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YOUTH PERCEPTIONS OF THE ROLE OF COPPER MINING IN DEVELOPMENT ON THE ZAMBIAN COPPERBELT

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ABSTRACT

Copper is the mainstay of the Zambian economy. From the inception of mining activities in the 1920s, it has accounted for the majority of the country's exports and foreign earnings. However, most people are of the view that its contribution to development programmes is disproportionate, well below their expectations. They attribute the contemporary failure to copper price volatility, international market forces, ownership, government ineptitude and the consequences of neoliberalism. Given the large expense involved in establishing and running copper mines, the country depends heavily on foreign capital. A big proportion of the copper that is mined in Zambia is sold in an unprocessed state denying the country additional revenue. This study assesses both the role of copper mining in the economic history of Zambia and its role in contemporary development as perceived and understood by current university-educated job market entrants on the Zambian Copperbelt, their educators and other commentators with work experience in the sector.

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LIST OF ACRONYMS

AGOA	African Growth and Opportunity Act
BBC	British Broadcasting Corporation
BSAC	British South African Company
CSR	Corporate social responsibility
CODELCO	Corporacion Nacionale Del Cobre
EITI	Extractive Industries Transparency Initiative
FOREX	Foreign Exchange
GDP	Gross Domestic Product
HDI	Human development index
ICMM	International Council on Mining and Metals
IDC	Industrial Development Corporation
IFI	International financial institutions
IMF	International Monetary Fund
ISI	Import substitution industrialisation
JSESRI	Johannesburg Stock Exchange Social Responsibility Index
KCM	Konkola Copper Mines
MDG	Millennium Development Goals
MMD	Movement for Multi Party Democracy
MNCs	Multinational Companies
MPRDA	Minerals and Petroleum Resource Development Act
MUZ	Mine Workers' Union of Zambia
NDP	National development plan
NFC	Non-ferrous Company
PTA	Parents teachers association

SADC	Southern African Development Community
SAPs	Structural adjustment programmes
SOE	State owned enterprises
TNCs	Transnational corporations
UNCTAD	United Nations Conference on Trade and Development
WB	World Bank
ZCCM	Zambia Consolidated Copper Mines

1. Introduction

> From the time I've spent in Kalulushi, and that's a long time, which is 15-18 years, I would say mining, particularly copper mining, and to some extent agriculture, drive the economy of Kalulushi, and in fact the whole Zambia. Before the mines collapsed, I was in Kalulushi, that was 98, in fact, 95 up to 98. At the time everyone moved to agriculture growing things like vegetables, maize crops. That's what was sustaining the people of Kalulushi. Those that had money, if say they got a good retrenchment package, took up poultry and beef farming, milk production, but most people grew vegetables in their backyards. This was around 1995 – 2000, which was also the beginning of privatisation. It's only when new companies like Metorex came in, that things started changing and people started going to look for jobs again. This was not everyone, although I would say the majority, even though, even at its worst we still had people that were still working in the mines who I would say were still contributing to the overall economy. During the time when things were really bad, it was mostly agriculture that sustained us. Around here most people work in Chambishi or Chibuluma mine which is now run by new investors so when the mines are not doing well everything is affected. (Interview with Muyunda, 18th December, 2011)

At the time of the interview Muyunda was a 24 year old man in his final year of study at the Zambia Catholic University in Kalulushi. He was born in Chingola in the Copperbelt Province, northern Zambia near the border with the Democratic Republic of Congo and less than 80 miles from Kalulushi where he currently lives with his parents. Muyunda's parents are both retired. His mother worked as teacher and his father was a senior employee in the mines for most of his working career, first as an assistant superintendent and later as a superintendent under the mining conglomerate Zambia Consolidated Copper Mines (ZCCM). Muyunda's father, a chemical engineer by training, was retrenched in 1998 in a restructuring exercise after Zambia privatised its mines, and as new investors took up operations. This thesis explores what the impact of this restructuring has been on local people, and how this has shaped, in particular, the attitudes and perceptions of a group of university students. Central to the dissertation, will be an interrogation of how capital, ownership, market factors, and property rights, have determined the relationship between mining, host countries and local communities, and how these factors determine the perceived role mining plays in development. In order to do this, I will sketch a historical overview of mining in developing regions around the world with a special focus on Zambia before outlining the views of students and workers on the Copperbelt. For those about to embark on their working lives, the opportunities that mining might have to offer them and the development of the country are of acute and immediate concern.

Like all urban towns on the Copperbelt, Chingola and Kalulushi, that Muyunda refers to in the interview extract above, are company towns that were created with the discovery and subsequent exploitation of abundant copper reserves in the 1920s. This led to mining companies embarking on a massive social, cultural, and economic engineering project, reshaping indigenous societies to establish conditions necessary for capitalism to thrive and ensure easy access to Zambia's copper. In this paper, my primary focus will be on the town of Kalulushi. This town is important in the history of copper mining in Zambia, eulogised for producing the best grade copper among all mining towns on the Copperbelt. According to Nyambe and Kawamya, the mines around Kalulushi produces the world's highest-grade copper at more than 8% copper (2005:81). At present the town has two large-scale operational copper mines, Chibuluma West, a new open pit mine, and Chambishi, an underground mine. Two other mines closed down. Two shaft in the 1990s at the beginning of the privatisation process, and Seven shaft around 2008.

In 1998 a Chinese company, Non-Ferrous Company (NFC), invested in Chambishi and has operated the mine since then. The story is quite different for Chibuluma mine. This mine was first sold to the Industrial Development Corporation (IDC) and Metorex of South Africa, and at the apex of the 2008 global recession, and as copper prices tumbled, IDC and Metorex disinvested. The mine was then sold to NFC. Such changes of ownership are not new to the Zambian copper mining industry. From the very beginning, investment in copper mines has flowed in and out of the region. This could be attributed to a number of factors from government policy to investor decisions. At present, the strong copper prices and the recent boom in China, India and Brazil especially, have led to more and more companies from these countries exploring the area for viable investment opportunities.

As Muyunda observed, people's livelihoods in Kalulushi are closely tied to copper mining. Thus the decline of the industry in the 1980s and 1990s negatively impacted on livelihoods, leading to massive unemployment and hardships in communities. Growing up in Kalulushi, I would support Muyunda's assertion, that a notable change of attitude in how some people within Kalulushi and across the country interacted with the mines, was apparent after this. Both the political and economic landscape became dominated by debates around how to fix the underperforming mining sector and broader economy. In order to counter the problems created as a consequence, and given Zambia's heavy reliance on copper, there was a strong move by the government, a move architected by the International Monetary Fund and the World Bank, to embark on a massive economic restructuring programme. According to these organisations, market friendly policies were imperative for Zambia to attract investment and resuscitate the mining sector and the overall economy. These policies became popularly known as Structural adjustment programs (SAPs). The main purpose of SAPs, it was argued, was removing state interference in the economy and relaxing the rules of trade so that capital could flow more freely. In retrospect, this meant reverting to the early period of copper mining when mines were dominated by foreign multinational companies (MNCs). Before I go into great detail as to how SAPs came to affect Zambian society, it is important to note that, from inception, Zambia's copper mines have been dominated by MNCs who, upon making agreements (arguably fraudulent, see Simutanyi, 2008) with the British South African Company (BSAC) and local chiefs, obtained concessionary rights to exploit mineral deposits. Not only did they – as in much of the developing world - establish a system of racial superiority, they also enjoyed privileges of private ownership (Ferguson, 1999). As a result, copper mining has always been influenced strongly by the dictates of capital and the market.

Nearly a century since the inception of mining and interest from foreign investors, interaction with the market and respect for property rights have again become central to questions of how countries like Zambia can increase trade, attract investment, reap sufficient rewards from their resources and distribute them equitably - in short, ensuring development. Unlike in the 1920s, these ideas have assumed 'sanctity' as they have found support in powerful and influential organisations such as the international financial institutions (IFIs) mentioned above. At the centre of renewed calls for a new full integration with the market is the idea that if past experiences with the market had not helped Zambia develop, present circumstances, helped by Zambia's membership of the global village, would. This should bring together the holy trinity of the market, property rights and foreign direct investment (Bush, 2010:238). IFIs not only support these measures, but have re-emphasised their commitment to developing countries by facilitating the extractive industries' contribution to poverty alleviation and economic growth through the promotion of good governance and sustainable development' (Bush, 2010:256). But in order for all this to work countries need to be members of the global village and embrace neoliberalism.

Globalisation and neoliberalism have both been premised on the idea that, more than ever before, developing countries like Zambia would be best advised to be open to trade with other countries with renewed vigour. However, sceptics of these processes have argued that as the initial rationale by those who advanced market fundamentalism was the developing world's debt, this was a self-serving exercise to ensure debts were repaid. Others have even gone as far as to claim that this new project of globalisation has simply been about freeing those in the developing world of their 'natural and cultural' identity (Nyamnjoh, 2000:5). Such voices are unanimous in blaming the market for increased levels of poverty and inequality. For example, Bush (2007) has argued that those who advocate for the market ignore its failures and its potential to hamper prosperity. He charts the way capital and markets have had uneven effects into Africa arguing that, 'it is not that markets are good or bad, but that some countries or regions have the power to make world markets work for their advantage, while others do not, and have to bear the cost' (2007:42).

Professor Jeffrey Sachs was an advisor to developing countries and played a role overseeing the transition of some communist Eastern European states into market integration after the Cold War ended. Sachs (2005:356) mocks the view that is often put forward by pessimists of globalisation and the market, which is that multinational corporations 'are the main villains in causing extreme poverty and environmental degradation'. According to him, 'Africa's problems are not caused by the exploitation by global investors but rather by its economic isolation, its status as a continent largely bypassed by the forces of globalisation' (Sachs, 2005:356). This analysis is interesting in the context of Zambia. Given what has been noted about the influx of merchant capitalists on the discovery of copper, to what extent can one say that the country has been bypassed by forces of globalisation, forces many of which may be seen as synonymous with capitalism? Other views are more circumspect, arguing that, though perhaps not bypassed, it is the way developing regions have integrated into the global world that has been problematic. For Ferguson (2007:38) and others, integration has not been homogenous. According to him capital does not flow from one part of the world to another uniformly. In his words, 'capital is globe-hopping, not globe covering…. it hops, neatly skipping over most of what lies in between'. In the case of Zambia he argues that if copper has linked Zambia to the global arena, it has also delinked it and, more than this, it has been a symbol of the 'myth' of modernity and development (1999; 2007). Despite his scepticism, Ferguson contends that 'the copper wire bars produced by Zambian refineries literally did connect the world, via telephone and power cables …. and electrification has provided the twentieth century with perhaps its most vivid symbol of modernisation and development' (1999:242). But for most Zambians the difficulty has been that, when the copper industry has gone down, so too has the entire Zambian economy. This has once again brought into centre stage debates about ownership and calls by locals for increased state participation as a way to ensure a larger share of the cake going to Zambians.

Given Bush's 'uneven effects' argument, can globalisation and neoliberalism help Zambia develop, and to what extent is it possible to have a more equitable distribution of resources, between people within the Zambian society, and between Zambia and investment countries, given the country's dependence on foreign capital and its weak position in the market? Mining companies have become so powerful that sometimes they are even able to evade the control of, and manipulate, internal regulatory bodies (Bracking, forthcoming). The secrecy surrounding revenues from mining is one example. More than anything, it is the companies' close collaboration with IFIs that have ruffled a lot of feathers. Some observers, have criticised their market-friendly policies that were initially supposed to fight poverty and accelerate the rate of development for actually worsening it (Bush, 2007). For example, one of the consequences of the IFIs engineered SAPs on Zambian society has been an abrupt end to the welfare programmes that had been started after independence, some of which had important benefits to society (Mususa, 2010). At present the Zambian government cannot actively participate in job creation or supporting educational programmes as they had done before the market reforms. The most vulnerable have been the poor and young people like Muyunda above. A group of women and young people at an illegal dump site, interviewed by Mususa (2010), bemoaned, that mines are likely to ‘employ *abapwa umulopa mumishipa*’ which literally means, ‘those who have no blood running in their veins’, a reference ‘to the perception that mines seem to only employ people who are old, have been overworked and should have been retired’(2010:197).

Although I could not find unemployment figures specific to youth, the table below demonstrates that from the late 1990s, by which time most of the mining companies had been privatised, the mines employed far fewer people than during the period of nationalisation between 1972 and 1991. Hansen (2005) echoes this point, by noting that SAPs, and neoliberal market policies, have reduced the number of people in wage employment. Most importantly copper mining in Zambia does not just create direct employment. It is a significant source of wealth to support the development of other industrial sectors. Green argues that each job in the mining sector is able to support 20 others in services, the supply chain and the wider informal economy (2009:2). However, despite many attempts at diversification, no substitute to replace the dependence on copper has been found. Hence, the sector continues to be the biggest employer in the country.

Table 1.

Trends in mining employment 1976-2006

Year	No of Employees
1972	52,000
1974	54,270
1976	66,000
1986	51,000
1991	56,582
2000	22,280
2004	31,440
2006	31,199

Source: Simutanyi (2008)

Some critics argue that developing countries should revert back to having more state involvement in economic affairs. Harvey (2010:240) recommends ‘progressive taxation arrangements’ while basic needs such as, education, healthcare, housing, employment and perhaps environmental and developmental concerns should be provided by the state. For some years various critics, scholars, and political parties within and outside Zambia have argued for some of Harvey's recommendations (Langmead and Baker, 2006). They have called for an egalitarian tax system similar to the one applied in other developed parts of the world. But these are often met with counter- arguments by IFIs. Thus debates continue to rage over institutional restructuring both in government and in how mines are run. Other suggestions that have been made include banning the exportation of raw copper in order to ensure that refinement happens before it is exported, and renegotiating development agreements.

1.1. Objectives and key questions

The objective of this study is to,

i. Highlight the perceptions of a group of university-educated young men and women and key informants among workers and management in the mining industry regarding the past, present and future roles of mining in development,

ii. Examine the nature of the relationships between copper mines and communities.

The research questions will aim to interrogate how copper mining affects people's livelihoods. Questions include:

i. What role copper has played in participants' lives

ii. What role they imagine it might continue to play in the future

iii. Whether copper mining benefits a cross-section of the Zambian society and the economy

iv. How questions of ownership of mines affects all these issues.

This thesis consists of five chapters. The literature review is divided into two chapters, chapters two and three. The first part of the literature review describes the impact of mining on development across different societies with a strong emphasis on the developing world. It considers mining's impact on livelihoods and employment, economic growth and foreign exchange, infrastructure development and the environment. The second part reviews the evolution of mining in Zambia from inception in the late 1920s to the recent past. Both literature review chapters interrogate the role that capital, markets and property rights have played and how these factors have directed mining's contribution to development. Chapter four discusses the methods used to answer the research questions. Chapter five presents results and discussions about the perceptions and attitudes of youth and other key informants on mining and development.

2. Mining and development: Impacts of mining on development

2.1. Literature review

This literature review is divided into two chapters. The first part will consider the impact of large scale mining as a driver of development giving examples of different regions around the world. It will focus on the themes of livelihood and employment, growth and foreign exchange, infrastructure and social investments, and the environment. The second part (chapter three) will discuss the evolution of copper mining in Zambia from inception in the 1920s to the recent past.

Concepts of political ecology assumed centre stage world over in the 1970s 'as a response to the theoretical need to integrate land use practice' with the 'development' of a 'local-global political economy' (Peet and Watts, 2004:4 citing Wolf, 1972). In line with the theme of this dissertation and central to it, is the constantly shifting and unequal dialectic between different tiers of 'society and land based resources' (Peet and Watts, 2004:3 citing Blaikie and Brookfield, 1987). The resources in question are mineral resources. This chapter traces the dynamics and the movement of mineral resources, capital, those that own the means of production and those that depend on it to support their livelihoods. Bebbington *et al* describe the relationship between large-scale mining and development as 'contentious and ambiguous' (2008:3). To them, and others, (see Hogenboom, 2012), mining is 'contentious' because it 'has so often delivered adverse social, environment and economic effects for the many but only significant gains for the few', and 'ambiguous', 'because of the abiding sense, among local populations as much as development professionals, that *just maybe* mining could contribute much more' (Bebbington *et al*. 2008:3).

Mining has been the engine of economic development in many parts of the world. This is due to a number of reasons: First, economic growth over the last century throughout the world has created an insatiable appetite for developing countries' mineral resources. In turn, growth in exporting regions has largely been related to meeting global demand for minerals. Second, unlike the developed world, the developing world continues to face numerous challenges in its economic diversification attempts. The failure to strengthen other economic sectors and the perceived difficulty of extracting and accumulating capital in other sectors like tourism, agriculture, trade and industry makes mining the most relied upon source of capital

(Breckenridge, 2008). Singh (2012) notes the ease, certainty and dependability of obtaining capital from mining in the developing world, claiming, unlike other sectors, 'natural resource wealth does not need to be produced but only extracted' (Singh, 2012:247). Despite its supposed importance, it is the impact of mining on local communities as Bebbington et al (2008) have noted above, that is highly contestable.

However, the impact of mining on countries across the world is varied. This often depends on whether a country is 'developed' or 'developing'. Most rich developed countries have stronger institutional and regulatory frameworks that allow them to bargain with investors on a more equal footing compared to developing countries. And because the structures of their economies tend to be more diversified, they are less dependent on mineral resources. As such, critics have argued that investors have tended to pay more attention to the needs of communities of rich countries than those of poor countries (Kapelus, 2002).

In the developing world, mining companies possess more power than they do in the developed world (Bracking, forthcoming). The technological and heavy capital investment that large-scale mining requires – which many developing countries may not possess - and the inception conditions of mining projects gives foreign investors certain powers and rights (Chitonge, 2010). In his discussion of African economies' dependence on minerals, Breckenridge (2008:7) argues that it is because mineral resources have been treated as a 'special form of property right', which consists of 'the centrality of an uncontested property right (or concession or license) to the profitability of investment' that has given foreign investors in Africa the most extraordinary freedom to make vast profits often with little or no regard for the local communities. Echoing these sentiments, Singh notes that in order to bring in investment, foreign companies coerced Brazil and Chile to create 'legislation instituting private property rights through concessions in explorations and exploitation', implement laws with the sole aim of attracting investment, and reduce the dominance of state owned enterprises (SOEs) in the economy (2012:236).

Evidence from history reveals that the expansion of large scale mining went hand in hand with colonialism (Kapelus, 2002). Therefore, one could argue that the idea behind the obsession with respect for property rights is a continuation of the colonial legacy of exploitative relations. This is certainly the case if one considers the working of modern capitalism in developing countries, the main concern of which has been protecting interests of investors rather than those living nearby in host countries. Furthermore, if compounded with another colonial legacy of highly uncertain markets, investments made tend to be highly ‘uneven over time’ and prices ‘strongly procyclical at both the local and global levels’ (Adam and Simpasa, 2010:60). Also capital always aims to maximise profits. As such, mining companies can go to any extent to ensure this happens. For example, the African independence decade of the 1960s which saw the beginning of a wave of Africanisation and nationalisation was met with a reaction from corporations that saw a rise of a new type of investment in enclave mining. This became entrenched in Africa in the 1980s. The consequence of this was a previously unseen isolation of the development of mineral resources from the wider economy and society (Breckenridge, 2008:6).

Writers such as Sachs (2005) and Collier (2008) have argued that Africa’s topography, ineffective governments, economic structures and policy problems, among other things, hamper broader development in the region. Despite the difficulty that this may present for mining driven development, availability of technology from industrialised countries means that it is possible to alter physical and natural features to make even the most difficult extraction possible. Hence, critics strongly point to the interaction of human, social and economic aspects to explain the problems of resource driven development. These critics have identified the existence of a ‘resource curse’ (a highly contestable term, see Stevens, 2003) to explain the relationship between the lack of development and resource dependence that is apparent in most resource-rich developing countries.

By closely examining the trajectory of mining in Africa and some of the factors this thesis mentioned, I would agree with some critics who point to pre-existing institutions embedded in colonialism for mining’s poor economic and political performance and lack of tangible benefits accruing to local people (see Bebbington *et al*. 2008). Decisions regarding the wider operation of the mines have been made by financiers and completely divorced from the locals. Aside from colonial institutions and corporations, in the recent past, IFIs have increasingly collaborated with capital. Together with donor governments who at most times are a source of investment, IFIs wield a lot of influence in the economic decisions of many African states (Bracking, forthcoming). These factors, in one way or the other, impact on each of the dimensions that I am going to discuss below. These are: livelihoods and employment; economic growth and foreign exchange; infrastructure and social investments, and environment.

2.2. Impact of mines

There are several dimensions through which mining might have developmental impacts on communities. These include its impact on: livelihoods and as a source of employment, on the economy and a source of foreign exchange, infrastructure and social consequences of mining investments, the environment, as well as consequences of extraction of mineral resources.

2.2.1. Livelihoods and Employment

On a broad level Scoones (2009) argues that a livelihood perspective is concerned with understanding things from a local position within the global context. Scoones notes that livelihood is 'a mobile and flexible term' that could be used to describe whole fields of development inquiry and practice (2009:172). He argues that the starting point for a livelihood analysis is a consideration of 'how different people in different places live' (2009:172). According to Scoones, livelihoods transcend different aspects of life such as regions (rural or urban) or occupations (related to work), among other things. He cites two possible conceptualisations of livelihoods: one used by Chambers (1995), where livelihoods are defined as, 'the means of gaining a living'; the other defined by the Glossary for Distance Learning Guide which describes livelihoods as 'a combination of the resources used and activities taken in order to live' (2009:172).

The first impact of mining on livelihoods occurs at the beginning of a mining project when, in order to set up a mine, people may be resettled. This means that existing small scale mining projects are displaced, grazing land is lost and competition for water and energy needs increases. Furthermore, existing businesses disappear as more people seek work in the mines and communities suffer the nuisance of noisy and dusty trucks (Bebbington *et al*. 2008).

Despite this, mining has the potential to benefit society as a whole, owners of the mines, and local communities. For the communities around mines mining can be a source of direct employment provided by the actual activity of mining and for the country as a whole, mining can be a source of indirect employment resulting from other economic activities generated by the mines. The value chain of mining involves a diverse range of activities from exploration and actual mining, to processing, adding value to the minerals mined (although in limited circumstances in developing countries) and distribution and consumption. Within this, there are also companies that supply products such as machinery, equipment and services to mining companies. Each of these processes has the potential to create a number of jobs.

However, Singh (2012) argues that mining's enclave character restricts the skills that it can create. He is of the view that that since natural resource wealth is extracted not produced, when extraction occurs in isolation from other sectors, 'workers do not get trained with transferable skills that allow them to move from extractive to productive sectors' (2012:247).

More than this, the ability of mines to create jobs has been limited by the fact that decisions regarding operations are made by the owners, for whom, profits often outweigh any other considerations. The consequences of this on labour are that throughout the world, and especially in the developing world, mining has been 'associated with appalling labour conditions' (Bebbington *et al*. 2008:3). And, in the specific context of Southern Africa, mining has been associated with 'whole regional economies organised around political and territorialising instruments designed to keep labour cheap and controllable' (Bebbington *et al*. 2008:3). For capital, Breckenridge argues, mining worked better 'under the political economy of the colonial rule' as its 'labour demands synchronised much better with the politics of indirect rule' (2008:16). As such, throughout history the interests of capital have often been at odds with local people's needs for jobs and improved welfare**.**

The relationship between labour and capital in many parts of the developing world has evolved from colonialism to neoliberalism. Before independence, most African workers were conscripted to work in the mines often against their will. In the South African gold mines, Breckenridge notes that corporations at the time 'exercised an almost uncontested economic and political domination over the 400, 000' workers who worked in the mines (2008:10). He further notes that 'African workers were locked into the least organised and skilled jobs' as most skilled jobs were kept for white workers (2008:10). Singh (2012) argues that in the recent past power dynamics have continued to hold. He contends that countries' labour management and relationships of various stakeholders have been influenced by the dynamics of power between companies, the state and organised labour, and that companies have reigned supreme (2012:247). He also argues that neoliberalism has institutionalised labour flexibility, but rather than offering more job opportunities to local people, companies have used this as a mechanism to subcontract most jobs (Singh, 2012:247). Subcontracting jobs means that companies are shielded from undertaking direct responsibility for workers.

Neoliberal labour and institutional flexibility have also led to companies employing many foreign workers who, they argue, possess special expertise. The value chain that could create more jobs is truncated as most companies import machinery and tools from industrialised countries and adding value to minerals occurs abroad. Where jobs are scarce locally, each full time job in the mine or in the value chain could support a number of people. Hence, exporting jobs abroad denies local people and their family networks of a source of livelihood. Singh contends that by 1980 the Chilean Corporacion Nacional del Cobre (CODELCO) a state owned mining company was just beginning to use third party services, but the situation drastically changed after privatisation of the 1990s. From then on, investors in the main mining firms significantly reduced the number of permanent workers and subcontracted most of the jobs (2012:248). This, they claimed, was in order to reduce costs, modernise companies and be technologically advanced so as to continue operating and contributing to national development (2012:248). However, a recent study by the International Council on Mining and Metals (ICMM) argued that although mining creates fewer jobs compared to other industries - less than 1.5 per cent of national employment in many cases - most large mining companies pay better compared to the national average wage (2012:6).

2.2.2. Economic growth and foreign exchange

At certain historical moments mining has been an important source of economic growth and foreign exchange in many countries. Besides this, it has had the capacity to stimulate non-mining economic activities. However, this has depended upon the movement of capital, the distribution of mining revenues and the factors that affect it. The industrial revolution and the subsequent growth in Europe and America that catapulted these regions into development were fuelled by mineral resources such as coal and iron ore. Some people have wondered why mineral resources in the developing world have not had the same impetus in sustaining growth and generating other economic sectors. Some note, however, that Europe and America were not rentiers that solely lived off their resources but rather, they managed to diversify from early on, using the window of opportunity provided by mineral resources to build a more sustainable industrial base such as viable steel and textile industries (Sachs and Warner, 1997).

The problem for the developing world has not always been a lack of growth, but a lack of sufficient growth that could translate into sustainable gains. A survey conducted by Sachs and Warner (1997) of 95 developing countries showed that between 1970 and 1990, average growth of resource-poor countries surpassed that of resource- rich countries. As noted above, critics have come to refer to this as the resource curse, a thesis that became prominent in the 1990s (Sachs and Warner, 1997; Gylfason, 2001; Stevens, 2003). Sceptics however, have doubted the methodologies and indicators used in demonstrating its existence (Bebbington *et al*. 2008:5). These cynics note that it seems premature to explain variation and lack of growth of resource-rich countries in terms of resources alone. They argue that any explanation should be linked to other factors obtaining alongside resource abundance in the country, like education and barriers to trade (Gylfason, 2001:563-565). Furthermore, Gylfason notes that ‘exporting raw materials affects other economic variables such as total export, inflation and income distribution and it is these effects which indirectly reduce economic growth’ (Gylfason, 2001:567). Gylfason further argues that any explanation must be periodised in history rather than generalised (Gylfason, 2001:567). Stevens also makes a similar point arguing that economic growth is a factor of long term growth and is affected by many other variants within the economy (2003:8).

Certain factors may help growth in resource rich countries. Setting up a mining project attracts huge amounts of foreign direct investment which comes in foreign exchange and may help some countries improve their credit rating which ultimately allows them to borrow money and attract investments in other sectors (ICCM, 2012:6). However, in a neoliberal context, companies operating in developing countries spend most of the money on foreign goods and services. Hence, a significant proportion of investable money and foreign exchange does not enter these economies (ICMM, 2012:6).

As can be deduced from the above, there seems to be a wide recognition that resource dependence is bad for long term growth. However critics acknowledge that resource availability can act as a catalyst for growth which, if well managed and provided other factors are present, can be sustained over time (Stevens, 2003:7). Just as the economies of developed countries performed well at the peak of industrialisation, the economic prowess and success of the developing world the 1960s was driven by mineral resources. Unfortunately for the developing countries, this growth could not be sustained over time owing to mismanagement of resources. In this regard Sachs and Warner (1997) found that Botswana and Malaysia had good management policies and were the only ones that grew economically and subsequently did best among those surveyed.

As I noted earlier, resource dependent countries become susceptible to market dictates, such as price volatility, which can make it difficult for countries to plan for the future on the basis of resource earnings. In single commodity dependent countries, export of the main commodity affects the value of the currency making it rise and fall proportionate to the levels of export. This situation is known as 'Dutch disease'. Dutch disease was a term applied to the Netherlands in the 1960s after revenues from natural gas exports flooded the market and increased the currency (Collier, 2008; Moyo, 2009). The success of mining improves the balance of payments and the currency strengthens. The strength of the currency makes it difficult for other sectors to export their goods. The effects are that other sectors outside the resource sector are suffocated. Stevens shows that the Dutch disease has taken on new meaning to refer to 'all the negative macro-economic effects associated with the "resource curse"' (2003:11). He highlights a narrower meaning of the term such as that used by Sarraf and Jiwanji (2001), who view it as 'a failure of resource abundant countries to promote a competitive manufacturing sector' (cited in Stevens, 2003).

The characteristics of a resource curse presupposes that something is wrong with the structure and management of social, political and economic spheres of developing countries, and it is this that has made them fail to register sustained growth. Until recently, not much was said about the role that developed countries and their institutions played in perpetuating the curse. However, some writers have begun to criticise foreign capital and point to the fact that in the extractive sector in most developing countries, information on how much wealth is earned from resource exports, and by whom, is not easily accessible due to what Bracking (forthcoming) calls 'secrecy jurisdictions' propelled by big multinationals. The myriad network of companies that is a feature of new investment mechanisms and lack of clarity over ownership means that companies can change their identity at any time, thereby avoiding paying taxes. This analysis was echoed in the British Broadcasting Corporation (BBC) discussion, *Does mining benefit Africa?* which featured key stake-holders in mining at the first Mining and Investment Forum in Lusaka, Zambia. There, the former British minister and cabinet member in charge of international development and now chair of the Extractive Industries Transparency Initiative (EITI), Clare Short, argued for transparency through public documentation of mining revenue. She said:

> All over the world there has been total secrecy about the contracts, about how much production there was, about how much they really pay to the government, how much the government receives. If there is nothing to hide, let's get all of this out in the open. Let the people know what it costs, how much is being produced, what proportion of profits are being paid in taxes (July 2011).

The result of this secrecy, or lack of disclosure of earnings, is that governments are denied a source of revenue that would allow them to reinvest part of these revenues back into the economy through government spending and so improve livelihoods. Although the ICMM case study acknowledge that mining's contribution to government taxes is fuzzy and varies from country to country, they argued that some developing countries with mining activities, such as Tanzania and Romania showed an increase of eight per cent in mining's contribution to total government revenue once mining activities were fully operational (2012:6).

2.2.3. Infrastructure and social investments

It must be acknowledged that at some points in history mines have made considerable infrastructure and social investments in communities. However, as critics have argued the enclave character of mining in the developing world restricts investments to those that support mineral extraction (Breckenridge, 2008; Matti, 2010).

In Africa, the early mining period investments that companies made in communities, varied between regions, and times, and depended upon the politics and the agreements between the different groups in that society. Just as was the case with other engagements between companies and communities of host colonies or countries, infrastructure and social investments were often based on the extent to which a company was able to 'commoditise and secure property rights' (Breckenridge, 2008:7). In some countries companies embarked on a social transformation project. This resulted in the creation of 'company towns' where people would be equipped with all the trappings of modernity, and companies could be assured of a steady and reliable labour force. After the nationalisation that followed independence the situation dramatically changed. Countries could now dictate how much they wanted to invest in infrastructure and increased infrastructure spending. Following the privatisation of the 1990s in many parts of the developing world the practice of enclaving has worsened. Mining companies have responded to growing calls from communities for improved investment by emphasising that their core business is mining. In their support, some critics have argued that 'the business of business is business' (Freidman, 1962 cited in Hamman, 2003:241). However, as the resource body becomes scarce, and as communities with resources become more organised in resisting corporate domination without proper rewards, companies are being forced to increase the level of investments they make in communities.

Despite all this, questions about who has the responsibility to make infrastructure and social investments are still being asked. Arezki *et al* argue that 'the limited state capacity of many resource-based countries makes appropriate and effective investment difficult to achieve' (2012:29). They argue that not only is the government unable to 'identify, implement, and monitor key investment projects' they are also likely to be corrupt hence 'misspend and mis-allocate the resource windfall' (2012:29). Breckenridge (2008) highlights how in 1972 the Gabonese government spent US $4 billion on a railway line linking the capital, Libreville, on the coast and Franceville, in the east of the country. However, he argues, that the expensive railway line has had no 'measurable development benefit for the non-mining regions it passes through' (Breckenridge, 2008:14).

2.2.4. Environment

Woodhouse claims that 'environmental issues affect virtually all aspects of development policy' (2002:136). Mineral resources have been central to the development of many parts of the world and have been since Roman times, although this intensified with the industrial revolution and more so after neoliberalism (Thornton, 1996). However, Jenkins and Yakovleva (2006:272) note that 'the discovery, extraction and processing of mineral resources is regarded as one of the most environmentally and socially disruptive activities undertaken by business' (2006:272).

As I noted above, the process of mining involves a range of activities, from exploration and mining to consumption. Each of these activities can at times be destructive to the environment. A report by Earthworks and Oxfam (2004) found that there had been a rise of open pit mining around the world because owners and financiers discovered that it is cheaper ‘to blast away the soil and surface rock, called, “overburden”, rather than dig underground shafts’ (2004:4). As the surface area required for open pit mining is much bigger than that required to sink shafts, this creates permanent damage to expansive landscape and vegetation (Dambwizi, 2009). The report goes on to claim that ‘open pit mines produce 8 to 10 times as much waste rubble as underground mines’ (Earthworks and Oxfam, 2004:4). The amount of solid waste left after treatment, depends on the mineral being mined. However, in most countries several years of large scale mining means that the amount of ‘waste created per unit of recovered metal’ has increased as high grade ores are depleted and mining turns to lower grade ore (Earthworks and Oxfam 2004:4). As the disposal of waste can be expensive, most mines are known to dump waste, either by creating ‘tailing dams’ which are in communities or by pouring it into rivers. Pouring waste in rivers not only pollutes marine life but can set off a dangerous food chain which if it gets to humans can be fatal. The Oxfam report gives examples of the Omai Gold mine in Guyana and two mines in Peru whose communities have suffered terrible consequences because of waste material from mines (2004:5-6).

In the treatment process of certain heavy metals such as gold and copper, certain chemicals, such as cyanide, are used. According to the report, a rice grain of cyanide, if not disposed of properly, can be fatal to those nearby (Earthworks and Oxfam, 2004). Furthermore, mining is responsible for 13 per cent of sulphur dioxide emissions’ (Breckenridge, 2008:9). Sulphur dioxide causes acid rain which is destructive to crops. Most importantly, it is harmful to the physical health of people if inhaled.

2.2.5. Extractive behaviour of mines

Once extracted, minerals cannot be replaced and unfettered extraction that has intensified in the wake of neoliberalism inevitably leads to problems, especially as mineral resources slowly deplete. Therefore, from the point of view of mineral resource dependent economies, the point that needs to be addressed is how abundant mineral resources can be used to build more sustainable economies. Hammersley argues that minerals development and sustainability are incompatible because of the very fact mining is ‘a form of development that takes away rather than adds to’ (1993: xiii). However, he also recognises that mineral extraction can be reconciled with sustainable development as long as it is done in a socially, economically and politically acceptable way. He makes the point that is made by proponents of mining-driven development that mineral extraction itself can strengthen the ability to develop in a sustainable manner (1993: xiii). Closely related with this view, Jenkins and Yakovleva (2006) also note that continued extraction and sustainability can exist side by side. They state: ‘depletion of mineral resources should be compensated by generation of new wealth, which, in the form of useful lasting capital, can benefit present and future generations’ (2006:271). They are of the view that mineral depletion may not be an issue in ‘the foreseeable future due to the possibility of recycling many non-fuel metals and minerals’ (2006:271). They contend that advancement in technology and the discovery of other new mineral deposits will ensure the survival of future generations (2006:271). However, the report by Earthworks and Oxfam (2004) dispels the basis of these assertions. Using gold as an example which could help put things into perspective with other minerals, the report argues that, of all the gold in storage or use about two-thirds of it came directly from the earth and only a third came from recycled material (2004).

A large part, (over 60 per cent on average) of most developing countries income comes from mineral exports (ICMM, 2012). Therefore, sometimes the immediate needs of supporting livelihoods may be more important than conserving them. Echoing this view, Arsel and Angel (2012) and Huckle (1996) both argue that policies that limit exploitation and protect reserves are often outweighed by current needs and market demand. Therefore, as long as there is demand, local policies will inadvertently be designed to guarantee that demand. Arsel and Angel (2012) show how in Ecuador, even where ownership of mineral resources is in the hands of the government with proclamations of being in the interests of local people, there is still continued extraction with no reduction in the negative effects on the environment.

2.3. Conclusion

In developing contexts mining has had contradictory outcomes on broader development. On the one hand it has driven economic growth which at times has been related to broader benefits such as wages, social investments, expenditure on infrastructure and economic diversification. On the other, however, profits are spirited away from the host country before they can be taxed, employment can be exploitative, there is little social expenditure or investment in infrastructure and little is done to offset environmental devastation. Thus the relationship between mining and sustainable development depends greatly on a variety of factors such as the regulation or deregulation of ownership, capital flight, the labour market, and trade. In the next chapter attention will turn to focus on how some of these issues have affected Zambia.

3. Evolution of mining in Zambia.

3.1. Introduction

There are three very important periods in the political economy of Zambia that put into context the influence of copper mining on development discourse. The first is the colonial period during which copper mining began, in the late 1920s. The second is the golden age of capitalism which coincided with the country's independence in 1964. The third is the economic crisis that started with the oil crisis of 1973, leading to a recession later that decade, and spiralling debts. For the most part this debt crisis was the root of the structural adjustment programmes of the late 1980s and 1990s.

3.2. Colonial period

The British interest in what was then Northern Rhodesia stemmed from the extraordinarily rich copper resources that were discovered in what is now called the Zambian Copperbelt. Interest was further fuelled by the increasing global copper prices (Fraser, 2010). This spurred social, economic and cultural transformations, most importantly the annexation of Northern Rhodesia as a British protectorate and colony in 1924 (Fraser, 2010). The impact of this on people continued to independence and depended on race and status. Despite this, Ferguson (1999) contends that the language of development was apparent in the reasons why so many Zambians migrated to 'urban' areas to seek employment in the mines. Like MNCs themselves, academics, mostly foreigners – like the anthropologists and sociologists of the Manchester School, drawn to Northern Rhodesia by changes brought by mining activities - explained this movement as a desire to 'adapt'. To them this was a 'liberal affirmation that the African was becoming an urbanite' and this 'was an affirmation of modernity' (Cooper, 1983 quoted by Ferguson, 1999:5). But most importantly, social scientists saw this affirmation of modernity as a desire to be like the West, and, as this was being driven by the mining industry, it echoed the West's own rise to become the symbol of modernity (Ferguson, 1999:5). This kind of reasoning has continued to the present day. Greig *et al* (2007) have argued that such social transformations as occurred at the time would be understood as development and modernity. Referring to Marxist perspectives, they proclaim that Karl Marx was 'in awe of the revolutionary transformations that modern capitalism brought in its wake, transforming cultures, dissolving superstition and drawing pre-capitalist cultures into the orbit of modernity' (2007:55).

In terms of how work was conducted, Fraser (2010) refers to Epstein, who documents how the initial stages of copper mining may have been distressing for local people. He highlights the strenuous conditions that local workers worked under, such as carrying heavy machinery in difficult terrain that their white superiors, unfamiliar with the surroundings, thought untameable (Fraser, 2010:4). Despite these hardships, in 1926, the industry was a source of 30,000 jobs for Africans and about 4,000 skilled jobs for whites (Larmer, 2010:32). However, this 'progress' was halted following the depression of 1929 which saw massive job losses, especially for Africans. As soon as the depression was over, estimates suggest that the mines were responsible for nearly 60 per cent of all men in formal employment working as waged labourers in Northern Rhodesia (Larmer, 2010).

Despite the apparent benefits, such as the jobs provided for local people, critics argue that trickery surrounded initial concessions, firstly between local chiefs and the BSAC, and as the importance of local chiefs waned, between the BSAC and the two major mining companies, Roan Selection Trust and Anglo American Corporation (Simutanyi, 2008). These agreements and the resultant mineral rights created a system which was designed to satisfy external markets and interests rather than fulfilling local needs and helping to create conditions necessary to promote and prolong local capital accumulation (Simutanyi, 2008; Bush, 2010). Larmer notes that, at this early stage of mining, the main purpose of the mines was to provide for the interest of white settlers at their headquarters in Salisbury in Southern Rhodesia, in what is now called Zimbabwe (2010:34). Furthermore, as profits were siphoned out of the territory, they were deposited 'into the coffers of the international companies that owned the mines' (Larmer, 2010:34). The only time financial rewards were given was when colonial masters distributed money across their colonies allegedly for developmental purposes, but even then, the main local beneficiaries of this gesture were white settlers (Larmer, 2010:4). Indigenous Africans were only rewarded as a way to placate them as they became increasingly rebellious (Larmer, 2010). This could have been buoyed by the growing possibility of independence.

Larmer (2010) further argues that throughout the colonial period mine owners and the colonial administrators did not take interest in the wider development of Northern Rhodesia. This view is contradicted by Breckenridge who notes that following Sir Ernest Oppenheimer's promise in the

1920s that Anglo, the biggest investor in the Copperbelt mines at the time, would ‘take a leading part in the progress of Rhodesians’, massive investments in infrastructure were made between 1940 and 1960 (2008:12). On the Copperbelt, Anglo purchased ‘L5, 000,000 of rolling stock rented to the state railways’ and provided a ‘L20, 000,000 loan, and a further L10, 000,000 power surcharge levied on the mines for the financing of the Kariba hydro-electric dam’ (Gregory, 1962 quoted by Breckenridge, 2008:12). Furthermore between 1948 and 1964, government, in collaboration with mining companies, funded the construction of 100,000 houses which influenced the creation of company towns on the Copperbelt (Breckenridge, 2008). Throughout the 1940s and beyond, copper mining continued to be the most important source of the colonial state’s ‘development’ efforts (Breckenridge, 2008:12).

Despite the positive gesture, the claim by Anglo to contribute to the ‘progress’ or ‘development’ of the region could be viewed with scepticism given, as Larmer (2010) suggests, they did not consistently provide money directly to the state until immediately before independence. These acts of good will which included other welfare benefits such as food subsidies were given only for the benefit of mine employees and were not provided to all Zambians. The desire by the mining authorities was to build a ‘modern’ African family that would provide a stable permanent pool of workers (Breckenridge, 2008:12).

3.3. Independence

Although acquiring independence in 1964 presented an opportunity to reorganise economic structures, political concerns attracted more attention and may have surpassed economic concerns as matters of national interest (Breckenridge, 2008). Larmer echoes this by saying that the primary demand of the leaders of Northern Rhodesia was ‘indigenous control of political institutions rather than the wholesale redistribution of wealth’ (2010:34). However, in order to be successful politically and continue implementing development programmes, leaders needed to continue obtaining revenues from mining. Thus copper became even more central to the development plan of the newly independent Zambia. Green (2009) notes at independence in 1964, Zambia’s status as a middle income country with prospects to develop into an even more prosperous nation was because of its rich copper deposits.

Tables 2 and 3 below highlight how output in the mining industry can be linked to overall economic growth.

Table 2: Sector contribution to GDP, 1990 to 2005 in per cent of total GDP

Sectors	1990	1998	2000	2005
Industry(mining)	11	7		7
Agriculture	50	70	72	72
Services	23		23	21

Source: World Bank

Table 3: Trends in copper production, 1973 – 2006 in tons

Year	Tons
1973	750,000
1980	550,000
1991	400,000
1992	441,000
1993	402,950
1994	360,347
1995	275,000
1997	263,000
2000	200,000
2004	398,000
2005	467,000
2006	600,000

Source: Simutanyi (2008)

Economic growth in Zambia is inextricably linked to the copper industry. Hence, decline and increase in copper production alternate with decline and increase in overall economic performance and this is demonstrated by Zambia's economic history. For example, between 1969 and 1976, the heyday of independent Zambia's copper production, production averaged 700 000 tons per annum. These high levels also spurred economic growth. The tables above reinforce this. They show that between the periods 1970 to mid-2000 a decline in copper production was almost always followed by a decline in overall economic performance. During this period overall GDP growth averaged 1.4 per cent, and this was blamed on among other things low levels of investment in the copper mines (Langmead and Barker, 2006:27). Related to this, exogenous forces such as copper price, also affect production and ultimately its contribution to growth. It must be noted that determining prices is outside the control of internal mechanisms, although it affects how much employment is created and foreign exchange earned. Stephens reports that the price decline after 1973, which coincided with increased government control precipitated wider economic decline (2012:7). As tables 2 and 3 above show, around the same time, copper production dropped from 750, 000 tons in 1973 to 550, 000 tons in 1980. Unfortunately, as Adam and Simpasa argue, the relatively small size and contribution of Zambian mining companies to world copper output means they cannot influence market forces and hence are always ‘price takers in the global market, a market that is very difficult for small producers’ (2010:59).

In order to realise the goals that had been set at independence, the Zambian government at the time embraced nationalistic principles prominent on the continent in the 1960s. The ideals involved partial nationalisation of all companies beginning in 1969, followed by full nationalisation and the creation of the philosophy and programme of *Zambianisation* in 1972. Economically, the idea behind this approach was that all sectors of the economy had to reflect indigenous ownership and involvement at senior levels, and, by so doing, increase the benefits accruing to the Zambian economy and people (Breckenridge, 2008). Socially, unlike the situation regarding Anglo’s contribution to infrastructure in the 1930s which was mainly for the benefit of miners, post-independence welfare provision was not just for miners but went beyond to include non-miners. Using the mines as a cash cow, the government attempted to create a cradle to the grave type corporate social responsibility welfare system (Simutanyi, 2008). The situation was more pronounced in mine communities where free medical services, recreational facilities and education were provided and sometimes food was distributed. The mines even provided nappies to parents of newly-born babies and coffins when a mine worker or a mine worker’s relative died (Simutanyi, 2008:9).

Most commentators on mining in Zambia, including Ferguson (1999; 2006) and Fraser (2010) recognise that the economic success and the wealth amassed in the early part of nationalisation, which was mostly because of the successful mining industry, was significant in how people on the Copperbelt perceived themselves as members of the global modern world. However, Adam and Simpasa, highlight that this period marked the beginning of an economically disastrous three decades of state involvement in the mines (2010:64). The intermeshing of, on the one hand, state involvement and a government eager to please its public, guaranteeing employment and remaining extremely dependent on mines as the only source of capital, and on the other, unfavourable market conditions for copper, proved detrimental to the country's economy. From the successes of having 'one of the highest GDPs in Africa, three times that of Kenya, twice that of Egypt, and higher than Brazil, Malaysia, Turkey and South Korea' in 1969 (at the peak of nationalisation) by the late 1970s, the economy had deteriorated, a situation made worse by the oil crisis and the recession in the mid-70s (Fraser, 2010:6).

Despite the difficulties in the economy caused by low growth prospects amid falling copper prices, still exuberant with the enthusiasm of independence, the government continued its elaborate efforts implementing welfare and development programs. Simutanyi, for example, shows that between 1969 and 1975 the government made unprecedented investments in the construction of new schools, hospitals, and roads (2008:2). And even though, as Nyambe and Kawamya (2005) show, copper production rose around the same time, as the state tried to maintain the minerals' contribution to national revenue, the dramatic fall in prices on the international market were too severe to buffer the country from shocks and sustain the high levels of investment that were being made in infrastructure. Thus the state had to find new sources of money. The country's foreign reserves were fast depleting and insufficient to keep up with such high levels of investment. As reserves dried up, government borrowed heavily and the country experienced periods of high inflation and a plummeting currency (Van Donge, 2009:74).

3.4. Zambia in the 1980s: Structural adjustment programmes

In June 1980 the then president of Zambia, Kenneth Kaunda, said, 'We were born, unfortunately, with a copper spoon in our mouths' (*Zambia Daily Mail*, 22nd June1983 and cited in Simutanyi, 2008). Kaunda's remark echoes the English expression 'to be born with a silver spoon in your mouth'. This saying is used when describing someone who is 'spoilt' because they come from a privileged background where everything is given to them on a plate, and has never had to come to terms with the harsh realities of ordinary life or had to really work for their living. Kaunda was speaking on the back of a difficult period in the 1970s. These difficulties would culminate in the near collapse of the Zambian economy in the 1980s, and eventually, Kaunda's downfall. It was a situation that had reversed the bright hopes that were the talk of the day in the exuberance of independence. As stated earlier, at independence in 1964, Zambia was judged to be a middle-income country with all the hallmarks of a prosperous nation (Green, 2009). Yet by 1980 the country's economy was not just worsening, it was becoming one of the poorest in the world.

The government responded to this by increasing their participation in the running of economic affairs. Though not a complete welfare state, Zambia operated a basic needs approach to development, subsidising food, agriculture products and other requirements and administered a strict price control regime (Kalinda and Floro, 1992). But, as the economy continued to decline, state involvement presented more challenges than solutions. Kalinda and Floro (1992) argue it hampered entrepreneurial dynamism and limited the ability and capacity of people to create capital locally. They further note that, during this period access to 'capital and intermediate consumer goods' became scarce and outside the reach of many people (1992:7). The result was overwhelming dependence on imports. To fend off the effects of this predicament the government adopted 'import substitution and high protection of domestic industry' (Kalinda and Floro, 1992:7). The main objective of this measure was 'to facilitate industrialisation by providing the environment for the so called "infant industries" to grow' (Kalinda and Floro 1992:7). However, this 'brought little change in the low productivity level at which most enterprises were operating' (Kalinda and Floro, 1992:7). Short term successes such as increased number of jobs for locals were recorded. In the long term, it stifled growth, and lack of competitiveness in these industries resulted in the production of substandard goods. The success of import substitution was dependent on the continued rise of copper prices which would bring new capital (Kalinda and Floro, 1992).

Inability to generate capital and lack of new investment in the mines accelerated the demise of the mining industry and the broader economy in the 1980s. The government continued to borrow heavily from donor countries and IFIs. Having tried several locally driven reforms with cuts in certain subsidies, without yielding the desired results, the government tried to access much needed capital (the only possibility being more loans). As a precondition, and as elsewhere in the developing world, the government was required by potential funders, notably the IMF and World Bank, to embark upon profound restructuring of the political and economic landscape. These reforms were known as SAPs. The idea behind them was that fundamental adjustments of the Zambian economy would bring them in line with global conditions and accelerate growth and development. Hence, the late 1980s economic and political spheres were dominated by debates about whether or not to adopt SAPs.

The most important idea underpinning the SAPs was the neoliberal orthodoxy couched within the language of globalisation. To most Zambians this was supposed to be the start of a new era of 'development'. To advocates of SAPs such as the IFIs this was 'the only game in town' (Bush, 2010:240). They claimed that if developing countries like Zambia were serious about ending poverty and developing their economies they had to do whatever they could to be 'properly integrated into the world economy' (Bush, 2010:240). Furthermore, they were of the view that poor countries' governments should not interfere in the economy as this would destroy the conditions necessary for rapid economic growth, while if they privatised they would be able to bring in a flood of new private capital investments (Ferguson, 2006:11). The IFIs argued that the economic climate of the time was not conducive for growth as the Zambian government, like most African governments, was too large, inefficient and corrupt. To these agencies, creating suitable conditions for growth meant deregulating the domestic economy and integrating trade and resources with the corporate dominated world economy (Bush, 2010:240).

However, Cammack has questioned how well SAPs 'forced' on the developing world were thought out, since the main proponents, the IFIs, although principally intending 'to reduce poverty and other inequalities', are also 'faithful to the disciplines required for capitalist accumulation on a global scale' (2002:157). He argues that the interests of capitalist development are at odds with egalitarian grassroots development. Capital interests include:

> authority of capital over labour, the unimpeded operation of capitalist markets for labour….the receptiveness of governments to the needs of capital, the presence of domestic and global regulatory orders capable of reinforcing the disciplines

> essential to capitalist production and the dissemination of ideologies justifying capitalism and dismissing alternatives (2002:159).

Thus sceptics such as Cammack (2002) and Nyamnjoh (2000) have come to see neoliberal policies as simply a way of ensuring easy access to the resources of the 'Third World'. Sharing similar sentiments, Ferguson argues that this 'new paradigm' was principally about 'getting African governments to accept, implement, and legitimate policies made in Europe and North America largely in the interests of Western banks' (Ferguson, 2007:83). Closely related to these views, Rowden notes this 'rapid, across-the-board, premature trade liberalisation....has in fact led to the destruction of many existing industries, particularly those that were at their early stages of development entailing massive job losses without necessarily leading to the emergence of new ones' (2011:508). He quotes estimates of the United Nations Conference on Trade and Development (UNCTAD) that suggests that 'total income losses for Sub Saharan Africa from trade liberalisations amounted to US $270 billion over the past two decades' (2011:08). The most high profile dissenter has been Joseph Stiglitz, a former World Bank employee who has now become an ardent critic of his erstwhile employers (see *Globalisation and its Discontents* 2002). Although appearing to offer a balanced view, for the most part he criticises the IFIs and developed countries calling them 'the faceless symbols of the world economic order' that 'are under attack everywhere' (2002:3). Referring to former French president Jacques Chirac, Stiglitz notes that even conservative politicians have understood that 'globalisation is not making life better for those most in need of its promised benefits' (2002:3). He goes on to state 'It is clear to almost everyone that something has gone horribly wrong' (2002:3). These views show that, although some influential entities of society are adamant that easy flow of capital can be a remedy for many of the problems that developing countries experience, they are silent about its contradictions, the poverty and inequality that is created (Cammack, 2002:160).

There was controversy surrounding adoption of SAPs in the latter part of the 1980s and early 1990s, with political parties, civil society and international bodies vying with one another. This suggests that some sectors of society strongly believed that Zambia's economic decline of the period was due to declining copper prices and lack of investments in mines rather than what others perceived as extreme neo-liberalism. The continued underperformance of the mining sector and the economy throughout the 1980s resulted in hardships for many, leading to civil strife and political tensions. Most of these were driven by unionised workers. This marked the beginning of the end to the one party rule that had been in place almost since independence. On the economic front, in 1989 the government reengaged fully with the IMF and World Bank, having rebelled against reforms and broken-off relations earlier in the decade. The change of stance by the government from its earlier position was marked by accepting the appointment of an IMF approved expatriate governor of the Central Bank of Zambia (Adam and Simpasa, 2010:64).

3.5. 1990 to present

Two decades of economic decline attributed to an underperforming mining sector made the transition to multiparty politics and a change of government in 1991 inevitable. The 1990s would be a period in which reforms that had been tried in the 1980s without much success would come to be implemented, helped by the ever growing role of the IMF and World Bank. A new party, the Movement for Multiparty Democracy (MMD), came into power largely on the promise of economic improvement for the majority and the adoption of SAPs (Larmer, 2010). Although highly contested, the Zambian government adopted these measures. As a reaction to adopting SAPs some successes such as the short-term stabilisation of inflation were achieved (Larmer, 2010).

The most controversial of all the SAPs was the privatisation of parastatal companies especially the mining conglomerate ZCCM. The need for privatisation of the mining industry was premised on the basis that it would promote overall 'growth with equity, development with justice, and sustainability with employment' (Bush, 2010:238). However, for the IMF and the World Bank privatisation was non-negotiable. They *demanded* privatisation, as a former finance minister Edith Nawakwi remonstrated:

> We were told by our advisers who included the International Monetary Fund and the World Bank that not in my life time would the price of copper change…. [Conversely, if we privatised] we would be able to access debt relief, and this was a huge carrot in front - like waving medicine in front of a dying woman. [We had no option but to go ahead] (Dymond *et al*. 2007:6).

Dissenting voices within the country saw it as an imposition of outside influence on Zambia by IFIs for the benefit of capital. From early on, with many anxious to see the immediate benefits of privatisation, even before the whole process was complete, sceptics argued that private capital had failed to bring in more investment in all sectors of the economy, and that investor interest was limited to mining. They further argued that this neoliberal logic or market fundamentalism only exposed Zambia to more exploitation especially with regard to development agreements which enhanced the process in which resources were obtained for a pittance (Fraser, 2006).

If the nationalisation period gave Zambians a sense of ownership of their resources and made them feel powerful, the process of privatisation reshaped power relations between the state, its people and mining companies and redefined companies' economic, environmental and social responsibilities. Most notable in the shifting power base was the way the government gave 'unnecessary concessions to the mining companies' (Green, 2009:5). These concessions, known as 'development agreements', were not signed on a level playing field but were designed to cajole and persuade mining companies to invest in Zambia, at whatever cost and with little regard to local people. The point of these agreements was to exempt new owners from liabilities incurred by the former mining conglomerate ZCCM, such as pensions for employees, taxes and laws on pollution (Fraser and Lungu, 2006). Many people argued that the agreements were characterised by unfavourable concessions and the periods involved were considerable, most of them ranging between 15 and 20 years. The most controversial parts of the agreement were that companies would enjoy below par royalty taxes of around 3 per cent, compared to the widely used 5-10 per cent, while in some countries rates were going as high as 30 per cent. Other agreements included the notion of price participation. The idea behind it was that the government would forego their claim on 'the difference between benchmark price and current price' of copper (Dymond *et al*. 2007:7). A limit was placed on how much price participation the government was entitled to during the lifespan of a mine (Dymond *et al*. 2008:7). Worse than all this, there were no agreements in terms of the use of mining revenues and sharing of profits or employment creation. As a consequence, money that could otherwise have been used to generate wealth locally, for example by lending to businesses, was siphoned off to the countries of investors. This would again lead to shortage of capital as had happened in the 1980s. Most mines were also accused of contracting workers from investors countries' of origins.

As the finance minister Nawakwi stated above, other factors that made privatisation of mines inevitable according to the IFIs were the unfavourable market conditions particularly the low copper prices which resulted in the country experiencing the lowest growth rates in the region, and comparable to the late 1920s depression (Erdman and Simutanyi, 2003:63). Prices during the 1990s were around the lowest they had ever been. However, since privatisation periods of low prices have resulted in employers reducing the number of employees in companies. It has also led to investors pulling out of the mines leaving it to government to sort out the consequences of their actions. This has been devastating in a country where 90 per cent of all foreign earnings and jobs have historically come from the copper industry. Growth rates in the 1990s were on average less than 1 per cent, the lowest among the Southern African Development Community (SADC) countries which had been growing at around 2.8 per cent, except for South Africa (Erdman and Simutanyi, 2003: 63). As an effect of low growth, unemployment and inflation soared, with ‘per capita incomes 50 per cent less in 1999 than they had been 25 years earlier’ (Green, 2009:1). In this bleak economic outlook the World Bank (2003) reported that Zambia’s position on Human Development Index (HDI) had dropped from 130 in 1975 to 163 in 2001.

Before privatisation, government could use tax from mining companies with little opposition. After privatisation with the government’s grip on power loosened, it became more difficult to easily access cash from copper sales. To increase the amount of money government was getting from mining companies and to counter the problems of previous governments’ mismanagement and lack of accountability, a proper tax regime, a modern system of taxes and royalties targeted at mining companies was introduced in 2008. This would add nine per cent to government revenue (Green, 2009:2). However, as the Financial Times reported, even this new tax system was ‘no harsher than standard rates worldwide’ (Green, 2009: 2). Dymond *et al* further note that revenue transferred to the Zambian government has possibly been the lowest compared to other mineral rich countries. They give the example of Botswana that gets up to as much as 70 per cent from its mining companies in taxes (2007:6).

Some observers have credited privatisation with bringing new technology and creating some jobs by prolonging the lifespan of mines and reprocessing old copper waste dumps. Others are sceptical about the quality of employment that has been created. The number of jobs created is also highly disputed. Sceptics of privatisation are of the view that, despite some supposed benefits, privatisation has made inequality thrive. New companies are accused of pollution and a callous disregard for environmental matters and causing the displacement of local people. In the decades following the advent of mining and through the independence period, Simutanyi (2008) argues that there is no evidence to suggest that environmental concerns formed much of the debate on mining and development in Zambia. If they did, then they might have been overlooked in favour of attracting foreign investments (Simutanyi, 2008). The Open Society Initiative for Southern Africa recently documented how in the Copperbelt town of Mufulira 'the mine's huge chimneys belch fumes into the sky, water sources are polluted by runoff from the mines as well as by raw sewage and waste from the community' (Lee, 2012). Although mining companies are reportedly making huge profits due to the demand for Zambia's copper, they do not clean up their mess.

3.6. Conclusion

This chapter has highlighted how the mining industry has evolved in Zambia from colonial times through a series of stages to the recent neoliberal era. Each of these stages has had varying developmental impacts and challenges. The rich copper resources of Northern Rhodesia attracted British colonial interest, though beyond extracting copper and other minerals, little was done to support wider development. At independence in 1964, for example, fewer than one thousand Zambians had completed secondary schooling (Mwanakatwe, 1968). The great expectations of the early independence period were soon to be dashed, only to be replaced by a mood of abjection in a time of severe economic decline (Ferguson, 1999) and followed by the promotion of SAPs by IFIs, which have constantly occupied an ambiguous position (Cammack, 2002). The adoption of SAPs entailed the privatisation of mining under extremely unfavourable market conditions. Among the consequences of this was the decrease of government control over mining companies that resorted more to 'core business', to the neglect of a sense of social responsibility with dire social and environmental consequences. At the African Growth and Opportunity Act (AGOA) Summit held in Lusaka in June 2011, United States Secretary of State, Hillary Clinton is reported to have said: 'it is easy, and we saw this during colonial times, it is easy to come in, take out natural resources, pay off leaders and leave. And when you leave, you don't leave much for the people there. We don't want to see a new colonialism in Africa' (see Taye, Ethiopian

Times 2011). As Clinton noted, a view which could be supported by many in Zambia, the role that foreign forces have played is highly contestable. Although some may see it as development, to others it evokes bad memories of colonialism and the continuation of primitive accumulation, a history of dispossession and exploitation (Singh, 2012).

4. Methodology

4.1. Introduction

This dissertation has tried to demonstrate that mining can have a contradictory set of impacts on development: livelihoods and employment, social expenditure, infrastructure investments, versus, extraction, environmental destruction, and suppressing economic diversification. In the case of Zambia, we have seen how the evolving structure of the industry, from British Protectorate to nationalised independence, to structural adjustment, relates to changing development impacts. The purpose of this chapter is to investigate how contemporary Zambians, particularly those currently entering the job market, position mining within the broader story of development. In order to do this I spoke to 14 people. These comprised seven young men and a young lady at university, three older men, who had previously worked in the mines and two female and one male lecture at a local university.

This research applied a qualitative methodology taking the form of semi structured interviews. These interviews were conducted in Kalulushi on the Zambian Copperbelt. In addition, documentaries, newspaper and academic articles contributed to data collected for this exercise. Being born and raised on the Copperbelt, I have ardently followed the activities in the copper mining industry in Zambia and rarely a day goes by without a story in the media either calling for the government to introduce some form of taxes or to scrap them. Copper mining has also formed the stuff of songs and politics.

Discussions on qualitative research normally centre around its reliability or validity as a method of inquiry or conducting research, in comparison to other paradigms such as quantitative research. Unlike quantitative research, which others see as more reliable in as as much as it is quantifiable, qualitative research is less so. However, Guba and Lincoln have challenged these assumptions identifying several weaknesses with quantitaive research. These range from ‘context stripping’, ‘exclusion of meaning and purpose’, ‘disjunction of grand theories with local contexts: the etic/emic dilenma’, ‘inapplicability of general data to individual cases’, ‘exclusion of the discovery dimension in inquiry’ to eliminating the vital interaction between inquirer and inquired (Guba and Lincoln, 1994:105-107). However, in an effort to give qualitative research credibility, Creswell and Miller (2010) denote that critics sometimes implement certain procedures. These range from ‘member checking, triangulation, thick description, peer reviews, and external audits’ (Cresswell and Miller, 2010:125).

Table 4 List of participants

	Participant	Approximate age	Gender	Occupation
1.	Constantine	23-25	Male	Student
2.	Muyunda	23-25	Male	Student
3.	Chooma	23-25	Male	Student
4.	Lundu	23-25	Male	Student
5.	Chipo	23-25	Male	Student
6	Paul	23-25	Male	Student
7.	Gloria	23-25	Female	Student
8.	Patrick	23-25	Male	Student
9.	Emmanuel	27-30	Male	Mine employee
10.	Manda	60-70	Male	Former Director
11.	Chanda	50-60	Male	Lecturer
12.	Robert	50-60	Male	Former mine workers (MUZ) Chairman
13.	Mwama	55-65	Female	Lecturer
14.	Petra	55-65	Female	Lecturer

4.2. Data size and limitations

This data set is not a good sample or a proper representation of the demography of the people in Kalulushi. It is not balanced in terms of gender or age. The reason for this is because at the proposal stage of my dissertation, I was interested in having two dimensions to data collection. These were to be based across age and class. My thinking was that such a distinction could highlight different perceptions. For example, whereas educated senior employees are able to change jobs easily when the mines can no longer sustain their livelihoods, this is more difficult for less educated employees and younger people. After consultation and in trying to narrow the focus of the dissertation, I was advised that I should perhaps concentrate on young people as new entrants into the job market, a market with very few jobs. At a time of great challenges for most developing countries and as revolutions, started by a youth in Tunisia, swept across parts of the Arab world, a dissertation that captured some perceptions of youth felt like a good area of research.

Fokwang quoting Furlong and Durham (2000) notes that ‘more often than not, ethnographies of Africa have treated “youth” as a supporting category rather than a subject of exclusive inquiry’ (2006:69). He goes on to say that although the youth have not been given much voice by academia, the social contexts and structures they find themselves in demand otherwise (2006). As this dissertation has a specific focus on perceptions of youth, and although I interviewed mostly university students, I also interviewed university lecturers, and other people who had worked in the mines who I thought could provide important information.

Having conducted 14 interviews, I felt that the themes that were emerging were extremely uniform. I interpreted this to be that people had the same anxieties or with regards to university students that they were a homogenous group. They all went to the same university, were from similar backgrounds and were around the same age. Hence, it was perhaps not surprising that they had very similar views. But could it also have been a point of theoretical saturation? While there ‘are no definitive rules for determining saturation’ it can be identified as ‘the point at which no new insights are obtained, no new themes are identified and no new issues arise regarding a category of data’ (Straus and Cobin, 1990 quoted by Bowen, 2008:140).

4.3. Ethical and methodological considerations

In as much as I was interested in talking to young men and women, it was more difficult to arrange interviews with young women. When I tried to meet with them, most of them asked me what the interview was about and once I told them, they claimed they did not know enough about mining to have an interview. It was easier for me to get access to male university students than to those going to work. I felt they were more comfortable being interviewed when they were all around rather than individually. In fact, as I invited them for tea one afternoon to set up interview dates and explain the purpose of my interviews, I found them more outspoken and at ease and, in hindsight, perhaps even more so than during the actual interviews. I arranged interviews for the following week but I was forced to postpone our meetings until they were available. In the end, most of them agreed to be interviewed on the same day over one weekend. I negotiated for two consecutive days, the 17^{th} and the 18^{th} of December 2011.

Even if this was not a particularly sensitive topic, I have used pseudonyms in table 4 above, to protect the true identity of my respondents. I also clearly explained my purpose at the beginning of each interview and told respondents that they were not obliged to answer any questions they did not feel comfortable with. Furthermore, I made it clear to them to feel free to respond in any language they felt comfortable in. I felt I had to be careful in the way I represented this issue so as not to make my respondents feel like I doubted their ability to speak English – a high status language in Zambia, and where the ability to speak it can sometimes denote the difference between educated and uneducated people. Clearly, this could be a sensitive subject. I appreciated this and did not want my respondents to feel I was profiling them. However, I did not anticipate how difficult it would be to translate technical phrases like 'sustainable development' into vernacular. The difficulty of translating certain words that respondents may have faced became apparent to me when I specifically asked respondents - in the interviews - to explain sustainable development in their own language. In a lot of the interviews I did not get an explanation and when I asked the question again, many responses were 'I don't know'. I also noticed that none of the answers were completely in vernacular or English from start to finish. Instead respondents would engage in what sociolinguists term 'code switching', switching from one language to another on explaining a point. However, most of the interviews were in English.

Mcnamara (2009) cited by Turner 2010 makes a number of recommendations to conducting successful interviews one of which is interviewer neutrality. I must acknowledge that at some points during interviews I struggled to divorce my personal feelings and knowledge of the place from what some respondents were saying. However, I tried not to let this affect my data collection by following my interview guide and set questions. Also I may have been helped by the fact that the views of most of my respondents closely resembled mine. Sometimes I felt I expected a certain answer and was a bit disappointed when I got a different answer. For example, I asked one miner whether he understood what was meant by ‘copper is a wasting asset’. Having gone to the same school as him, where this formed a big part of our social studies and environmental classes, I was disappointed when he said he had not heard of it.

4.4. Interview process

The interviews I conducted took the form of a general interview guide, standardised open and sometimes informal conversations. Informal conversations were not part of the planned methodology but only emerged due to circumstance.

To what extent was it necessary to distinguish between having an intellectual or academic conversation which in the academic arena is known as a general interview guide approach, and what is called an informal conversational interview, what I think of as a merely social conversation? For me, what was crucial was where I was likely to get good data. As some critics have argued, ‘Predesigned and structured instruments blind the researcher to the site. If the most important phenomena…. at work in the field are not in the instruments, they will be overlooked or misrepresented’ (Henry, 1998:35).

The interviews took the form of asking questions I had prepared. However, I was unfamiliar with conducting interviews. Even though I had tried to practice before-hand, I realised that interviewing people I hardly knew would be quite different from the small amount of practice I had had. I was thus a little apprehensive, particularly with my planned interviews with university lecturers. Here I knew I would be faced with people who were not only older than me but who, I thought, would have a tendency to be domineering, given the fact that they are lecturers and are used to being ‘in charge’. As it later turned out, my anxieties were sometimes baseless.

Taking note of the way I have used interviews raises consideration of their importance, a reflection of how I conducted them, how I might have been perceived by my various interlocutors. Robson (1993:228) calls the interview a 'conversation with a purpose' and Kvale (1996:5) calls it a 'professional conversation'. Not all interviews are asymmetrical in terms of power and control. They are often the result of a negotiation and ideally create a space in which interviewer and respondents are equal partners in the construction of meaning. The interview is a very specific kind of cultural performance. My experience in conducting interviews revealed how respondents differed considerably in their experience of interviews and their expectations of how our encounter might proceed. University students were different from their lecturers, for example, in the way they seemed to perceive me and my purpose. The former ZCCM director and the former MUZ chairman appeared to be much more articulate, more knowledgeable and much more at ease than the young miner.

As became apparent when I started the interviews, the mention of the word 'interview' meant people felt they had to assume a different tone to suit the occasion. Sometimes, at the mention of interviews respondents assumed a certain amount of seriousness, no matter how much I asked them to relax. Others, however, became extremely relaxed and would fidget and even answer a phone call mid-interview, which made it difficult when recording. During one of the interviews with a student, at the end, having turned off the recorder, I asked him if he had any advice for me and then he said, 'Oh, yah here let me just speak the truth and tell it as it is'. He then proceeded to give me a more candid response. My view was that despite the importance I attached to the information I was collecting, by taking on a simple and relaxed tone I would benefit more and gain richer information.

I found most interesting things were revealed in an informal conversation without all the formalities of a general interview guide approach or a standardised open ended interview. I think that is because once people felt they were not being recorded they felt at ease and free to speak their minds as may be perceived from the comment of the university student above. It is possible that recorders make respondents feel they have to give their best and most intelligent answers. In fact, one very important conversation I had was with a former mine worker who was a very senior employee of the mines. I had gone to ask him for a paper he had written and to arrange for an interview. However, without me even asking him any questions he went on and started giving me very interesting and important information. This was a bit difficult for me because I was not prepared for the interview but was nonetheless interested in what he was saying. As I knew him to be a friend of my parents, an accomplished individual and a much respected man it was difficult for me to ask him to reschedule the interview. I just listened carefully asked a few questions and afterwards excused myself by saying that I had to write down a few of the things he had said.

Of the 14 interviews conducted, the three with lecturers were not recorded electronically as they refused to be recorded. Other unrecorded interviews were those with a former senior employee of the mines with whom I was unprepared to have an interview on the date we spoke. Nonetheless, our conversation provided useful information. The other was with the former MUZ official which I thought was being recorded but it later turned out the recorder was off. For these interviews I relied on the notes that I had taken during the course of the interviews. I decided to take notes because I felt it was important to do this just in case something happened to the recorded interviews. Being in Zambia with intermittent electricity supply because of 'load shedding', and knowing that I would have to return to Durban, I was anxious about the safety of my material. In the event that I lost my recorded interviews I would at least have a back-up in the form of written notes and so I would not risk losing everything. The downside to this was that it was a tedious process. I may have sometimes missed an opportunity to probe important points in greater depth. Sometimes, I did actually miss important points and was embarrassed to ask the interviewee to repeat themselves.

4.5. Data interpretation

The nine other interviews were recorded and transcribed. I then embarked on a process of thematic analysis. Some of the main themes I had identified in my analysis include: politics, ownership, livelihoods and employment, economic growth and foreign exchange, capital flight, multiplier effects, social and infrastructure investments and environment. Braun and Clarke define thematic analysis as the 'method of identifying, analysing and reporting patterns (themes) within the data' (2006:79). They go on to state that 'it minimally organises and describes your data set in (rich) detail' but often goes beyond 'and interprets various aspects of the research topic' (citing Boyatzis, 1998). However, Braun and Clarke (2006) also argue that an interviewer is not always passive to what he presents as themes. They cite Ely et al (1997) who argue that 'if themes 'reside' anywhere, they reside in our heads from our thinking about our data and creating links as we understand them'. I did not have specific themes I was looking for. They emerged from the responses I got from my respondents. I did this process by highlighting and grouping the responses I got into the themes I identified.

5. Key Themes: Dimensions through which mines impact on development

5.1. Introduction

This chapter has the following objectives: first, it seeks to understand, from the point of view of young people on the verge of entering the job market, and other key informants on the Copperbelt, their perceptions of the past, present and future roles of large scale copper mining in development; second, it explores what respondents take to be the relationships that exist between mining and communities; and third, it asks to what extent copper mining has impacted on local people's quality of livelihoods.

I identified the following main themes in my respondents' narratives: mining's impact on, livelihoods and employment; economic growth and foreign exchange; capital flight; the environment, and multiplier effects. Overshadowing these themes was the view that politics and policies around owenership, such as choosing whether to nationalise or not, strongly affected how each of these key themes played out. In examining these issues, this chapter highlights the views of people on the Zambian Copperbelt, demonstrating how local discourse gives evidence of nostalgia, as respondents discuss the transformation that has occurred over time, specifically between periods of nationalisation and privatisation. It also considers whether such changes in ownership have led to copper mining supporting or undermining more general development. The general view of most of my respondents was that in the past, under nationalisation, mines did more for local communities and the economy. At present, most respondents are of the view that minings's impact on development and the economy has been reduced, but that under the right policy framework, mining still has the potential to contribute much more to the economic growth and development of the country than it has done since privatisation.

5.2. Politics

Most of my respondents were of the view that the problems in Zambia and the apparent lack of development were directly a result of politicians failing to deliver. They shared the view that change in the broader political structure and a strong will from politicians were needed in order to achieve meaningful development. Muyunda, a fourth year university student in development studies, stated 'We need serious policy change and policy implementation, and change of management and government, and political will' (Interview with Muyunda, 18th December, 2011). Chipo, also a student, shared this sentiment. He commented: 'Political will is needed to counter the problems of copper dependence'. According to Chipo, 'even for diversification to be successful, it needs political will and without it, we as a country will be susceptible to turbulence and uncertainty such as was the case during the 2008 financial crisis' (Interview with Chipo, 18th December, 2011).

The statements by Chipo and Muyunda imply that politics and the entire political structure within the country, and the Zambian government is the problem. This view was echoed by other respondents. Robert put it thus: 'Our central government has problems prioritising needs of communities. We need a decentralised power base' (Interview with Robert, 20th December, 2011). The issues raised by Robert, which are also echoed by Chipo and Muyunda, about Zambia's economic choices and development trajectory are linked in complex ways. These are not just local or national matters but have entered an arena in which international politics are fought out between governments and powerful bodies such as the World Bank and the IMF. Under the rubric of globalisation and neoliberalism, IFIs designate countries that embrace and adopt their policies without strong opposition as those practising 'good governance'. This can often be the difference between attracting investment or accessing loans. As such countries like Zambia have been held captive to such rhetoric. Some consequences are that policy decisions are not just subject to the needs of a sovereign state. Branded as a conduit of good governance, SAPs had serious implications for the mining sector. As I will show later, some sections of society are of the view that SAPs are to blame for the underperforming mining sector and the Zambian economy.

5.3. Ownership - nationalisation or privatisation?

Most respondents were of the view that government ownership of the mines would be the best way to increase the mining sector's contribution to development. This was as a result of what they saw as private companies' lack of interest in local communities and in the general development of the country. This could be surmised by the commonly held view that foreign mining companies were in Zambia only to make money and did not care about the concerns of the general public. Most respondents attributed this to the privatisation of the 1990s which was aimed at improving the productivity of the mines among other things. Robert, a retired miner and formerly chairman of the Mine Workers Union of Zambia argued:

> Most people don't see mines as theirs. During ZCCM days people depended on mines. Now they no longer depend on mines, at least not the majority. Except for seeing big lorries damaging our roads and pollution, the impact of mining is little felt. The working conditions in the mines now are worse than they had been during ZCCM, and the new companies, they just don't care. They pay less and less to the majority of workers except the few senior employees. And there are also fewer ventures by mines in the communities, in fact I could say may be none. Those days the mines were there for people. I remember asking my boss, a Mr. Blakkie, for help to repair a blocked sewer which had flooded the township. I said, 'Sir, people can't be living like this. We are going to have an outbreak of diseases and people are going to die'. He said, 'Robert, what can we do about it? Can you do something?' I said, 'Yes'. He said, 'Ok! What do you need?' We went back to the plant and he directed they provide me with the few things I needed to do the repair works. We got a few pipes that were lying around the plant and they asked me to organise a gang of boys to help me. Just after that as Parents Teachers Association Chairman I said, the school where my children go needs cement to repair damaged floors. I got the bags of cement for that project and again we went and helped them. At the time I was working as foreman and was a union chairman. From then on they moved me from where I was working and we established a maintenance department that was repairing things around the place, painting houses and all that, whether or not they belonged to ZCCM. But you go and look around the townships and see what's happening now for yourself (Interview with Robert, 20th December, 2011)

Roberts's view was shared by Chipo, the university student. Chipo (echoing Marx) argued that 'under the present circumstance it is not possible to be sustainable. We don't own the means of production. The new owners only want to maximise profits' (Interview with Chipo, 18th December, 2011). The suggestion Robert and Chipo are making here, which was also shared by many other respondents, is that the relationship between communities and mining companies has shifted for the worse since privatisation. At the core of Robert's argument, bringing to the fore a debate that has reigned for many years in Zambia, are debates over which system of production would be most beneficial to the Zambian people: the IMF and World Bank advocated free market ideals, or state participation in economic activities. Robert recounts how mining companies in the nationalisation era paid attention to community welfare unlike the new owners. Unfortunately for Zambia, privatisation under SAPs was presented as non-negotiable, necessary and mandatory, given the wider economic difficulties and the acute lack of capital that the country was experiencing.

Most respondents were of the view that privatisation was conducted in a rather disastrous way. It worsened the relationship and widened the gap between companies and communities. Post privatisation relationships are guided and influenced by the mines' insistence that their main objective is to concentrate on their 'core business'. This has restricted their activities to mining at the expense of what had formerly been considered as their social responsibilities – such as housing, education, healthcare and the provision of infrastructure. As Robert indicated above, private companies are not just denying people a fair share of their wealth but are helping to degrade the already existing infrastructure. Most views were overshadowed by the constant comparison between the performance of the mining industry during periods in which they were under government control and periods in which they were privatised.

It is not just questions of ownership that have impacted on copper's contribution to development. The pro-cyclical price of copper is also a plausible explanation for the haphazard contributions of copper to wider development and the welfare of local communities. As Manda, a former director of ZCCM noted, 'companies at the moment have been making lots of money as copper prices have sky-rocketed since we sold the mines. This would be a good time to have windfall taxes which we could then put into a fund that would then make finances available and accessible to people' (Interview with Manda, 20th December, 2011). At the time of privatisation in the late 1990s, the price of copper on the London Stock Exchange had reached a historical low-water mark but by 2002, prices had started to rise, reaching unprecedented levels by the mid-2000s. Given that copper still remains Zambia's main export commodity and a major source of foreign exchange, unpredictable rises and falls of prices makes long term planning difficult. However, most of my respondents noted that the positive economic outlook of the last few years was a direct result of high copper prices. The concern, however, is that this could be temporary, since even at its best the country struggles to register any significant and permanent economic gains. Having said this, however, from the inception of mining, periods of high copper price have not always translated into more benefits for the nation, particularly ordinary Zambians (Larmer, 2010). As Fraser (2010) also acknowledges, despite the recent rise in the price of copper, Zambians still suffer from low wages, insecure employment, poor local amenities and unpleasant living environments.

5.4. Livelihoods and employment

Many critics such as Ferguson (1999; 2007), Dymond *et al* (2007), Nyambe and Kawamya (2005), Bebbington *et al* (2008), Hogenboom (2012) and Breckenridge (2008) have noted the correlation that exists between mining and people's livelihoods. Overwhelmingly, the theme of livelihood and employment permeated all the interviews I conducted. All my respondents were of the view that resources should not just be extracted but be used to create employment and improve livelihoods for whoever was in need. Throughout the history of mining in Zambia, people have depended on mines not just as a source of employment, but – especially during nationalisation - to obtain social amenities and welfare benefits. However, this is contested. Mususa (2010) notes resentment of this situation by some people as they perceived this to be the control of family life by mine companies. Other views are more critical, and argue, that the eventual collapse of the mining industry was due to the government's elaborate welfare system which redirected resources away from the development of mining activities, resources that could otherwise have been reinvested in new explorations and upgrading the mechanisation of existing mines.

Most people on the Copperbelt have at some point in their lives either worked in the mines or have had relatives who have worked in the mines. However, whereas the parastatal ZCCM was able to create jobs to suit the government's broader social agenda, this is no longer possible under privatisation. As I will show when discussing multiplier effects of mining, the number of jobs created under privatisation are limited, as investors sub-contract most important services to companies from outside Zambia, highlighting the enclave character of mining activities in the country. Manda narrated how privately-owned mines were now outsourcing goods and manpower. He argued 'they would rather bring in an Indian guy or a Chinese guy to do the job that a Zambian can do. All this while lots of local workers go without jobs, and, mind you, these are workers that the country trained at tax payers' expense' (Interview with Manda, 20th December, 2011).

In an interview with Mwama, a lecturer, I asked what role she thought copper had played in the history of the development of the Copperbelt. This is what she said:

> Let me begin by saying we should ask where does the name Copperbelt itself come from? It is called the Copperbelt because of copper, *umukuba.* I was born and brought up here, in Chingola, so I have seen things change. My father was a miner. But your question is, what is the role? The role! Well, the role has changed at different times. When I was growing up mines had a very good reputation. Mines were seen as higher status. Everybody wanted to work in there. It didn't matter whether somebody was educated or not. Young people wanted to work there. It was associated with good living. My father was able to meet family needs, unlike the situation today with most miners. At the time companies didn't just siphon things out. They ploughed back into the communities. There were entertainment facilities which I don't see now. Clinics and hospitals were of high standards. We had free regular checkups. Over the years I've seen a shift. The role of mining now is not the same. My father got enough wages to sustain our family. Now it's not the same. Clinics are not in existence. Nchanga hospital and many others are not the same. Now locals are given as little as possible. Poor conditions are rampant. If basic needs cannot be met then the mines are not being sustainable. Mines should be doing more for people (Interview with Mwama, 22nd December, 2011).

According to Mwama, before privatisation, mining used to play an important role in the lives of employees both directly through wages and indirectly through providing the means of social reproduction through education, healthcare and recreation. She argues however that its impact has been reduced due to lower wages and lower social spending. She attributes this to new companies. Mwama also notes the significance of mining to Zambians as a source of employment. However, she argues that whereas before privatisation most people may have wanted to work in the mines rather than in other sectors, now people go into mining as a matter of last resort. As Fraser (2010) shows, despite its controversies at the inception of mining most people sought work in the mining industry. This continued in the newly independent Zambia as it became the most sought after and most lucrative profession, to both educated and those not so educated. These days it trails behind a number of apparently more attractive options like teaching. However, given that Zambia still struggles to diversify its economy and create sufficient jobs to meet demand, it would be interesting to find out the reasons for the declining desire by people to work in the mines. This issues was not fully addressed as I thought it to be beyond the focus of this dissertation. It would go beyond simply considering the supposed better rewards that may be offered by other industries to analysing a whole realm of issues, as for example, safety in the mines.

Muyunda a university student noted:

> The biggest problem we have is that the benefits of mining are not being transferred into the community. Yes, mines may provide some employment, which is good from an economic point of view, but, we are also talking about acting in a way that is socially responsible. For example, yes, you can paint a hospital but how can that benefit the entire population? These same mines, like we heard in the case of KCM [Konkola Copper Mines, a subsidiary of Vedanta listed on the London Stock Exchange] they are dumping all these chemical wastes in the Kafue River. So now we have other problems like the Kafue weed. That's like choking the life out of Kafue; fish are dying. We have rotting fish in the river, fungus and they are not cleaning it up. They are supposed to ensure that residents receive clean water because they do have the engineers who can do that. They have the resources to purify that water and they are not doing it. What we are seeing is more pollution instead (Interview with Muyunda, 18th December, 2011).

Muyunda makes an important distinction between the contribution of mining to the economy and the local community. He argues that while mining companies may in the quest to extract minerals create jobs, which is good for the economy, they also harm environments by polluting rivers on which people's livelihoods in that community depend. However, the jobs created are not just for people within that community and may benfit others from outside. Hence, critics such as Arezki *et al* (2012) argue that in order to ensure that mineral resources benefit many local people, governments in developing countries should perhaps distribute mineral revenues directly to people.

5.5. Economic growth and foreign exchange

Mining has historically been Zambia's biggest source of foreign earnings and growth. As Muyunda stated, 'it brings in more money into the economy' (Interview with Muyunda, 18th December, 2011). However, critics note that although it has accounted for the majority of foreign exchange, its contribution to overall economic growth, has been disproportionate. Since the inception of mining, Zambia's foreign earnings from copper sales have averaged 90 per cent while its contribution to growth has been around 9 per cent, and less than 1 per cent has been paid in taxes. And, as Manda noted, 'If copper's contribution to GDP is not double digit then it is unsustainable' (Interview with Manda, 20th December, 2011). Manda's views are supported by the fact that in Zambia there is a close-knit relationship between copper earnings, exchange rate and overall economic performance. Throughout Zambia's history, low copper earnings have alternated with a depreciation of the local currency, the kwacha (Green, 2009). Similarly, high copper earnings have created conditions conducive for the Dutch disease to flourish, that is, an artificial appreciation of the kwacha which has sometimes been harmful to non-traditional exports, as they become too expensive. However, Adam and Simpasa (2010) argue that, although this has been true in the past, from 2002 growth in copper exports which has gone alongside appreciation of the currency has occurred side by side with an upsurge in non-traditional exports. They argue that the reduction in non-traditional exports seen in the past may have been more to do with structural policy issues and weakness on the supply side rather than a copper boom (2010:84).

In order to sustain the spillover effects of mining, Manda argues that 'it is better for mines to employ more local people who can pay taxes as opposed to bringing in foreigners' (Interview with Manda, 20th December, 2011). His statement echoes Lunda, a university student, who noted, 'we have seen a lot of externalisation of profits. If companies pay local workers more, those workers can send their children to school and give their families money to start businesses and that is proper sustainability' (Interview with Lunda, 18th December, 2011).

Most of my respondents lamented the low taxes and royalties that mining companies were paying. Much of this, however, was to do with the concessions and agreements that the Zambian government made with investors at privatisation. Apart from depriving the government of revenue through inadequate taxes, mining companies were accused of engaging in illegal activities. Manda explained – the arguably illegal - way in which new investors sold unprocessed copper in the form of copper blisters, limiting economic benefits to the country. He argued, 'Those copper blisters contain gold, and other minerals. Now, forget copper, how much is gold and how much money is the country losing out from the sale of those things which they have no control over?' (Interview with Manda, 20th December, 2011). As taxes play an important role in helping governments undertake development projects such as provision of healthcare, education and poverty reduction, loss of taxes severely impacts on Zambia's ability to have a sustainable economy.

Another respondent Emmanuel, a miner and an employee of one of the copper mines in Kalulushi, expressed concern about the new investors' mining practices and their effects on the economic growth of Zambia.

> If we are to be strict, with these investors things are different from the way they were in ZCCM. ZCCM was even interested in development. Underground, we have surveyors or geologists. They might, for example, find a body of copper ore surrounded by waste rock. They will start digging waste rock and separate it from the copper and then they start mining. But these investors, they are just interested in the copper and leave the waste rock. Like that, we can't go far. All they are interested in is making money and like this we can't go far. So, even the life-span of copper in Zambia is very short. But we all hope that these new mines that they are opening might prolong mining in Zambia. However, eventually copper will finish. Hence, the future is in agriculture. When we compare our economy with others, even with say Malawi, Malawi has no copper or any other minerals as

> much as we do here, but their economy is far much better and they are better organised (Interview with Emmanuel, 24th December, 2011).

Emmanuel laments the lack of interest in development by the new investors. Like other respondents, he is of the view that foreign investors are only interested in copper and overlook local people and development. According to him this is particularly problematic given the finite nature of copper. He further argued that Zambia still had a chance to rectify the situation and achieve growth through its new mines. He suggested that as copper will eventually be depleted, a good sustainable approach would be to invest in agriculture. Emmanuel attributes Zambia's economic problem to its dependence on copper. This resonates with some critics who interpret the problems associated with mineral dependence and lack of development in resource-rich but poor countries in terms of the resource curse thesis.

5.6. Capital flight

Most of my respondents were of the view that investors pay no regard to their well-being. They pointed to the limited links of mining to the local economy, the reduced number of jobs available to Zambians, and the lack of social or infrastructure investments while, at the same time, reports abound of investors repatriating their profits to their countries of origin. This came out when I asked whether under the current climate, people had a sense of connection to the copper mines. Most of the respondents like Robert and Mwama above were of the view that they did not have a sense of connection, partly because of what they saw as the inequitable distribution of the benefits of copper alongside repatriation of profits. One respondent, Paul, a university student, asked:

> How can you say it's ours when we don't even know where the money goes? Most of the money goes to other countries, where the same owners of the mines come from. We don't produce anything here in Zambia, not even nails so the mines spend all the money outside Zambia allegedly buying goods and even paying the workers that work for them (Interview with Paul, 18th December, 2011).

Sharing a similar view, Patrick, a university student, noted:

> The problem that we have is that our focus is still on the mines. We are not being successful at diversification and worse still the distribution of copper benefits is inequitable as money is going to other countries. Under the current policy foreign investors are reaping the benefits from copper (Interview with Patrick 17th December, 2011)

Gewald and Soeters (2010) have highlighted the susceptibility of the Zambian economy due to how it has interacted with investors and financial markets. They argue that foreign investors, while taking advantage of 'Zambia's liberalised investment climate to gain ownership of the country's greatest economic asset …. have consciously engaged in "shape-shifting" in response to changes in the market for copper' (2010:156). They have done this by constantly changing their names, addresses and corporate identities, especially after the expiration of the tax rebate period, thus making it difficult to know who really is in charge and who should be answerable for their activities. This is even more controversial given the limited benefits filtering through to the public. Before privatisation, however, capital concerns were not because money was leaving the country but rather that not enough of it was being created locally.

5.7. Multiplier effects

One of the major ways in which the themes being discussed in this section were discussed and were linked, from livelihoods and employment to economic growth and foreign exchange was, as Chooma, a university student explained, that the 'development of copper could only be sustainable if we use copper to develop other industries' (Interview with Chooma, 17th December 2011). For Chanda, a lecturer and a former employee of the mines, Zambia's strategic geographic position and natural endowments such as water would make diversification easier. He said:

> We should use our comparative advantage. We have a lot of water compared to other countries in the region. We can develop hydro electric power stations to generate electricity, which we could supply to neighbouring countries and because of being landlocked we are strategically positioned to act as a centre of business in the region (Interview with Chanda, 22nd December, 2011).

The biggest challenge with Zambia has been that the economy has hugely depended on the performance of the mining sector and how well it links with other sectors like tourism and manufacturing. During the nationalisation era, development of this linkage was on top of the government's agenda and was pursued through 'direct state ownership of part of the supply chain, preferential sourcing, import substitution industrialisation and value chain cooperation between ZCCM, its suppliers and public research institutions' (Fessehaie, 2012:3). The result of these measures was a well-developed local supply cluster of diversified activities including a thriving manufacturing sector. This was composed of large state-owned entities and smaller private enterprises (Fessehaie, 2012:3). Most of these however, struggled to survive on their own even with strong government support. This was due to an amalgamation of factors, most importantly, falling copper prices which led to reduced cash-flow and loss of foreign exchange, but also poor management within ZCCM. This negatively affected the capacity of ZCCM to pay suppliers, and supply firms to import inputs in good time (Fessehaie, 2012:3). The persistence of problems in ZCCM reduced the company's ability to monitor the quality of goods and services supplied to them, many of which were gradually becoming sub-standard (Fessehaie, 2012:3). Despite this, ZCCM was mandated to buy from these companies. As a consequence most of these companies not only fell behind international quality standards but failed to expand and died.

After privatisation, development agreements insulated new mine owners from continuing to support local industries as the nationalised ZCCM had done. Mining companies would no longer be mandated to take a lead in supporting the growth of other local industries. This resulted in an influx of foreign companies affecting the whole value chain of mining. Some of these companies became popularly known as 'brief case companies', suggesting that they lack fixed abode in Zambia, a situation that is strongly resented by the locals. More than this, as Robert stated: 'The companies that have come up after privatisation are all connected to the new owners. For instance, there is now a whole lot of people rushing to get car loans, loans that are facilitated through companies with connection to the mines' (Interview with Robert, 20th December, 2011). Also, their insistence on concentrating on core business has meant that the country's National Development Plan (NDP) that had been proposed by the government at privatisation is no longer supported by the mines. Following the large number of redundancies that followed privatisation, some former employees of the mines acted on the government's pledge in the NDP and registered small firms aimed at supplying goods and services to the mines. However, as Fessehaie (2012) demonstrates, the success of this initiative has varied with the majority of these small companies being either static or in decline. But instead of being a positive step, giving a chance to local suppliers and supporting employment creation for Zambians, most respondents criticised new investors with bias in awarding contracts and giving job opportunities. According to my respondents, companies with contacts among senior mining authorities benefit more than others. They also accused senior managers of mines of nepotism.

Accusations of senior managers being asked to register companies and subcontracting their services despite being employed by the same companies were highlighted by my respondents. Some respondents also mentioned the growing inequality after privatisation. Although quite difficult to prove, Lunda a university student argued, 'Right now I can tell you most senior managers at Mopani earn as much as 100 times what the average miner earns' (Interview with Lunda, 18th December, 2011).

5.8. Social and infrastructure investments

The 'company model' approach which was started by Anglo American Corporation before independence and the creation of the 'cradle to grave' welfare policies afterwards resulted in massive infrastructure and social development programmes (Simutanyi, 2008; Breckenridge, 2008). However, before independence the motivation behind such projects was not simply because companies at the time wanted to improve local people's living conditions, but were strategic to enable them to conduct their businesses. Ferguson (1999) also notes the desire by companies to create a certain kind of African family. There was huge social spending through independence and the nationalised period but significantly declined after privatisation. As Manda observed:

> You see, just as Ramcoz [Roan Antelope Mining Corporation] and Anglo invested in Kariba to supply electricity to the mines, the same way these companies today can do the same. They could also be investing in the railway; in fact, we already started doing that for them. See! These companies always complain that the cost of doing business in Zambia is high. But why is that cost

> high? The unit of production, compared to other copper producing countries like Chile, who can transport their copper cheaply due to a sea coast, is high! So the copper here, will be expensive. Investment in the railway line would bring down the unit of production costs. Currently most of the copper is transported by roads. This is very expensive and it also destroys roads. And now our government pushes that cost of repairing roads on us local people, the tax payers. Now if we consider that there are over 4.5 million unemployed people then, one would assume that those employed people are overburdened with taxes. So what I'm saying to you is a lower cost of production would make our copper as competitive as that produced in other countries. So companies will come here and the spillover effects could be felt by many people (Interview with Manda, 20th December, 2011)

Here Manda reinforces the notion that the relationship between companies, governments and people evolved and transformed into a new unequal realm after privatisation. If MNCs desperately needed Zambia's copper in the 1920s, that may have prompted infrastructure and social spending as Anglo did; today they may not see such pledges as necessary. At present the power balance has tilted strongly on their side. As Manda noted above, the contribution of mining companies in setting up infrastructure today can certainly not be equated with the period before privatisation. This is not to say that there is no contribution to infrastructure, but for him and many others it is insufficient. This is, however, contrary to certain elaborate self-flattering media reports that are sponsored by MNCs that always highlight their contributions to communities (see Zambian Traveler, 2011). According to most of the people I interviewed, companies should do more to put up infrastructure so that when copper is depleted, good infrastructure left behind can help attract investment in other sectors like tourism, in order to sustain people into the future. In what is perhaps the most important document ever to be released that demonstrates how much mining companies re-invest back in the communities they work in, Stephens (2012) shows the 28 companies surveyed for the 2008 EITI report only contributing US $32, 000 between them to community and social initiatives. Additionally, the document has no specific mention of contributions to infrastructure.

5.9. Environment

Simutanyi notes that before privatisation in Zambia ‘sound environmental policies were not enforced’ (2008:8). However, most of my respondents are of the view that the deleterious effects of mining on the environment were exacerbated after privatisation and are concerned about the new extractive practices, the ever growing open pit mining and treatment processes such as leeching. These practices have been known to damage land and pollute environments at levels that were previously not seen. Most respondents argued that these practices were unsustainable. Chipo, a fourth year university student, commented:

> Ah, I don’t know if you’ve, ah, I’m yet to like kind of prove this. I’ve heard there are certain mining companies that are using leeching as a way of trying to extract copper. It’s kind of like you pour acid and then you extract everything that is there. So whether there is no copper or what. It’s quite destructive and you cannot say that is sustainable because once they have even left potholes here in Zambia after they have done mining the land becomes very useless and you can’t use it for farming (Interview with Chipo, 18th December, 2011)

However, the extent to which environmental degradation has worsened after privatisation is not very clear. Growing up in Zambia in the 1980s and early part of the 1990s, I recall numerous occasions, perhaps on a weekly basis, when the then government-run mines released sulphur dioxide into the atmosphere. Although people may have complained, I would argue that they seemed willing to tolerate it. This was perhaps due to the fact that they felt a stronger sense of connection to the mines. However, now people feel that this connection has weakened, worse still there are no tangible benefits to communities. Although mining companies in some places have started a process of reprocessing old copper waste dumps that the old state owned ZCCM had left in communities, most of my respondents see this only as a self-serving exercise that is due to the appreciation of copper prices and the desire of companies to cash in.

On a similar point, in responding to a follow up question on the consequences of mining companies paying less tax, Constantine, also a university student remarked:

> Well, some of the consequences are that the organisations are going to benefit more while we as a country are going to benefit less. The mining sector does have a negative impact on the environment, so while they are messing our environment and jeopardising the abilities of the future generations to provide for themselves, we should also be benefiting so that if anything, in future we might have enough money, enough infrastructure, or resource and knowledge to obviously mitigate any forthcoming situations that would have been caused by the mining activities. For instance, we have heard about pollution and the cutting down of trees where some mining companies have been dumping their waste in our water sources such as the Kafue River and the cutting down of trees to expand their mining activities. That might have a long term effect on agriculture itself and on the weather and also cause the displacement of people. So while that is happening we should see tangible benefits. In terms of the taxes the royalties that they are paying. Yah that's the way I see it (Interview with Constantine, 18th December, 2011).

When asked what he thought was the link between sustainable development and copper Constantine commented:

> There is a link. The link is that, you know, just as copper or the mining of copper can bring about development, that development is supposed to be sustainable. For instance, the case of Kalulushi, there are areas, I don't know if this is the East, the West (using hand gestures) but where there were mines and people are not allowed to go there because sometimes there tends to be, I don't know if I can call them sink holes. So look at the huge piece of land that is prohibited to people who can't farm there; people can't even go there. They can't do anything in that place because there is a possibility of having sink holes, because the mines have been abandoned. So when you look at that, copper here, the mining of copper and other things is simply unsustainable. Because when you mine copper and you know the mining of copper is not always going to be there at some point the mine will have to move to some other location. So they should do their business in such a way that even when they leave, even when the holes remain underground, they don't affect the livelihood of people. That mine can always be moved from one place to

> another. They must make sure even when they leave that whatever they leave doesn't affect other people (Interview with Constantine, 18th December, 2011).

Constantine's remarks capture both the concern over the inevitable depletion of copper resources and the havoc that is caused through displacement of local communities from productive land. Constantine highlights the complexes and paradoxes of the benefits and disadvantages of mining.

Despite this, his views and those of my other respondents do not seem to be against mining. They are confident that mines could still bring about development. However, in order for this to happen, government must strive to reconsider its policy position so that people are able to take advantage of the benefits offered by mining today to build a more sustainable local economy, one that would last a lifetime. But as has been noted these efforts are being hampered by suggestions of exceedingly low taxes and highly advantageous concessions that mining companies in Zambia enjoy. These concessions have been designed in such a way that they preclude the country from renegotiating the contracts (Simutanyi, 2008). Another common view is that government must increase its participation in the economy. Most of my respondents seemed to suggest that lack of national ownership meant that Zambians had given away the rights to its copper mines. As Manda argued:

> You have to strike a balance between privatisation and nationalisation; an extreme of either is dangerous. Privatisation without the proper monitoring of companies can lead to a whole lot of problems. Having said that, and as we saw in the past, nationalisation can also lead to less productivity and a whole lot of problems (Interview with Manda, 20th December, 2011).

5.10. Conclusion

The findings in this chapter reveal a striking degree of consensus in respondents' views across generations. Among these are perceptions that there has been a serious political failure to deliver development. Prominent in this failure is the perception that the privatisation of the mining industry was conducted in a disastrous manner, especially with regard to loss of tax revenue, resulting in a serious loss of national wealth and of development potential. While there is some evidence of contest (Mususa 2010) about perceptions of the nationalisation period, a sense of nostalgia remains for the provision of social amenities and welfare benefits. Respondents' anxieties caused by privatisation include the lack of employment opportunities for local people, the differential wage structures for local and expatriate staff, and the enduring effects of pollution and the disregard for sustainable development.

6. Conclusion and recommendations

This dissertation began with Muyunda, a university student in his final year of study, narrating his experience and that of his family. At the centre of his narrative and in line with the main theme of this dissertation has been the perception of educated young people about to enter the job market and other key informants, as to their understanding of the relationship between large scale copper mining and development. This required investigating Zambia's relationship with capital, the impact of large-scale mining and the implications of mineral resource dependence in development. This conclusion will reveal the main issues dealt with in previous chapters, briefly reflect on some common perceptions among my informants and draw some parallels with the literature. The second part offers recommendations for further research.

The first part of the literature review explored the broader debates on the impact of mining in development in the developing world. The themes considered included: livelihoods and employment; economic growth and foreign exchange; environment and infrastructure; and social investment. The chapter focused on the relationship that MNCs have with countries in which resources are found, its origins and how this relationship has transformed since colonialism. It highlighted experiences of some countries in Latin American and Africa. Part of this discussion centred on dissecting the theory of the resource curse. This thesis argues that something embedded in the political and economic structure of developing countries limits these countries from acquiring significant and sustainable gains from their resources, and this is the reason why they continue to lag behind the 'development' trajectory. The chapter, however, argued that an informed analysis of the lack of development in the developing world is one that goes beyond mineral abundance and considers a range of factors from the beginning of mining. It outlined the impact of colonialism (the significance of 'the past of the present' Cooper, 2002) and the binaries that this set up, the effects of property rights and markets, to the recent neoliberal policies. These are the building blocks to the current relationship that has existed and continues to exist, one in which foreign capital has come to have more power than countries with resources. The power that MNCs have acquired also means that they neglect their contribution to 'development' and sometimes even avoid paying taxes.

The second part of the literature review offered a historical trajectory of copper mining in Zambia from inception in the 1920s focusing on some of the key moments, upswings and downturns. The chapter also highlighted the interrelatedness of the Zambian economy to copper mining. Tracing the evolution of the industry, it offered an insight into other factors that have affected the performance of the Zambian copper mining industry. However, understanding these complex dynamics goes beyond investigating the internal workings of the Zambian state and economy to include an analysis of the role that colonialism, colonial property rights, markets, IFIs and neoliberalism have played.

In this research 14 respondents were interviewed to ascertain their views on the role of copper mining in the development of Zambia. Although this dissertation focussed mainly on youths, it revealed that the views of the older generation closely resembled those of youths. Both groups demonstrated remarkable awareness of events in the mining industry. However, whereas young people's views were specific to the neoliberal period of the 1990s, adults were able to give a much longer historical narrative. The main argument that echoed through both young people's and adult's views was that politics and government's policies, foreign ownership of the mines and recent neoliberal policies have disadvantaged Zambians. Most respondents argued that local communities' needs have been sacrificed for capital.

In the findings chapter I noted that I sensed an amount of nostalgia from most of my respondents in their recollection of the past, as they constantly compared the past to the present, between periods when mines were run by the government and during the time they were in private hands. However, critics within Zambia, such as (Simutanyi, 2008) have noted that government ownership failed to translate into sustained benefits. According to this line of argument, the eventual collapse of mines was a result of the government's involvement in running them. And this is the reason why some saw privatisation as inevitable. However, from the point of view of my respondents privatisation has not improved livelihoods or created more job opportunities. And as Table 1 in the introduction suggests, employment has been reduced. Respondents also bemoaned the type of jobs on offer as they accused investors of out-sourcing most skilled jobs. They also argued that the amount of social investments such as health care and other social amenities has also reduced. While most respondents recognised the important role that copper mining could play to overall economic growth of the country, they argued that this was impossible to achieve as long as mining remained isolated from other sectors of the economy.

Some also saw this contribution as worthless as long as it did not translate into overall economic wellbeing for the majority. They criticised companies for not paying a fair share of taxes, and with siphoning out copper revenues with little or no multiplier effects locally. They also argued that investors disregarded the environment. Overall the view was that current mining patterns and practices were causing more harm than good especially to local communities. Thus, in order to ensure that mining benefited communities and companies equally, most respondents argued for a rebalancing of the status quo and for increased state participation in copper mining being the key pillar of the economy. Respondents were also of the view that the only way mining could be linked to the local economy was through nationalisation, or finding a balance between nationalisation and privatisation. According to my respondents by nationalising mines and the government becoming active participants in the mines they would be better placed to determine Zambia's developmental path and, indeed, their futures. However, although the government could indeed go some way to create the environment necessary for sustained economic benefits to accrue to the local people, in a global world it is difficult to fathom how a complete shift in policy nationalisation would be received by other players in the Zambian economy such as IFIs and donor countries.

6.1. Recommendations for further research

It is important to recognise the limitations of this study in terms of the majority of my respondents' age, gender, social background and educational level. Further research would need to compare the views of these 'privileged' young urban people on the verge of entering the job market and contrast them with other groups of people differently situated in social, economic and geographical aspects. Among such groups would be those already in employment and indeed those – the majority of young people – who are unemployed. Even though copper mining has generally been a male-dominated field, it would be interesting to do research that also looks at female perspectives of copper mining in development. As Zambia is endowed with many other mineral resources such as emeralds and rare earth metals, research needs to be done regarding how the country can develop a more sustainable mineral resource sector that goes beyond copper mining. Integrative ways that effectively link the development of these minerals to other sectors of the economy such as agriculture, tourism and manufacturing must be properly researched. Furthermore the extent to which company ownership affects the development of value chains must be researched. At present it is very unclear how many Zambians own mining companies. More research that aims to recommend measures of how small scale miners could be helped to participate in this industry must be conducted. Analysing these issues would give a good platform for a new effective sustainable mineral development.

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