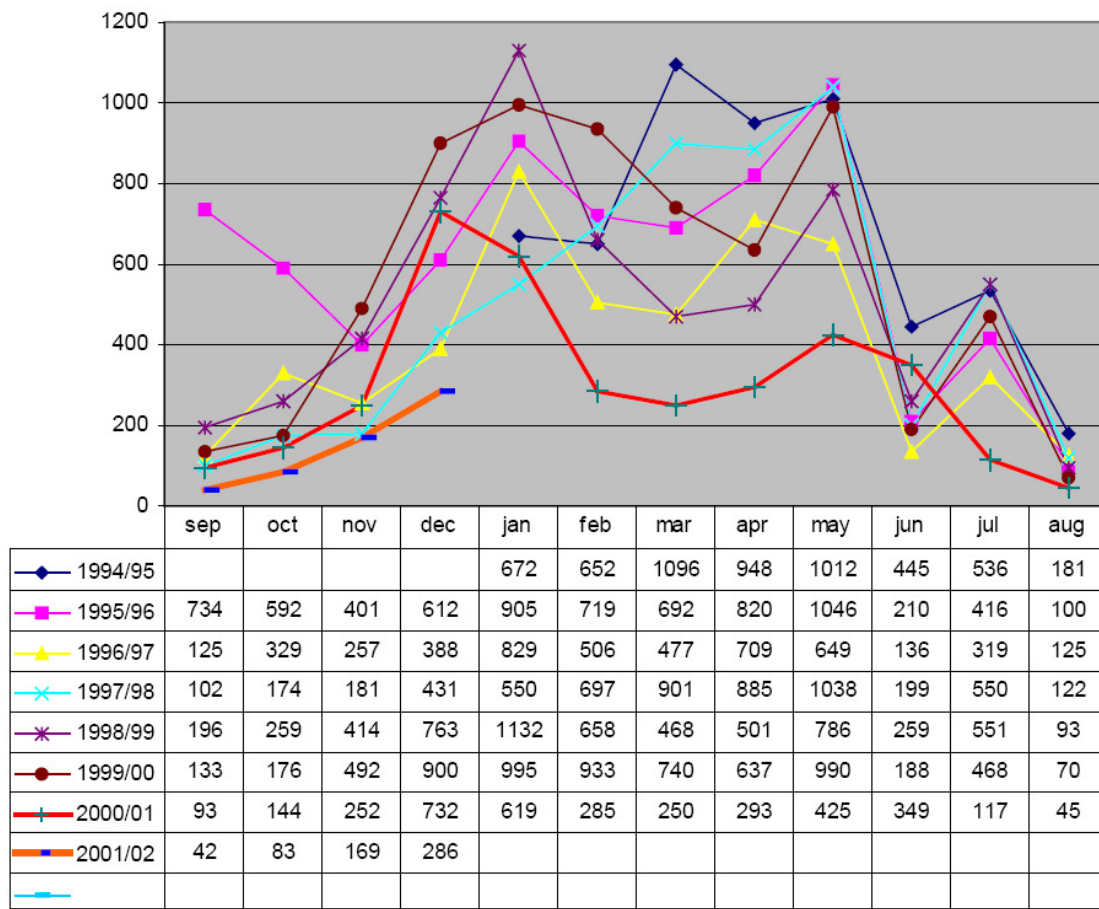
Malaria is endemic across Zambia and is the leading cause of death. The interview with residents showed that KCM has a Roll Back Malaria Control Programme that aims at reducing malaria incidences in Chingola (Undermining development, Copper mining in Zambia, and 2007). The Company funded spraying of more than 36 500 houses within a 10 kilometres radius of Chingola. As a result, incidence of reported malaria cases has reduced by over 60 per cent over the last four years. The programme has been a resounding success. The programme employs an inter-sectoral partnership model that involves the National Malaria Control Centre, Environmental Council of Zambia, District

Health Management Teams, and Local Authorities, World Health Organization, Tropical Diseases Research Centre and the community. An indoor residual spraying campaign carried out at the end of 2000 reduced the incidence rates to 33/1000 (hospital statistics) for chingola. The programme involves Residual spraying of houses, Larvicidal spraying, Dambo clearing and Insecticide treated bed nets.

Incidence trends

Following the residual spraying campaign in 2000, new malaria cases were diagnosed in KCM health centers. It was discovered that malaria cases were reduced in 2000 in Chingola by 52%, compared to the same period in 2000. Hospital admissions for malaria made up of 42% of all admissions in 2000, were reduced by 50% in 2001 these were the lowest malaria figures in ten years.

Malaria Cases Graph 2



Source; Nchanga Mines Hospital (2004)

There have been no reported deaths in Chingola due to malaria since 2002 up to the time of the above study. The KCM Roll Back Malaria Programme has been recommended as a model for malaria eradication in Zambia.

HIV/AIDS Programme

The study findings showed that KCM has an HIV/AIDS policy that protects the confidentiality of employees' HIV status, employees' rights to work and benefits despite their status and prohibits discrimination against HIV positive employees. The policy clearly states that no pre-employment HIV/AIDS screening will occur and that KCM Does not conduct compulsory testing. The Policy provides for education, voluntary testing and counseling of employees. Other benefits of HIV/AIDS Policy

include Voluntary Counseling and Testing , Condom distribution (about 120,000 per month, Tuberculosis control programme, Prevention of Mother to Child Transmission (PMTCT) of HIV and targeted health education.

5.6 Konkola Copper Mine and Local Authority Relationships

Interviews with the Local Authorities showed that the MNC was not doing enough to assist the Local Authorities run social services in the town. It was reported that the council was not deriving benefits from the company. The council argues that it has not seen the benefits of social responsibility of having a Mining MNC in its town. Then there are some houses that are on the fringes of the open pit mine, but are not safe. Some have high voltage cables passing dangerously overhead. One interviewee was very angry with the MNC. She observed that her house was supposed to be 100 meters away from high voltage cables and far way from the mines. She complained of constant disturbances due to constant blasting from the mines. Tenants bought houses under house ownership programme; unfortunately, the houses are dangerously closer to the mines. Most of the houses have developed huge cracks on the walls and on the floors because of constant blasting and people are not happy. These people are wondering where their government and KCM are. They feel Copper is a curse in their community.

The Local Authority has been waiting for KCM to come up with a resettlement plan for people with cracked house; unfortunately, the MNC is not interested in the issue. The Council official repeatedly mentioned that the people of Chingola were extremely unhappy with the operations of the MNC in their area. He warned, that a disaster is likely to happen should the communities not be resettled quickly.

5.7 Environmental Concerns

Study findings revealed that farmers living near KCM's Nchanga plant have 'suffered crop losses due to sediments and silt which is flooding farmers' fields so that farmers can no longer use, them. This has prevented farmers from growing basic food stuffs such as

cabbage, tomato and maize for their own consumption or for selling in local markets. According to the ministry, this has cost local farmers a total of K100, 300,000 (20, 120 euros) in lost income during 2005 alone' (Christian Aid 2007) what this means is that the local communities' sources of livelihood is under threat and yet they do not in any way receive any form of help from the mining company.

One resident said that these are some of the failings of the Environmental Council of Zambia where it fails to discharge its functions. ECZ is not fully independent: because its decisions and recommendations can be over-ruled by the Minister of Tourism, Environment and Natural Resources. Evidence suggests that ECZ is unable to adequately regulate the behavior of multinational companies.

Development involves more than just the increase of real income per capita, but has to encompass issues of distributional equity, the well being of the worst off in society, and sustainability. In this regard, KCM can play an important role in bringing development to Chingola community. There are many precedents in the mining industry world wide for substantial and continued support for a social service function for example, in Chile where the sector supports local people through contributions towards improvement of infrastructure and social services. This has not been the case in Chingola. KCM has just been supplying water to a one of the water utility companies for one of its branches, which services the mine area. This means that non-mine areas can not benefit from this supply. KCM has also been involved in bus station constructions as well as the maintenance of roads on a cost-sharing basis with the Local Authority.

Water

Regarding water supply, the findings showed that KCM in 2006 polluted Kafue river on the Copperbelt province and the effects were visible. KCM is the largest mining and Metals Company in Zambia with an annual capacity of 200, 000 metric tones of copper. Fuelled by a higher demand for copper by countries such as India and China, mining companies such as KCM, were trying to cash in, taking advantages of high copper prices. But hauling such volumes of copper comes with its cost to the environment.

According to the (Sunday Post 19 November 2006), the visible green Colour of the water in the Kafue River gave a clue of the contents in the water. One interviewee said, “as the green water gushes down stream, there was an eerie silence and the local community started calling it the river of death.” Another interviewee, said, “The frogs do not croak anymore, the fish – well dead ones but on top of the whole pollution story, were people affected”. People in the vicinities of Kafue River had bloated eyes, releasing some green stuff in addition to the diarrhea, which they developed after drinking polluted water from the river.

Documentation indicated that copper whose maximum limit milligrams per litre is supposed to be 1, was 10 milligrams per litre representing 1,000 per cent out of compliance. Manganese is supposed to be 0.05mg/l but in Kafue River it was 38.5mg/l representing 77,000 per cent out of compliance. Cobalt is supposed to be 0.05g/l but that day it reached 5.38mg/l representing 10,760 per cent out of compliance (19th November Post 2006). These were the levels for days until the water companies shut down the pumps because the water was too dangerous to drink. Experts indicated that for cobalt, long term effect resulting from repeated exposure from cobalt may cause allergic respiratory reaction “(ibid).

Chingola has an average of 75,000 people who depend on piped water from Kafue and underground water. The Chingola Industrial area with tailings dams and Mushishima and Chingola rivers drain tailings impoundment. Mwambashi, Muntipa and Munsenga rivers drain the central and southern part. In Chingola, most tributary, streams and rivers rise in headwater dambos. These treeless, shallow saucershaped depressions cover 6 to 7 per cent land surface. The two water utility companies, Nkana Water and Sewerage Company were not happy during this time. They could not pump water because the river was polluted. As a result, residents had to go without water for a long time. When it was polluted, the river was just like an industrial stream. As a result of siltation, the water pumps started breaking down constantly.

In this chapter two main points were raised. These were that KCM as a MNC is contributing to community welfare. The company has been implementing various community development programmes and projects. For example, the company runs two hospitals and a school. It also has employs about 10, 000 direct workers and about 6000 sub-contracted workers. This makes KCM as the second largest employer in the country. The company also contributes to reduction of poverty among women living in a less diversified economy.

This chapter has shown that while KCM has been busy providing services to the local communities; it has not done enough to address matters of environmental protection. The company has shown repeated negligence and does not show concern over its poor environmental records. Furthermore, not much has been done to assist farmers in nearby community to find them alternative means of livelihood. Crops in the nearby communities do not do well due to droughts.

Sports Activities

From 2005 to 2007 KCM has been sponsoring the Football Association of Zambia (FAZ) National League. The league has been re-named to the KCM Premier League. In addition, KCM supports football clubs in its areas of operation namely; Konkola Blades, Nchanga Rangers and Nampundwe Football Clubs. KCM supports other sport through provision of facilities. This includes golf, tennis, squash, bowling and rugby.

This study has shown that Konkola Copper mine is one of the few Multinational Corporations in the mining sector that is actively involved in improving community welfare. The company has been implementing a number of programmes in the community. Notable among them are education and health. As a responsible company, KCM has been giving business opportunities to the local business houses. This is unusual for a MNC to allow local business houses to supply goods and services to it. This is in view of the fact that they MNCs are very particular with quality. Furthermore, the MNC has been supporting local sporting teams in various ways. Of critical importance to the

local community have been the implementing malaria programmes where a number of houses in Chingol are spread with chemicals.

However, despite the programmes being implemented by the company, KCM has failed in many sectors. For example, the company does not offer free transport that the former company, ZCCM used to offer to the local communities. Furthermore, the company has not taken interest to encourage sub-contraction companies to offer good conditions of services. Furthermore, the company has not been consistent with observing environmental regulations.

CHAPTER 6: IMPACT OF THE STUDY APPROACH

6.1 Analysis of Study Approach

This section is an overview of the methods used in the study. It seeks to identify the strengths and weaknesses of the methods used in the study. It also seeks to evaluate the overall impact of the methodological approach on the effectiveness of data collection and establish the extent to which the approach has affected the accuracy of the research findings.

One of the main goals of this study was to identify the socio-economic benefits and costs of having KCM in Chingola. Such being the case, the study was built around two main assumptions. The first assumption was that MNCs are the best agents of community development. This is that MNCs use corporate social responsibility as a way to invest in the community. The study also focused on the empirical part where the understanding of the methodological tools and approaches were used. This study was not only focused on establishing the socio-economic impact, but also to identify the most effective methodology available to effectively capture the benefits and costs by MNC in Zambia.

In order to address these issues a world wide view of literature and the descriptive analysis of community development programmes conducted in earlier years were conducted. The findings revealed that it is not possible to measure socio-economic impact with approaches typical of the positivist and postpositive's paradigms Nutbeam (1998). The socio-economic process as explained in the literature review encompasses a political connotation when attempting to increase power among the powerless (Starrin and Forsberg 1997)

However, as socio-economic impact seems to be a political and methodological question, it makes the analysis efforts extremely complicated. The study therefore needed action research type of methodology which favors theme and group interviews. However, in this

study only one participatory approach was used. This is what made this research complicated. The aim of the researcher was to analyze the impact of mining on the local community (Kushner 1996).

The overall approach of this study could be labeled as “research of socio-economic impact of MNCs on surrounding communities (Eakin and Maclean 1992), which seeks the understanding of socio-economic impact as phenomena. In this study the focus was on corporate social responsibility and empowerment which are seen as a core of socio-economic benefits by many. The problem was that although the aim was to promote corporate social responsibility and empowerment through citizen participation, there were no tools for implementing such programmes. As described earlier, the available tools were not appropriate because of the ontology – nature of the phenomenon (socio-economic impact). The perception of socio-economic impact is subjective, because there is no common definition of what constitutes socio-economic impact.

The instruments created in these studies have been limited in their use of assessing socio-economic impact and focused on certain topic-specific interventions only. There have also been some trials to measure general socio-economic impact. All of them have approached the issue with quantitative instruments. Risel et al (1996) claims that in order to assess community benefits corporate social responsibility, empowerment and participation should be quantified. And to analyze socio-economic impact multiple levels of analysis are needed.

In analyzing community benefits, it would have also been necessary to examine the results in the wider context expanding the analysis to cover subjects like participants’ and municipality authorities’ views on decision making processes. These ideas are supported by Wallerstein (1992) and Stine (1992). However, because of time limits and difficulties to deal with the already huge data, these issues were excluded from the present study. In Chingola, a separate study on the municipal employee’s perceptions of community empowerment would be needed.

Pirie (1999) argues that the strongest study design would have been a comparison of a community, which is not exposed to a MNC. Unfortunately, this was not the case. Since socio-economic impact is considered to be context specific (Rappaport 1991) argues that it would not have been appropriate to do so in a manner required by the design proposed by Pirie. The design of the Chingola study was a follow up to the process of corporate social responsibility and a description of the way these two towns were empowered.

Qualitative Methods

Qualitative methodology of this study was devoted to seeing the world from the perspective of the participants' experience. It assisted in locating these experiences in a wider context and earlier theories. The methodology was used because it was flexible and adaptable in changing situations in the local settings than quantitative method. During the research process, interaction between the researcher and the respondents was effective.

Many writers and qualitative researchers (Denzin and Lincoln 1994) have argued that it is not possible to have a completely value free social research. In the case where MNCs and socio-economic impact are the focus of inquiry, the involvement of the researcher in the life of those to be investigated is necessary to collect data. As the phenomenon of CSR and socio-economic impact are still highly abstractive, it would be a mission impossible to imagine all sophisticated nuances of meanings which may take place in authentic situations.

My arguments are supported by Eakin (1992) who argued that research involves the study of complex human behavior in natural settings that cannot be controlled for scientific purposes. They state that qualitative methods may be attractive because they appear to promise the capacity to capture aspects of human action and social change, such as context and complex meanings. Furthermore, they contend that qualitative research gives value and scientific legitimacy to individual subjective experience. It parallels the people centered community development presented by Raeburn (1992).

Wallerstein (1992) also supports the idea of deepening the already existing quantitative measure on corporate social responsibility. The qualitative methods at best may elicit genuine participation of the community in the research.

One of the most important disadvantages of the qualitative approach in my study was that it was time consuming particularly when the researcher was working alone, as it was in my case. On the one hand it would have been good if there had been a group of peer researchers to discuss the ideas and share the pressure of making scientific choices and argumentations. However, the existence of peers could have disturbed my own maturation in perceiving, understanding and identifying the different social benefits the community had derived from the operations of the mining company.

This chapter focused on the effectiveness of the entire study approach. The section has shown that the study approach used in this study was not adequate to capture all the elements of socio-economic impact. This was that the concept of socio-economic impact in the context of a MNC is a huge responsibility which requires more than one approach. Specifically, this is that the study needed to involve such approaches as action and analytic approaches. A single approach was insufficient knowing that the topic in point was complex. Therefore, more time was needed to study the community. A comparative study to would have also been necessary to eliminate speculations.

While the approach used in this study was inadequate, the study has shown that qualitative approach was the best approach for this study because it allowed participants to freely express themselves. It also demonstrated that it is possible to carry out studies on MNCs in developing countries, a thing which was almost impossible in the past.

CHAPTER 7: DISCUSSIONS AND CONCLUSIONS

7.1 Discussions

The study findings have shown that in line with the concept of Corporate Social Responsibility, KCM has delivered a lot of development programmes in Chingola community. For example, interviews with residents and other key informants revealed that the MNC runs a school with an approximate 100,000 population. It also runs two hospitals called Nchanga North and Nchanga South, including some clinics. These services according to interviewees are open to all members of the society. However, services at Nchanga South hospital and at the Trust school can only be accessed by KCM employees. However, members of the community are free to seek the services at a fee. Other community programme the company is involved in includes HIV/AIDS programme, Malaria role back, employment creation and giving businesses to the local community.

The company was also reported to be training a number of business houses within the town to be suppliers of goods and services to the company. This is in tune with the company's philosophy of empowerment of the local people. Transfer of skills and knowledge too is enhanced too. The highlighted benefits are in agreement with the resource based theory which argues that countries with resources in the soil can use them to develop other sectors of the economy.

In the ideal model of what Zambia has become, Fraser and Lungu (2007) the principal responsibility of the new mine owners is to invest much-needed capital. By doing so, they should revitalize the economy, generating employment for workers and a market for local producers. At the same time, they should respect the labour, health, safety and environmental laws of the country to ensure that their operations do not negatively affect local populations.

Companies should be encouraged to make voluntary and charitable contributions to support local initiatives, in programmes that reflect their belief in 'corporate social responsibility'. Zambia has succeeded in keeping the new companies happy but in seeking to meet their every whim the state has been unable to collect a sensible share of revenue or to perform its own roles as an effective regulator, protecting the rights of workers and local communities.

Corporate Social Responsibility

CSR is the voluntary integration of environmental and social considerations into business operations, over and above legal requirements and contractual obligations. CSR is about going beyond and not replacing or avoiding. The CRS concept refers to companies taking voluntary action towards integrating social and environmental concerns into their business operations and communicating interactively with their stakeholders. One of the main points in CSR is that it includes and goes beyond complying with legal obligations. CSR incorporates taking proactive, long-term measures that base on the organization's operations and field of business. The activities can be seen as related firstly to the business environment (within the company and relations to stakeholders, customers and suppliers) and secondly to the wider community, society and environment (local, national, international). In this regard, KCM has been actively involved in collaborating with Chingola community in community work. This is very basis of corporate social responsibility. However, while the company has been helpful to the local community, it has not done much to contribute to community welfare.

CSR is a growing political, social and economic issue. The changes in the society bring about the new role of companies in the new economic and social environment. While many individual companies are proclaiming their own codes of conduct as a response to pressure from competitors, customers, NGO's and other stakeholders, many other have found strength in coming together in groups and networks to promote common approaches.

Weak regulatory frameworks

The Zambian Government was advised by the World Bank and IMF ahead of privatisation that, in order to bring in investment, the country would have to make itself more attractive than its neighbors and competitors by developing an ‘investor-friendly’ regulatory regime. The Bank and Fund then used Zambia’s dependence on them for aid and debt relief to ensure that laws were passed – principally the Investment Act and the Mining and Minerals Act, withdrawing many of the controls the state had previously established on the behavior of companies. While significant investments have poured in since, it is far from clear that all Frasier (2007) investors have chosen to take note of those of the country’s laws that do still apply to them – or indeed to honor the commitments they made in the Development Agreements. Some investors have taken advantage of the fact that Zambian state institutions are too weak to effectively regulate their behavior. The result of such state of affair is state of affair is that health and safety, labour, immigration and environmental regulations are ignored with impunity, causing significant resentment.

The Mines and Minerals Act of 1972 which regulated the nationalized industry was repealed to give way to the Mines and Minerals Act of 1995. This provides for the particular incentives for investors in mining. Under the Act tax paid for copper removed from Zambia – called a ‘mineral royalty’ is charged at the rate of 3% of the net back value of the minerals produced. The Act permits companies to minimize their income tax returns by allowing deductions for investment in mining. It also provides relief from paying customs duties on imported machinery and equipment. The Act does not specify the amounts of these forms of relief. Rather, it permits the government to enter into ‘Development Agreements’ with specific companies, under which they may extend more incentives than the Act grants, including reductions in royalty rate. KCM privately went to government to pay royalties that were lower than the set rates. The reason was that the government had weak laws and regulations which could be changed at anytime.

Casualisation of the workforce

Although KCM has created some new jobs, there has been a collapse in the quality of employment with around 33% of those working for KCM now unable to access permanent, pensionable contracts. The company has shifted workers onto rolling, fixed-term contracts on significantly less beneficial terms and conditions. In some situations jobs have been ‘contracted-out’ to companies that pay in many cases less than half the monthly wage offered to permanent workers for the same work in the same mine. Given the dangerous nature of their work, workers believe they deserve decent terms and conditions. The current situation is creating for the first time amongst mineworkers a category of the ‘working poor.’

Poverty

Casualization of the workforce has significantly deepened this crisis as the next generation of employees is refused the security of income in retirement that their fathers had expected from giving their working lives to mining. An absence of pensions is a particularly severe problem in Chingola because of the social structure of the town. Over the past years more and more people have been drawn to the town, giving up rural lifestyles to work in the mines. At the end of formal employment, and without a pension, many now find themselves unable to afford food and unable to fall back on subsistence farming and the extended family networks that many retirees in rural areas would depend on. An increasing number are living and farming on squatted land, owned by the mines, and on which they face risks from eviction, subsidence, explosions and pollution.

Failure to protect the social infrastructure

ZCCM provided jobs, hospitals, schools, housing, and a wide range of social services. Others included HIV-AIDS and Malaria awareness and prevention programmes. Towards the end of the ZCCM era, much of this effort stopped. Although KCM tried to resuscitate the exercise, the efforts were not enough. They are clear Frasier and Lungu (2007) that

their 'core business' is mining, and that the provision of social infrastructure goes beyond this remit. According to free-market ideology, and the Development Agreements, these goods and services should now be provided either by the local authorities or by market forces. But assuming on the basis of ideology that this transition can be achieved without significant welfare losses for the population completely ignores the context of Zambia's society, state and economy.

Local people cannot afford to pay for services and if charged they will simply not attend schools and hospitals. Increasing numbers are being cut off from electricity and water supply. The mining companies are starting to recognize that, in this context, in an industry that makes profits over the long term, investments in the human fabric of the surrounding community are also important. For example, after privatisation, cuts in the Preventative health systems that ZCCM ran quickly led to significant increases in absenteeism as a result of increased malarial prevalence.

To build a business in the long term, KCM needs the consent and support not only of host Governments, but of their employees and the communities where they work. People remember the days when an underground workers' wage was sufficient that many could afford to support their family and to buy a car and a suit imported from the UK, when they could plan for the small business they would develop with their pension upon retirement. Now, many of those who still have jobs are living in poverty, unable to afford to feed and clothe their families, and fearful of how they will survive their retirement without a pension.

However, study findings showed that complaints about the mining industry are based on: poverty wages, insecure terms and conditions, resistance to the legal right of trade unions to organize, inadequate support for retrenched and retired workers and a failure of attention to safety measures and environmental protection by the KCM. The company has shown little interest in solving these Abi (2007) problems since each of them results from purposeful cost-cutting policies undertaken to maximize profits and dividends to shareholders. This implies that, alongside collecting more tax and encouraging more corporate social responsibility, the Government may need to break free of an obsession

with 'investor-friendly policies' and use their regulatory and legal powers to priorities the need and rights of workers and communities.

Facts on the ground showed that sub-contracted employees continued to work without safety clothes. Both KCM and Government should strive to harmonize the safety requirements. The situation of contract workers working without helmets or indeed safety boots could result in a lot of injuries, which may have adverse impacts on the families from which the injured come from.

It was also mentioned that contract workers are not always paid for the overtime they do. Employees working for contracting firms observed that they work more than eight hours and they are not paid overtime or simply calculate the hours and give them time off in lieu. In extreme cases, they would just give them a packed meal instead of money. Most of them often have to work seven days without taking off the days they accrue. Their experience is that if the work is behind schedule, they are not allowed to take them. However they do not get paid extra for working longer hours. Such conditions could curtail the monthly wage employees take home.

In addition sub-contracted workers do not receive many of the allowances that KCM employees receive. Thus contract workers are not provided with pensions or automatic free medical care, yet they are unable to save to cover for illness, unemployment or old age. Contract workers mentioned that they have very limited job security. For example, some indicated that their employment agreements were verbal and have no guarantee of their jobs. Some contract workers observed that their firms had given them insufficient equipment. For example, underground workers said they are meant to have two pairs of disposable gloves a week but are given only one pair a month; and they often have to buy protective clothing from their own salaries.

Training for local businessmen in business as reported on the KCM website as well as encouraging partnerships in the fight against disease in the area further confirms the company's commitment to both citizen participation and community empowerment. All

this shows that the Theory of resources base is being realized. However, the findings also revealed dissatisfaction among residents who argued that the company was not doing enough to assist the community. This was that both the safety and conditions of contract workers working for the MNC was not being taken serious. Contract workers work under difficult conditions without being cared for. They have poor conditions of service compared to their colleagues working as full-time KCM employees. Environmental management is another case in point where for example in 2006 the company discharged huge volumes of copper effluents in river used by local communities to draw water for drinking.

While it is true to argue that countries with resources hidden in the ground can turn to them to create wealth for the surrounding communities, it should be stated that this is only possible in an environment which has well functioning regulatory institutions. In other words government, the local community and the MNC should work collaboratively to address the challenges confronting them, unlike what is happening in Chingola.

7.2 Conclusion

In conclusion findings are clear from the study of the socio-economic impact of KCM on Chingola community. The first findings are that the MNC has made substantial contributions to the development of Chingola community. For example, the company has over time been implementing various community programmes and projects. Notable among them are the malaria roll back, HIV/AIDs, hospitals, schools and the provision of business to the local communities. Furthermore, KCM has contributed to employment creation using various ways including through contractors and suppliers. In this regard, KCM could be considered another big community leader in Chingola as it has contributed to poverty reduction.

KCM has also contributed to increased transfer of technology both at individual and community level. The benefit of such a contribution is that it empowers the local community with skills and knowledge capable of sustaining people's lives for a long

time. It is also fair to argue that the company has managed to remain committed to the beliefs of corporate social responsibility.

The findings also showed that KCM is in Chingola because of copper which is found there. The company is contributing to Chingola community because of the profits it derives from the resource. For example, minerals in Zambia have been hidden in the ground for many years. Due to the mining activities, the company has been able to help the local community in various ways. The various forms of tax paid by the company have also been used to develop the country. These resources will be used to develop other sectors of the economy including the local infrastructure such as roads, bridges and schools. It could be further argued that there is a general improvement in the provision of social services in the area.

While the company has continued to invest in the local community as part of corporate social responsibility, study findings showed that the company has not been doing enough in investing in other productive ventures that can generate jobs. For example, during ZCCM time, employees of both ZCCM and contracting companies were employed on permanent pensionable basis. However, KCM has not continued with that trend. The company has more casual workers in the history of Nchanga mine than before. Furthermore, while KCM pays better salaries compared to other mine companies, it has not been concerned with the poor salaries and conditions of service its subcontracted workers are getting.

Although the company runs two hospitals in the township, not all communities are allowed to get medication from an exclusively mine hospital. Members of the community are charged fees in order to access medical services from Nchanga South Hospital.

Regarding the environment, it is very difficult to make a positive commendation of the company. For example, in 2006, the company released copper effluents in a river which services the surrounding rural communities with clean source of water and proteins. Its commitment to environmental management leaves much to be desired. The company has

not been very honest with the environmental laws as evidenced by its repeated violation pollution of the environment.

Regarding the survey, the study revealed that the majority of the respondents in the survey were in the productive age group. However, due to lack of linkages to various productive activities, the majority of the residents, especially women were not directly benefitting from the operations of the MNC.

The purpose of the Survey was to obtain quantitative data. This data was important in determining the approximate population composition that were benefitting from the presence of the mine. The survey was also aimed at getting a snapshot picture on the make up of the population in terms of productive and unproductive population. Although the survey data did not have a direct link to the set questions, it helped in validating the notion that many people in the area felt that they were not benefitting from the MNC. Specifically, it was aimed at establishing the socio-economic impact of having KCM in Chingola community particularly among single women.

The targeted population was about 45 households. Although the sample was not statistically representative generalizations can be drawn from this study. This is so because the household survey method and FGD that were employed are valid and have led to the generalization of the both qualitative and quantitative data. The qualitative data equally brings to the fore narratives from the grassroots of the people.

From the foregoing, it can be concluded that although KCM is trying its best to contribute to community development, it could not be the best institution to develop communities. This is due to the fact that the company has got divided loyalty. It is loyal to its shareholders whose motives are exclusively profit while also trying to please the local communities. Secondly, there is marked difference in terms of conditions of services between KCM and subcontracted employees. Finally, although the company is busy contributing to community development, the benefits are far from being enough, because the former company offered more help to the community than KCM.

Responsibility towards the Community

Companies depend on the health, stability, and prosperity of the communities in which they operate. Often majority of the company's employees and customers come from the surrounding area. The reputation of a company at its location, its image as an employer and producer, but also as an actor in the local scene, certainly influences its competitiveness. That is why KCM has become involved in community causes by providing additional vocational training places, recruiting socially excluded people, sponsoring local sports and cultural events, and through partnerships with communities or donations to charitable activities.

As an employer, it is important to take care of the personnel's welfare and safety at work, upholding their skills and motivation to the job and providing equal opportunities. It is also important to contribute to the employment situation of the society. The company should also be a good supplier of products and services which give prompt attention to complaints and questions. Customers should also be provided with full and reliable information about the products. As a member of the society it is important to have an open interaction with stakeholders as well as upholding good business practices. Companies should also cooperate and network with the community as well as other organizations and stakeholders in the industry

Contribution through Taxes

Companies are major contributors to the well-being of the area surrounding their operations, for example through the local tax base. Therefore, the question arises: is it responsible for a business to see corporate taxes purely as a cost to be avoided, rather than part of their "social contract" with society? Taxes have a significant impact on the creation and distribution of wealth; tax avoidance, though perfectly legal, deprives the community in the area of the company's operation of well-being.

Avoiding Actions that Damage Trust

A company's "license to operate" depends upon the trust and support of the local communities where it operates. The shift in power from the public to the private sector emphasizes the importance of this trust – and the obligations and responsibilities that come with it. Some company activities are potentially very destructive to the trust earned from the community or otherwise cannot be regarded as economically responsible. These should be avoided or at least carefully considered. Examples of such harmful company behavior include: bribery and corruption; tax avoidance; and concentration of rewards and "incentives" of the company's performance to few individuals only instead of fairer distribution among the personnel. The company should also stop to consider the economic effects of changes in locations and/or operations to the community. .

Environment

To truly commit to its environmental responsibilities, KCM should change its "traditional" modus operandi towards a more environmentally oriented one. The environmentally more responsible perspective could include such issues as an emphasis on increased resource productivity, cleaner production and active dialogue with the company's stakeholders. Many businesses have found that establishing an environmental management system is the best basis for good environmental performance. Quality, health and safety issues can also be integrated into the same management system.

There is a growing concern on the performance of corporate social responsibilities. Different actors try to understand the policies and practices followed by multinational corporations in their home countries and away in host countries. They argue that investment should take into account the environmental, economic and social concerns of the local population in which the multinational corporation operates. Stephen, T. (2004) argues that corporate social responsibility goes beyond the old philanthropy of the past of donating money to good causes at the end of financial year, but instead it is an all year round responsibility, for their engagement in their local communities and their

recognition that brand names depend not only on equity, price and uniqueness. Now society needs to move towards a challenging measure of corporate responsibility, where we judge results not just by the inputs but its outcomes, the difference we make to the world in which we live, and the contribution we make to poverty reduction. Apart from the positive spill over effects of the multinational corporations, there are also negative effects and unforeseen social, economical and cultural dynamics.

Regarding Social responsibility study findings in Chingola showed that KCM has been working ver hard to improve the livelihood of the surrounding community. Social responsibility does not only mean being accountable for the social effects the company has on people – even indirectly. This includes the people within the company, in the supply chain of the company, in the community the company is in and as customers of the company. It refers to the management's obligation to make choices and take actions that will contribute to the welfare and interests of society as well as those of the organization. KCM has clearly demonstrated that it seeks to fulfill this vision too as evidenced by its various community programmes..

However, economic responsibility is not simply a matter of company being financially accountable, recording employment figures and debts in their latest corporate-responsibility report. The economic dimension of the sustainability agenda should rather consider the direct and indirect economic impacts that the organization's operations have on the surrounding community and on the company's stakeholders. That is what makes up "corporate economic responsibility". This is why KCM employees hve been asking te company to improve their conditions of service. This would in turn impact positively on the surrounding community.

While the company has been making various contributions to the surrounding community, this study showed that there is dissatisfaction from many quarters of the community, as shown by the recent loss by the ruling government of all parliamentary seats in mine areas including Chingola. Complaints included failure by the company to make significant improved conditions of service for the employees, failure to improve

safety regulations, inability to observe environmental rules and general failure by the company to take responsibility of all former social liabilities of former ZCCM.

The economic performance of a company has direct and indirect impacts on all of its stakeholders – including its employees, local governments, non-profit organizations, customers, suppliers, and the communities in which the company operates. For example: A good economic performance makes it possible to develop operations for the long term and to invest in development and the well-being of employees. The employees of the company get good salaries, from which they purchase goods and services as well as pay taxes. These activities fuel the local services industry, government programs, and community activities, thereby creating additional jobs and services. This "multiplier-effect" becomes all the more important if the company is one of the largest employers in the community.

KCM is a major contributor to the employment situation of Chingola community. However, social responsibility to employees extends beyond terms and conditions of the formal contract of employment. KCM needs to come up to the wider expectations that its employees have for the quality of their working life. Such expectations include taking care of the personnel's welfare and safety at work and upholding their skills and motivation for the work. Beyond these expectations, KCM as a socially responsible company should secure a just treatment and equal opportunities for all its employees, regardless of gender, age, race or religion.

A comparative study between KCM and other mining companies is required to compare the terms and conditions of service between KCM and other mining houses. This study is necessary to assess the extent to which the mines differ. Furthermore, a study is also needed to measure the extent to which Chingola community has been empowered.

BIBLIOGRAPHY

- Abi, D. (2007), *Undermining Development? Copper Mining in Zambia*, A joint Report by ACTS, Christian Aid and Scotland Agency
- Agricola, G. (1950), *De Re Metallica*, p. 8. New York: Dover New York
- Alinsky, S. (1971), *Rules for Radicals*. Random House New York, NY Empowerments
Seen by the Municipal employees
- Altonene, T. (1998) *Community Development in Health Promotion towards community*
- Auty, R. M (1993), *Sustaining Development in the Mineral Economies: The Resource Curse Thesis p. 1*. New York Rutledge
- Bennett, B. (1997), A case for Theory Triangulation. *Nurs sci Q* 10: 97 – 102
- Bleicher, J. (1980), *Contemporary Hermeneutics as Method, Philosophy and Critique*,
Routledge Onion
- Bomsel, O. (1990), *Mining and Metallurgy Investment: The End of Large Projects?* .
Paris OECD
- Bonarff, F. (1983), *Community Empowerments a Strategy for Health Promotion for Black and other minorities*, *JAMA*, 261: 282 - 286
- Braz, Secr. Plann. (1984), *the Greater Carajas Programme: Legislations and Norms*.
Brassily Press. Rep. of Braz
- Campbell, CL. And Lawrence, JH. *et. al* (1998), *The end of Cheap Oil*. *Science. Am.*
78 (3), 60 - 65
- Christian Aid (2007), *Undermining Development? Copper Mining In Zambia*, SCIAF
Scotland Aid Agency, pp 6 - 19
- Clark, A. (1999), *the New Reality of Mineral Development: Social and Cultural Issues in Asiaand Pacific Nations, Resource Policy, RES, Work. Pap. 2355*
World Bank Washington,
- Collier, P. (2000), *Greed and Grievance in Civil War. Policy Res. Work. Pap. 2355*,
World Bank, Washington
- Creswell, JW. (2003), *Research Design: Qualitative, Quantitative and Mixed Methods Approaches (2nd Edition)*, Thousand Oak, CA Sage

- Denzin NK (1994), *Handbook of Qualitative research*. SAGE Publications, Thousand Oak, CA
- Dixon, J. (1989) The Limits and Potential for Community Development for Persona and Social Change. *Community Health Study* 138: 80 - 91
- Down, CG. Stocks (1977), *Environmental Impact of Mining*, p. 7. New York/ Toronto: Wiley
- Eakine, JM. and MacLean, HM. (1992) A Critical Perspective on Research and Knowledge development on Health, promotion int. 11: 157 - 165
- Eng. Min. (1995), *AIDS Now Number one South African Mine Hazard*. Engi. Mine J.196 11 9140
- Eklund L. (1995) Strengthening community empowerment in two small communities, Finnish Centre for Health Education Publication 1995: 6. Helsinki
- Fraser, A. and Lungu, J. (2007) For Whom the Windfalls? Winners and Losers in the Privatisation of Zambia's Mines, CSTN, Lusaka
- Francis, G. (1999) *Personal Communications*, University of Waterloo, Waterloo.
- Fielding NG and Fielding JL (1986) *Linking data: The articulation of Qualitative Methods in Social research*. SAGE publications, Beverly Hills. CA
- Freire P (1970) *Pedagogy of the oppressed: The continuum of publishing company*, New York.
- Freyman, A. (1974), Mineral Resources and Economic Growth. *Finance Development*. 11(1): 20-23-24
- Garner WR (1954) Context Effects and validity of loudness scales. *JEXP Psychology*
- Glaser BG and Strauss AL (1967) *The discovery of Grounded Theory; Strategies for Qualitative research*. Aldinde Gruyter, New York, NY
- George, F. (1992) *Mining and the Community*
- Grace V (1991) The marketing of empowerment and the construction of the health consumer: A Critique of health promotion. *Int. Journal Health Service*: 21, 329 – 343
- Gutierrez LM (1990) working with women of color: An empowerment perspective. *Social work* 35: 149 - 153

- Hirst, P. and Thompson, G. (1995) *Globalisation and the Future of the Nation state*.
Econ.Soc. 24:408-42
- Huisinga (1997) Mining and the Community development, Dar- es- laam
- Hyndman, (1994), Academic Responsibilities and Representation of the OK Tedi Crisis
in Post colonial New Papua Guinea. Cont. Pac
- Israel B (1985) Social Networks and Social Support: Implications of Natural helper and
community level interventions. Health education. Q 12; 60-78
- John, C. (2000) Evaluating Privatisation in Zambia: a tale of two Processes; Review of
African Political Economy, 27(85): 355 -366
- Kangwa, J. (2004), *Privatisation and Social Management, MMSD, African Institute for
Corporate Citizens, p. 1-20*
- Kiebaumaum, GH. (1994) Development Services GmbH (1994). Strategic Options for
the Privatisation of Zambia Consolidated Copper Mines Draft Report
(Main Volume) Republic of Zambia, Ministry of Mines and Minerals
Development, Lusaka
- Kirsch (2001), Changing Views of Place and Time along the Oak Tedi.
- Knafl KA and Breitmaye BJ (1989) Triangulation in Qualitative research; Issues on
conceptual clarity and purpose: In qualitative Nursing Research pp 209 –
220, Ed. JM Morse, Aspen, publication of Rockville, MD
- Kuhn T (1970) The Structure of Scientific Revolutions. University of Chicago Press.
- Kushner, S. (1996) The Limits of Constructivism in Evaluation 2: 189 - 200
- Kvale S (1996) An Introduction to Qualitative Research interviewing. SAGE
Publications
- Labonte and Robertson (1996) Delivering the Goods, showing our stuff: The Case for a
Constructivist Caradigm for Heath Promotion research and Practice.
Health Q 23: 431 - 447
- Lincoln Y et al (1985) Naturalistic Inquiry; SAGE Publications, Beverley CA
- Lungu and Silengo (1997) The Socio-economic Impact Assessment of the ZCCM; D
Copperbelt University, Institute of Natural Resources, University of
Natal, South Africa
- Marcello, M. (2001), United Nations: Servier Services Ltd

- Miles MB and Huberman AM (1994) *Qualitative Data Analysis*. 2nd Edition, SAGE Publications, Thousand Oaks, CA
- Minkler and Cox (1980) Creating critical consciousness in Health. Applications of Freire's Philosophy and Methods to Health creation setting. *Int. J. Health service* 10:311 - 334
- Min. Miner. Sustainable Development (2003), *Breaking New Grounds: Report of the MSSD project, London*, Sterling, AV Earthscan
- Myers J (1998) New Paradigm Research. The trials and tribulations and research, *JAD, Nurses* 18; 1066-1072
- Nutbeam (1998) Evaluating Health Promotions – Progress, Problems and Solutions. *Health Int* 13: 25 -34
- Ogola et al (2002) Impact of Gold Mining on the Environment and Human Health: Environment Geochem. Health
- Okley, P. (1989) Community involvement in Health development: An examination of the critical issues. WHO Geneva
- Paget and Walliser (1983), *The Development Mining Communities in British Colombia: Resilience through Local Governance in: Mining Communities: Hard Lessons for the future*, Centre for Resource Studies, Proceedings No 14 Queen's University at Kingstone, pp 96-130
- Patton MQ (1990) *Qualitative Evaluation and Research Methods*. 2nd Edition SAGE Publications, Newbury Park, CA.
- Pearson, LB. (1969), Deforestations and forest Regeneration following Small Scale gold Mining in the Amazon, The Case of Suriname. *Environmental Conservation*. 28(2):117-26
- Penza, R. (1992), *Privatisation in Zambia: It's Effect on Industries*. Profit Magazine. ZCCCI, Lusaka
- Petersen A (1994) Community Development in Health Promotion; Empowerment or regulation. *August J Public Health* 18: 213 – 217
- Philip, LC. (1998), *Tanzania Precious Mineral Boom: Issues in Mining and Marketing*, Research Paper Funded by USAID.
- Prager, S. (1997), *Changing North America's Mind-Set about Mining*. *Rock Products* 100 (8), 34 - 39

- Quivik FL (1997) *the Historic Industrial Landscape of Butte and Anaconda, Montana*.
Unv. Ne Mexico Press
- Raebun, J. (1992) Health Promotion Research with Heart: Keeping a People perspective.
Can J Publications Heath. 83 9supp. 1): 20 - 23
- Rappaport (1987) Terms of empowerment. Examples of prevention: Towards a theory of
community psychology. Is J Community Psych, 15: 120 - 147?
- Rissel E (1994) Empowerment: The Holy Grail of Health Promotion? Health promotion
international. 9; 36 -44
- Rothman T (1971) the three models of Community organization practices in: Strategies
of community organization, pp 20 – 36 Eds
- Sassen S. (2000), *Spatialities and Temporalities of Global Element: for a Theorization*,
*Public Cult.*12: 215 - 32
- Seale, C. (2004), *Researching Society and Culture*, SAGE Publications, London, pp 109 -
197
- Shafer, DM. (1994), *Winners and Losers: How Sectors Shape the Development Prospects
of States*. Ithaca: Cornell University Press
- Shih F.J (1998) Triangulation in nursing research. Issues of conceptual clarity and
purpose. J Adv. Nurs 28: 631 - 639
- Simpson, D. (1994), *Privatisation in Zambia: Slow but Surely Interesting*. Profit
Magazine, ZCCI, Lusaka
- Smith, D. (1987), *Mining America*: Lawrence: University of Kansas. Press
- Starring, B and Forsberg, E (1997) Research Strategy for Empowerment, pp. 33-49, Eds,
Stockholm
- Stephen, R. (2004), *Zambia Consolidated Copper Mines: Environmental Management
Plan*, Nkana Division
- Stevenson HM and Burke M (1991) Bureaucratic Logic in New Social Movement
clothing the limits of Health promotion research. Health promotion
int.6.281 – 290
- Stine, D. (1992) An Assessment of the Scientific merits of Action Research. Adm Sci Q
23: 589 - 590
- Swan, B. (1994) Mining and the Community – Challenges of empowerment, Profit
Magazine, ZCCI, Lusaka

- Tauptz, KC. (1991), Technical Introduction. *Small-Scale Mining Technology Workshop*, (Abstracts edition), 18-19, February, Livingstone.
- Thompson, I. and Joyce, S. (1997) Minerals Explorations and the Challenge of Community Relations Paper presented at the International Conference and Roundtable on Mining, the community sponsored by the World Bank, Quito, Ecuador. (1994) Times of Zambia 14th September, Lusaka,
- Todaro, M. (1985), *Economic Development for Development for Third World*, New York, pp50-180.
- Warhurst, A. (1999), Issues in Management of Socio-economic impacts of closure: Review of Challenges and Constraints In: Warhurst, A Noronha L. (Eds). *Environmental Policy of Mining, Corporate Strategy and Planning for Closure*. Lewis Publishers, Boca Raton, USA, pp, 81 – 99
- Wallerstein N (1992) Powerlessness, empowerment and Health: implications for Health promotions. *Am J Health promotion* 6. 197 – 201
- Wallerstein and Beansten E (1988) Empowerment and Education Adapted to Health Education. *Health Education Q* 15; 370 - 398
- Wesley Smith (1980) *The Politics of Access: Mining Companies, the state, and Land Owners in Pupa New Guinea Polities*.
- Watchman, B. (2000), *Mine Closure and Sustainable Development: Island Copper Mine: A Case Study History. Proceedings, Mine Closure and Sustainable Development Workshop*, World Bank Washington DC
- WHO (1997) *The Jakarta Declaration on Leading Health Promotion in the 21st Century*.
- Zimmerman, MA. and Rappaport (1988) Citizen Participation, Perceived Control and Psychological Empowerment. *Am J Community psychology*. 16; 725 –

ARTICLES

Akbzaa, T. and Darimani, A. (2001), *Impact of the Mining Investment in Ghana: A study of Tarkwa Mining Region*. For the Structural Adjustment Participatory Review Initiative SAPRI. [Online]

Available from:

www.naturalresources.org/minerals/africa/docs/pdfs/impact%20of%20sectors%20Investment%20in%20Ghana.pdf20.03.2006

World Resource Institute (1997), *Resource Flows: The material basis of Industrial Economies*, Washington DC World Resource. [Online]

Available from:

[www.zic./u/16%20 at http://www.minersandcommunitities.org/Action/press/817.htmol](http://www.zic./u/16%20at%20http://www.minersandcommunitities.org/Action/press/817.htmol)

World Bank, (2004), HIV/AIDS and Mining [online]

Available from:

<http://www.worldbank.org/ogmc/wbminingaids.htm>

(2006), The Sunday Post, November 19, 2006. [Online] Available from:

www.postzambia.com

Pirie, PL. (1999) Evaluating Community Promotion Programmes. Basic Questions and Approaches. In. *Health Promotion at Community eve*, pp. 129 – 130. Ed. N Bracht, 2nd Ed. SAGE Publications, Thousands Oaks, California [Online]

Available from:

[www.tanzaniagateway.org/docs/Tanzania's Precious Minerals Boom Issues](http://www.tanzaniagateway.org/docs/Tanzania's%20Precious%20Minerals%20Boom%20Issues)

Natural Resources Canada, (1999), *Canadian Mining Facts*, Canada. [Online]

Available from: <http://www.nrcan.gc.ca/mms/efcb/mms/facts/canada.htm>

Fraser and Lungu (2006), *For Whom the Wind Falls? Winners and Losers in the Privatisation of Zambia's Copper Mines*, p. 7; [Online]

Available from: www.minewatchzambi.com

MMSD, (2002), *Minerals and Sustainable Development Project*, London Eartscan
Mineral Policy Centre (1999), *fourteen Steps to Sustainability, Minerals Policy*
Washington DC: Available from: <http://www.mineralpolicy.org>
(Undated) www.esprojects.net/attachement
(Undated) <http://web.worldbank.org/>
(Undated) <http://www.bsr.org>

APPENDICES

**University of Jyväskylä
Department of Social Sciences and Philosophy
Jyväskylä
Finland**

Dear Respondent,

Thank you for participating in this research. Your answers to the questions in this questionnaire will be confidential and are completely anonymous. No one will know who answered this questionnaire. You are not required to give your name.

Your participation in this research is entirely voluntary. If you do not feel comfortable to answer any of the questions or do not wish to participate in this research, then you are free not to answer the specific questions or to leave the whole questionnaire blank.

Instructions

Please respond to the following questions as truthfully as possible. Where there are other options, select the appropriate response by putting across (x) in the box of your choice.

1. Gender.....

Female	
Male	

2. Age in years.....

--	--

3. Marital Status.....

4. Interview language.....

Bemba	
Kaonde	
Lozi	
Lunda	
Luvale	
Nyanja	
Tonga	
Other	

5. Compound.....
 6. Occupation

Mine area	
Non-mine area	

Mining	
Trade	
Farming	
Weaving	
Sports	
Other	

SECTION B

6. Name of Mine company.....

KCM	
MCM	

7. Who owns it?

Foreigners	
Zambian Govt	

8. How long has the new Mine Company been around?

5 years	
2 years	

9. How long have you been in this compound?

More than 5 yrs	
Less than 2 years	

10. Are you happy to have the company around?

Yes	
No	

Explain.....

11. Are there any developmental programmes KCM is doing in the community?

Yes	
No	

12. If so which ones?

Businesses	
Education	
Employment	
Health	
Township malignance	
Sports	
Water supply	
Other	

13. How widely spreads are the above services to the community?

Limited to miners only	
Open to whole town	

14. How clean is the township?

Very clean	
Dirty	

15. Who is responsible for township maintenance?

KCM	
LA	

16. How do you rate the relationship between KCM and the local authority?

Very good	
Very poor	

17. Who is responsible for road repair in the township?

Municipality	
KCM	
Other	

18. How would you describe the status of the roads in Chingola?

Very good	
Good	
Very bad	

Poor	
------	--

19. Compared to ZCCM days, would you say Chingola better than it was during ZCCM?

Yes	
No	

Explain.....

CONDITIONS OF SERVICE

20. Do you work?

Yes	
No	

21. If answer to 20 is yes, which company do you work for?

KCM	
Sub-contractors	
Other	

22. Are you permanent employee or not?

Permanent	
Temporal	

23. Are you entitled to any of the following?

Pension	
Living wage	
Education	
Health	
Housing	
Safety	
Water	
Electricity	
Leave	
Other	

24. Are the working conditions better off than under ZCCM?

Yes	
No	

Explain.....

25. As a contract worker, how do you rate your conditions of service to those of permanent KCM employees?

Same	
Different	

26. What would you say about KCM's attitude towards environmental management?

Good	
Not good	

27. Does KCM follow environmental regulations?

Yes	
No	

28. How strict is the ECZ in enforcing the regulations?

Very strict	
Not strict	

29. How would you describe the relationship between KCM and ECZ?

Serious	
Casual	

30. How often do you participate in developmental matters in your community?

All the time	
Not at all	

END OF INTERVIEW

THANK YOU FOR PARTICIPATING IN THE INTERVIEW.

QUESTION GUIDE FOR FGDs

1. Who was responsible for the township development before 1991?
2. Who is responsible for the township maintenance now?
3. Is the City as clean as it used to be in the 1980s?
4. Why?
2. How would you describe the state of the roads in the 1980s?
3. Do you think KCM is doing enough to improve your surrounding?
4. Between International and local companies, which ones do you think are best placed to develop Chingola community?
5. Comparing miners of today and those of the 1980s, which of the two do you think are better off? Why?
6. Describe the working conditions of permanent KCM employees.
7. Do you think sub-contract employees are fairly treated or not?
8. In what way are the conditions of service different between KCM employees and contract workers?
9. Are there specific developmental programmes KCM has brought in the area?

Table 5: Annual Rates of Malaria Cases per 1000 population (1990 to 2001)

YEAR	CHINGOLA
1990	74
1991	68
1992	80
1993	93
1994	81
1995	95
1996	55
1997	36
1998	58
1999	59
2000	68
2001	33

Source: statistics (Mine hospital) - Chingola