UNCOMMON WEALTH

TRACING THE IMPLEMENTATION OF THE AFRICAN MINING VISION

Draft 2

RESEARCH REPORT

2014

UNCOMMONWEALTH:
TRACING THE IMPLEMENTATION OF THE AFRICAN MINING VISION

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CONTENTS

PREFACE

This report arose out of concern regarding the state of industrialisation and the mining industry in Africa. The African Union's Africa Mining Vision (AMV) recognises that the key issue for development is the formulation and implementation of workable industrialisation strategies based on the continent's unique strengths, rather than the emulation of strategies that may have been effective in other contexts beyond.

The Vision claims that 'many states now agree that most of what they wish to achieve through ownership in mining projects can be achieved through the regulatory process or policy and fiscal instruments'. This statement inspired the Southern African Resource Watch (SARW) to partner with the Mapungubwe Institute for Strategic Reflections (MISTRA) to interrogate the reasons why Africa, despite having an endowment in mineral resources, still rallies at the lower levels of the development ladder.

The results of the examination culminated in a report which (a) assesses the extent to which African countries have aligned their mining policies with the African Mining Vision; (b) tracks the legislation and policy governing the mining industry and evaluate to what extent they are adhering to the mining vision; and (c) evaluate and recommend the mining policy approaches aimed at maximising the benefits to the local people.

Based on the objectives of the AMV, the study observed data on mining employment, ownership structures, beneficiation activities and other linked areas. Mainly literature reviews and interviews were depended on to assess the extent to which AMV has been embraced on the continent. Government policies, legislation and monitoring efforts were also assessed.

Four countries – Botswana, the Democratic Republic of Congo (DRC), Republic of South Africa, and Zimbabwe – were sampled to represent developments in the SADC region. Each of the chosen countries is a mining nation endowed with mineral resources of different kinds. The countries, although all based in southern Africa, have different salient and historical facts which have guided the process of policy formulation and implementation.
The report consists of four chapters plus an introduction and a conclusion. The country chapters were authored by independent researchers

who were tasked with the process of undertaking the study in the particular territory. In Botswana, Khaulani Fichani, who is a mining engineer based at the University of Botswana unravels the mining history and regulatory framework for the country. The DRC chapter is written by Tshombe Lukamba, a resource and public policy expert based at the North-West University in South Africa. Betchani Tchereni, a political economist at MISTRA, examines the mining policy and regulatory framework of South Africa. The Zimbabwe chapter is written by James Muzondidya, a political and economic governance expert based in Harare.

The case studies were then assembled and compiled into this report. The discussion in this report is by no means exhaustive. It does, however, set out a range of issues affecting the mining industry in Africa on the basis of which further research and debates can be undertaken.

We acknowledge funding from the Open Society Initiative for Southern Africa (OSISA) through Southern African Resource Watch (SARW). Our gratitude also goes to the peer reviewers and the sub-editors

LIST OF ABBREVIATIONS

AMDC	African Minerals Development Centre
AMREC	African Mineral Resource Classification
AMV	African Union's Mining Vision 2050
ANC	African National Congress
ASM	Artisan and Small scale Mining
BCM	Botswana Chamber of Mines
BEE	Black Economic Empowerment
BDC	Botswana Development Corporation
BIT	Botswana Income Tax
BITC	Botswana Investment and Trade Centre
BR	Botswana Railways
BOCCIM	Botswana Chamber of Commerce Industry & Manpower
CEDA	Citizen Entrepreneurial Development Agency
CIDA	Canadian International Development Agency
CMMI	Council of Mining and Metallurgy Institutes
CNRG	Centre for Natural Resource Governance
CoM	Chamber of Mines (of South Africa)
CSOT	Community Share Ownership Trust
CZI	Confederation of Zimbabwe Industries
DMR	Department of Mineral Resources
DRC	Democratic Republic of Congo
DTC	Diamond Trading Company International
DTCB	Diamond Trading Company Botswana
EA	Environmental Audits
EIA	Environmental Impact Assessment
ETF	Environmental Trust Funds
EMP	Environmental Monitoring Programme
GEAR	Growth, Employment and Redistribution Strategy
GDP	Gross Domestic Product
GoZ	Government of Zimbabwe
GECAMINES	General de Carrièreet de Mines
GRI	Global Reporting Initiative
GTZ	German Aid Agency
HDSA	Historically Disadvantaged South Africans
HLCC	High Level Consultative Committee
HRD	Human Resource Development
HRW	Human Rights Watch
IMF	International Monetary Fund

LEA	Local Enterprise Authority
MCIMS	Mineral Cadastre Information Management Systems
MDGs	Millennium Development Goals
MEWR	Ministry of Minerals Energy and Water Resources
MEL	Mineral Economic Linkages
MIBA	Societe Miniere de Bakwanga
MMCZ	Minerals Marketing Corporation of Zimbabwe
MPC	Minerals Policy Committee of Cabinet
MPC	Mining Promotions Corporation
MQA	Mining Qualifications Authority
NDC	National Defence College
NDP	National Development Plans
NRZ	National Railways of Zimbabwe
NSR	Net Smelter Return
RDP	Reconstruction and Development Programme
SAIMM	Southern African Institute of Mining & Metallurgy
SAMDA	South African Mining Development Association
SAMREC	South African Mineral Resource Classification
SAP	South African Police
SBI	Sustainable Budget Index
SEA	Strategic Environmental Assessment
SLP	Social and Labour Plans
SOCOCOM	Societe Congolaise de Commercialisation de Minerais (State Mineral Trading Company)
SPEDU	Selebi Phikwe Economic Diversification Unit
SPV	Special Purpose Vehicle
SSA	Sub-Saharan Africa
SOEs	State Owned Enterprises
TNCs	Transnational Corporations
UMHK	Union Minière du Haut-Katanga ("Mining Union of Upper Katanga")
UNDP	United Nations Development Programme
VRIT	Variable Rate Income Tax
VTF	Vocational Training Fund
ZASMC	Zimbabwe Artisan and Small Scale Miners Council
ZIMASSET	Zimbabwe Agenda for Sustainable Socio-Economic Transformation
ZELA	Zimbabwe Environmental Law Association
ZMDC	Zimbabwe Mining Development Corporation
ZRP	Zimbabwe Republic Police

INTRODUCTION

Background

The importance of industrialisation in Africa cannot be overemphasised. With its many socio-economic problems, such as high unemployment, unstable growth rates, unequal distribution of wealth, high poverty levels and general underdevelopment, industrialisation becomes one of the most important elements that can provide the much needed leap into prosperity for Africa's people (Lall, 1992; Lall, 2004; Kaluwa, 2010; Obeng, 2013).

In the current economic discourse and dispensation, as Soludo (2005) has pointed out, African governments have now intensified a faster adoption of value-adding industrial development strategies over and above import substitution and export promotion policies. The mining sector is one such industry which drives economic activities.

It is important to note the fact that Africa is a well-endowed continent in natural resources. As noted by the African Mining Vision (2009):

> 'Africa is the world's top producer of numerous mineral commodities and has the world's greatest resources of many more.... Unfortunately, most of Africa's minerals are exported as ores, concentrates or metals, without significant value-addition. There is thus a large potential for mineral beneficiation. Africa also has significant known resources of fossil fuels (oil, gas and coal) and has large biomass and bio-fuels potential (ethanol, bio-diesel), especially in the tropics'.

Indeed it is a paradox that the African continent has significantly large known deposits of minerals, with supplies of up to 31 percent of the world's demand for bauxite, cobalt, gold, manganese, phosphate and uranium. Additionally, it supplies 57 percent of the world's need for chromium and diamonds, and the hydrocarbon deposits are immense (Simons, 2012). Yet, the people of Africa are poor by many standards.

Table 1: Some Leading African Natural Resources

Mineral	Production (World %)	Rank	Reserves (World %)	Rank
PGMs*	54%	1	60+%	1
Phosphate	27%	1	66%	1
Gold	20%	1	42%	1
Chromium	40%	1	44%	1
Manganese	28%	2	82%	1
Vanadium	51%	1	95%	1
Cobalt	18%	1	55+%	1
Diamonds	78%	1	88%	1
Aluminium	4%	7	45%	1

Also Ti (20%), U (20%), Fe (17%), Cu (13%), etc.
*PGMs: Platinum Group Minerals
Source: African Mining Vision

The structure of Africa's economy remains agrarian and extractive. There has been remarkable growth recorded over the past few years, largely driven by strong domestic demand due to urbanisation and increasing public expenditure in infrastructure (ECA & AU, 2013). However, the economy remains undiversified in many respects, acting largely as a source of raw materials. In the new discourse for liberalisation of international trade, African states, speaking together in the G90 block, have called for improved special treatment for market access, especially for non-agricultural commodities and services. The aim is to try to break through the vicious cycle of poverty and predominant consumption to a situation where producing and engaging in manufacturing leads the way of economic activity (Alves, Drapar, & Khumalo, 2009).

The 2014 African Transformation Report (ATR) shows that the growth and development trajectory of Africa relies on its ability to transform from a predominantly consuming and importing region to one that will be predominantly producing and exporting (Africa Centre for Economic Transformation, 2014). Of significance, is the observation that the commodities to be exported must originate from the continent and that they should not be primary in nature. The ATR 2014 argues that diversification, export competitiveness, increased productivity, improved technological capabilities and human well-being (DEPTH) must be the focus of the transformation agenda.

Recognising the important role that the mining sector plays in the economy of Africa, the African Union, through its relevant ministers, undertook a decisive move to come up with an overarching policy with strategies specifically for the mining sector through the Africa Mining Vision. The Mining Vision recommends the refinement of existing policies and frameworks so as to promote equitable participation by various stakeholders in the extractive industries value chain. The vision identifies various challenges constraining the achievement of optimal public benefits from natural resource endowments. For instance, extracting maximum benefits whilst growing the industry requires Africa to build capacity to manage knowledge on resource potential and proven reserves, develop contracting capacity, and improve the capabilities of states to husband natural resources.

Others have argued that, given the fluctuations of primary commodity prices from the 60's to the 90's, Africa could not fund the region's industrialisation. Others have pointed to 'resource curse', according to which export concentration in primary commodities is growth retarding because of the intense rivalry for the distribution of the resulting revenue. Whilst others have pointed to the debt paradox whereby scarce capital needed for development is siphoned to financial havens in developed countries to be lost forever in the labyrinth of financial secrecy and coded bank accounts. The stolen monies subsequently become part of international liquidity which developed countries lend to developing countries. Again, this raises the question of why Africa is richly endowed yet its people remain so poor.

The abundance of natural resources in Africa and its unexploited natural resource potential, at a time when the global demand for natural resources is high, brings to the fore the question of economic management and governance of these enormous resources. The dynamics between the extractive industries, workers, the local communities and domestic political elites have manifested in various ways in the past. These have been largely unpleasant and have generally not improved, evidenced by the discussions of economic nationalism in South Africa, Boko Haram and the continuing Niger Delta crisis in Nigeria, Dodd Frank Act on Conflict Minerals in the DRC region, and in Uganda where Bunyoro representatives complain that the interests of the Bunyoro-Kitara Kingdom and of the local communities have not been addressed in Uganda's oil and gas policy.

More intriguing though, is that there is evidence of the presence of early civilisations before the “discovery” of Africa by Europeans (Wa Mutharika, 2011; Schoeman & Hay, 2013). Africans realised the richness of their continent as far back as the 13th century. They were already mining and trading with the Arabs and Chinese. It is therefore imperative that a study be commissioned to clearly understand the development of resource ownership loss.

In international trade it is important to note that two of Africa’s biggest trading partners, the EU and China, are all importers of raw minerals. In 2013 China’s imports of mineral products from Africa accounted for 58% of total imports. In addition 6% and 5% of total imports were base metals and precious stones respectively (Tralac 2014). Again, in the same year, 67% of Africa’s total exports comprised of minerals and the remaining 33% did not contain much of value addition (Ibid). Extractives, therefore, have been the main export commodity and, where other goods were traded internationally, the amount of value addition has been minimal. This implies weak economic linkages stemming from dependency on low-value production.

The mining industry has the potential to stimulate economic activity across the continent, thereby creating decent jobs and improving the wellbeing of the people. Realising this, African ministers accentuated the need to develop a home-grown mining policy, together with an action plan, with the potential to increase diversification and improve linkage benefits from mining operations.

The overarching question is: how do we reconcile Africa’s rich endowment with natural resources that are in high demand with its poor record of economic advancement and human development? Put differently, why is Africa not using earnings from primary commodities to improve the welfare of citizens and to diversify its economies?

The current study recognises other studies that have been carried out in the past with very similar objectives. However, it is noted that most of those studies have been a mere exposition of opinions based on ideologies rather than empirical evidence. Although other studies have advanced an empirical stance, they emphasised the nationalisation of mines and other industries in the extractive sector (Solomon, 2012). These studies provided only a political and short-term analysis of the nationalisation debate without necessarily understanding and answering the question of the state of affairs in the mining sector holistically.

Realising the important direction the AMV aimed to undertake, and the five years that have passed since its adoption by member states, coupled with a detailed action plan, it is important to evaluate the extent to which the policies represented by the AMV have been implemented on the continent. The purpose of this study, therefore, was to undertake a scan and identify which countries have localised the elements of the AMV into their government policies and actions. Thus the objective was to track the extent to which the various countries have moved towards realising the objective of the Mining Vision by localising its elements.

Specifically, the exercise aimed to:

(a) Conduct a study of the various measures, if any, that have been introduced in pursuit of the Mining Vision.
(b) Conduct an evaluation of the effectiveness of the measures that have been introduced in the specific countries
(c) Draw up recommendations regarding the adoption of the AMV.

The African Mining Vision in Perspective

The African Mining Vision can be summarised as a set of strategies aimed at increasing and improving the results of endowment and beneficiation of minerals in Africa. The vision points out that the regulatory framework is the most important aspect to determine processes of exploration, ownership, licencing, extraction, beneficiation and social responsibility, to mention but a few areas. To that end, the vision proposes five intervention areas, namely:

(a) Improving the level and/or quality of the resource-potential data,
(b) Enhancing contract negotiating capacity,
(c) Creating a comprehensive and progressive capacity for resource development and governance
(d) Improving the capacity to manage mineral wealth; and
(e) Addressing Africa's infrastructure constraints

It is important to emphasise that the African Mining Vision is not about mining, but rather it is an overarching policy that spells out strategies for poverty alleviation and for development. The goal of the AMV is to create a transparent, equitable and optimal exploitation of mineral resources to underpin broad-based sustainable growth and socio-economic development. Basically, the AMV seeks to promote the use of Africa's natural resources as a vehicle through which social and economic transformation of the continent can take place.

The developmental objective of the AMV is re-emphasised through the Action Plan that is structured to have 9 programme clusters emphasising on particular areas as follows:

- Programme cluster 1 – mining revenues and mineral rents management
- Programme cluster 2 – geological and mining information systems
- Programme cluster 3 – building human and institutional capacities
- Programme cluster 4 – artisanal and small-scale mining
- Programme cluster 5 – mineral sector governance
- Programme cluster 6 – research and development
- Programme cluster 7 – environmental and social issues
- Programme cluster 8 – linkages and diversification
- Programme cluster 9 – mobilising mining and infrastructure investment

Historical and Theoretical Underpinnings

The colonisation of Africa as it progressed into the 19th Century came about due to a number of reasons ranging from political to economic. In broader aspects, the scramble for Africa emanated from the desire by the industrialised nations to acquire more land and have control over resources. They created settler colonies, which they found to be both pleasant and having economic potential. For example, some of the colonial settlers in Johannesburg and Zimbabwe were attracted due to deposits of gold and other mineral resources. Those colonies which were conceived to be colonial settlements soon became industrial hubs of the continent.

Decolonisation was aimed at liberating the people of Africa. In South Africa, the ANC clearly indicated that the struggle for freedom was not only about political governance and power but also about economic and resource ownership (The Freedom Charter 1955)[1] . The struggles, often bloody, resulted in some concessions that were provided as trade-offs

1 African National Congress (1955). The Freedom Charter.

through several treaties. The Europeans still maintained an upper hand in resource ownership ranging from land to the financial institutions.

Nationalisation, mainly through government take-overs and buyouts, resulted. In some instances, there were some success stories but, in general, the performance of nationalised industries proved to be dismal. This coincided with the wave of privatisations that was blowing over Eastern Europe[2] and South America.

Eastern Europe and South America.

In the circumstances that followed, as predicted by the Structure-Conduct-Performance model from industrial and development economics, ownership and management of resources became skewed towards 'foreigners'. It has been shown that such people do not seriously participate in the development agenda of the local people.

On the other hand, the public choice theory, from both public policy specialists and economists, suggests that pareto optimum is possible only in situations where the markets do not fail. It advances, however, that markets are never perfect, as suggested by proponents of a perfectly competitive market structure, to the extent that there are certain economic agents who have an upper hand in information to influence the direction of trade and distribution of resources.

Given the arguments by those who point out that markets sometimes fail in reality, there is a need for government intervention in the economy to correct the market imperfections. This might include having government participating in the economy, not just as a regulator, as the Washington Consensus economics would advance, but also as a direct participant through opening of firms, producing, employing people and training.

The Africa Mining Vision is developed against this background of public choice theory, with the overarching aim of levelling the playing field and bringing the benefits of the resources in Africa to Africans. It is believed that the market economy in Africa has failed to produce the desired results benefiting the wider economic spectrum. In addition, the AMV is construed along the Agenda 2065 of the African Union which has set

2 The disbanding of the USSR and the adoption of some sort of capitalism by Russia necessitated privatisation to take place. The success story of privatisation in other countries influenced the World Bank and IMF to suggest that this was one of the best ways to run industry.

goals and strategies to transform the continent.
The African Union's Africa Mining Vision cites the key issue for development as 'the formulation and implementation of workable industrialization strategies based on our continent's unique strengths, rather than the emulation of strategies that may have been effective in other contexts.'

The Vision claims that 'many states now agree that most of what they wish to achieve through ownership in mining projects can be achieved through the regulatory process or policy and fiscal instruments'.

This view is based on the assumption that the state has no difficulty attracting private investors but it cannot raise the required finances and does not have people with the required skills to embark on mining directly. On the other hand, if a state possesses the required resources, it is then possible to invest in a profitable and purely commercial operation as in the case of Debswana in Botswana and the Royal Bafokeng nation in South Africa.

CHAPTER ONE
BOTSWANA

by Khaulani Fichani

Introduction

Modern mining in Botswana began in the early 1970s with the opening of the Orapa diamond mine, the Morupule Colliery, which was part of the larger BCL Limited's copper and nickel mining project at Selebi Phikwe. The Jwaneng diamond mine, the world's richest diamond mine, was discovered in 1973 and brought into production in 1982. Prior to the development of the Jwaneng mine, the Letlhakane diamond mine near Orapa was brought into production in 1975. In the early 1980s therefore, the mining sector in Botswana consisted of the three diamond mines, owned by Debswana Diamond Company, a 50/50 joint venture between the government of Botswana and De Beers, the then Morupule Colliery, wholly owned by the then Anglo American Corporation of South Africa and BCL limited, which had as major shareholders, Amax Inc. and Anglo American Corporation of South Africa with the Botswana government owning a 15% minority stake.

The current mining scene includes the diamond mines, which have been much expanded from their production capacities in the 1980s; base metal mining, which consists of BCL Limited's nickel-copper-cobalt mining and smelting complex at Selebi Phikwe, Norilsk Nickel's Phoenix mine, which produces nickel and copper concentrates for toll smelting at the BCL smelter, a new copper project, Boseto Copper project, owned by a junior miner, Discovery Metals on the Kalahari copperbelt that stretches from around Maun and down to Ghantsi; gold mining by a junior mining company, Galane Gold, about 50 km east of Francistown; soda ash and salt production from the Sowa pan brine deposits by Botswana Ash, about 200km north west of Francistown. In 2012, Lucara Diamonds commissioned its Boteti Diamond mine near Debswana' s Letlhakane mine, while Gem Diamonds is developing its Ghaghoo mine at Gope and the project was commissioned in June 2014, with some 2,400 carats produced during that month.

While the country is host to more than two-thirds of all of Africa's coal resources at about 212 billion tonnes, there is still only one coal mine in Botswana, the Morupule Coal Mine. This produces coal for captive supply to the Botswana Power Corporation's power generating station at Morupule. The mine's capacity was recently tripled from about 1.0 Mtpa to about 3.0 Mtpa in line with the increased power generation at the Morupule power station.

There is no traditional (precious stones/diamonds and metals/gold) small scale mining in Botswana and any that exists tends to be in industrial minerals for the building and construction sector. Current quarry operations are licensed under mining licences and employ modern equipment and practices in their operations.

Contribution of the mining sector to the economy of Botswana

Botswana is considered a middle income country with the UNDP 2013 Human Development Report indicating that the gross national income per capita is US$13,102 (in 2005 constant US$ and PPP). With regards to poverty eradication, the Minister of Finance and Development Planning observed in his 2014/15 budget speech that, while there had been a marginal improvement in the Human Development Index from 0.587 in 2000 to 0.634 in 2011, reflecting improvements in the quality of life, the country was still faced with abject poverty. Initiatives to address poverty include programmes such as drought relief, school feeding, destitute allowance and subsidies to subsistence farmers. Mining plays a key role in the economy of Botswana and below we present measures to demonstrate this. This subsection presents a summary of the economic contribution looking at three measures: mining sector contribution to GDP, mining sector share of export earnings, and employment share in the mining sector.

Contribution of the Mining Sector to GDP

In the last decade or so, the economic contribution to the Gross Domestic Product (GDP) by mining has been declining. For instance, over the period 2003-2008, just ahead of the global economic meltdown that began in the fourth quarter of 2008 and which was felt hardest in Botswana in 2009 (mining GDP declined by 46% in 2009), mining contributed about 31% to GDP. In the four year period 2009-2012, the average contribution was 15% or approximately half of that for the period 2003-2008. Regarding the mineral revenue proportion in the total government revenue, in the three financial years (April to March) 2005/6 to 2007/08, mineral revenues accounted for an average of 47%. This declined to 31% in the two financial years 2008/09 and 2009/10 before rising to an average of 36%

in the 2010/11 and 2012/13 financial years.[3]

The bulk of government mineral revenues is derived from diamonds, hence the ever-present worry in government corridors regarding the over-reliance on one mineral commodity and the active steps being taken to build up other sectors such as tourism and agriculture. In a recent study that was aimed at forecasting the likely quantum and timing of the expected decline in government mineral revenues, done for the Botswana Chamber of Commerce, Industry and Manpower (BOCCIM), it was found that currently identified possible future mining projects in copper, coal and coal bed methane, uranium and diamonds would not sustain the level of mineral revenues that the government has grown accustomed to once diamond production from the Debswana mines declined in about 15 years' time[4].

Share of the mining sector in exports

The export base for Botswana consists of minerals (diamonds, copper-nickel, soda ash and gold), beef, textiles and vehicles. Diamonds are the country's major export, consistently accounting for just over 75% of exports. For instance, over the years 2010 to 2012, the share of exports averaged 76.4% for diamonds and 12.3% for copper-nickel.

Share of the mining sector in employment

The share of employment by the mining sector has always been very insignificant and was at 3%, or 11,494 workers, in September 2012[5].

Study background

Many African countries modernised their mining laws and policies beginning in the early 1990s, and this has attracted foreign mining and mineral exploration companies to invest in exploration and mining projects in Africa. The modern mining regimes are considered to have fiscal terms that achieve reasonable returns to African governments in the form of mineral royalties and profits tax. The debate, which is really the thrust of the AMV, is how to move beyond the maximisation of fiscal revenues from mining projects and into other socio-economic benefits that could be re-

3 Bank of Botswana, Botswana Financial Statistics, November 2013 downloaded on 03/01/2014 from http://www.bank of botswana.bw/index.php/content/2009110615035-botswana-financial-statistics

4 Fichani, K. and Freeman, P. (2012). Minerals and Energy Export Revenue Projections (steering committee coordinated by the Botswana Institute of Development Policy Analysis), Gaborone. Botswana

5 Central Statistics Office, Formal Sector Employment Stats Brief, September 2012. Downloaded on 3/4/2014 from: http://www.cso.gov.bw/templates/cso/file/File/FORMAL%20EMPLOYMENT%20STATS%20BRIEF.pdf

alised if Africa's mineral endowment were used as a basis for industrialisation of the continent. Such industrialisation would be led by economic diversification activities into up-, down- and side-stream activities to mineral exploitation. The AMV vision is that of a "Transparent, equitable and optimal exploitation of mineral resources to underpin broad-based sustainable growth and socio-economic development"[6]. Simply put, the AMV aims to leverage the goals for poverty reduction, industrialisation, economic diversification and growth of African countries on the direct (government mineral revenues) and indirect (upstream, side-stream and downstream linkages and infrastructure) economic benefits from the minerals sector.

The implementation of the AMV has always been anticipated to be a challenge and there is progress in the setting up of the African Mineral Development Centre, whose mandate, among others, would be to focus on the coordination of implementation of the AMV in the member states.

Objective of the study

While Botswana does not have dedicated institutions or resources in the Ministry of Minerals Energy and Water Resources (MEWR) to specifically ensure that policies within the portfolio responsibility of the Ministry take into account the accepted vision regarding the role that mining in Africa must play, there is value in assessing how well the current mining laws and policies, institutional structures and capacity align with the AMV. The argument is that, with such alignment, this would place the country in a good position to identify those areas that it needed to prioritise in order to progress towards the achievement of the AMV. The objective of this study, therefore, is to provide a diagnostic on the performance or achievement that Botswana has made in the nine programme clusters that make up the action plan for the AMV.

Scope of the Study

The scope of this study is limited to providing a diagnostic of the current situation regarding mining laws, policies, institutional structures and capacity within Botswana's minerals sector and how far these align with the short term (up to 5 years) achievement levels set in the action plan

6 The Africa Mining Vision, February 2009. Downloaded on 01/01/2014 from vi.unctad.org/files/wksp/.../docs/.../Africa%20Mining%20Vision.doc

of the AMV.

Methodology

The approach for this study relies on both desk top research and the experience of the author in mineral legislation and policy and the mining industry in general. The desk top research assists in objectively arriving at a diagnostic of the progress that Botswana has made in the areas of scope for the study, that is, its achievement, in the short term, of the action plan of the AMV.

A Diagnostic of Botswana's progress towards achieving the Africa Mining Vision

In this section, we review the literature to determine the level of progress that Botswana has made in each of the nine programme clusters under the plan of action of the AMV. The study also relies on recent interviews with heads of technical departments in MEWR to assess the progress made in aligning with the ideals of the AMV.

Programme Cluster 1
Mining revenues and mineral rents management

The question is whether or not Botswana's mining laws and policies have led to the creation of a mining sector that generates adequate income and rents to eradicate poverty and finance the country's growth and development. We review publicly available information to find out how Botswana has performed in this area.

Enhanced share of mineral revenue accruing to government

The short term actions planned for this goal are reproduced from the action plan for the AMV document in Box 1 below.

Box 1 Short term actions by member states towards enhancing the share of mineral revenue accruing to government

a) Negotiate or renegotiate contracts to optimize revenues and to ensure fiscal space and responsiveness to windfalls
b) Review the current fiscal environment in African mining countries to develop guidelines for optimizing tax packages in a manner that does not discourage mining investment
c) Develop systems to evaluate components of tax regimes for leakages and transfer pricing
d) Review applicability and terms of double taxation agreements and BITs with host countries of mining companies.

Source: Draft Action Plan for Implementing the AMV, December 2011

The bulk of mineral revenues accruing to government are in the form of mineral royalties, profit taxes and dividends from the diamond mines that the government owns in a 50/50 joint arrangement with De Beers. In recognition of the heavy dependence of the country on diamonds, when the mining law was amended in 1999, it had fiscal provisions that were aimed at attracting new exploration activity in base metals as well as other non-diamond minerals. For instance, the mineral royalties applicable to base metals was set at 3% while that for diamonds was left unchanged at 10%. There was a realisation that, unlike non-diamond minerals, the very high profitability of some diamond projects presented difficulty in devising a progressive fiscal regime capable of capturing a fair level of rent during boom times when companies realise windfall profits. It was for this reason that the fiscal regime for diamond projects is open for negotiation at the point where the company applies for a mining licence. For base metals projects profits are taxed under a Variable Rate Income Tax (VRIT) formula which derives an applicable annual tax rate to apply to the before tax profits based on a project's profitability.

The Mines and Minerals Act also makes provision for government to invest in mining projects at the stage where a company applies for a mining licence. Section 40(1) of the Act gives the government an option to acquire up to a 15% working interest participation in a mining project at the issuance of a mining licence (see section 40 (2) of the Act below).

(2) Government shall on issuing the licence inform the applicant as to whether or not it is exercising its option and of the working interest percentage it wishes to take.

For diamond projects, section 51 of the Act provides for a negotiated level of investment and the fiscal regime that would apply to such a diamond mining project. The agreed conditions would then be appended to the mining licence (section 41 of the Act). A mining licence is issued for a period that does not exceed 25 years and is renewable for a period not exceeding 25 years. In the renewal of a mining licence, the guiding principle regarding the duration of the licence period is that it must be reasonable for the carrying out of the mining programme (section 42 of the Act).

The Mines and Minerals Act 1999 has been successful in making Botswana a favoured destination for investment by foreign exploration and mining companies. The Fraser Institute's 2012/13 Annual Survey of Mining Companies publishes indices that provide governments with a score card on the attractiveness of their mining regimes, while exploration companies use it to identify potentially suitable countries to target for their exploration. The survey is in its 13th year and covers more than 90 countries and territories and more than 600 executives of exploration companies worldwide. One of the measures of a country's attractiveness is the current mineral potential index. Botswana was ranked in 1st position out of 93 mining jurisdictions worldwide in the 2011/12 survey but slid to 16th position out of 96 such jurisdictions in the 2012/13 survey (Wilson, McMahon, & Miguel, 2013). A closer look at some of the issues surveyed indicates that Botswana does well on issues that deal with mining law and policy. For instance, it is in the top ten globally and 1st in Africa on issues such as the taxation regime, political stability, certainty in policy and implementation, but is less attractive on issues with respect to socio-economic matters, infrastructure, supply of labour, some of which will be discussed under the relevant programme clusters below. Section 66 (5) of the Mines and Minerals Act, 1999, deals with transfer pricing and empowers the Minister, where it appears that minerals have been disposed of in an arrangement other than at arm's length, to determine the royalty payable based on prevailing international market prices. The Act provides for ad valorem royalties based on gross market value at mine gate as opposed to net smelter return (NSR). This makes the determination of payable royalty to be an easy computation that is straightforward to monitor. Section 66(3) of the Act defines gross market value as '...the sale value receivable at the mine gate in an arm's length transaction without discounts, commissions or deductions for the mineral or mineral product on disposal.'

The law provides comfort to the mining company to seek redress from the courts or through arbitration if they believe that the amount of royalty determined by the Minister is not proper or accurate.

The Botswana Income Tax Act does not have provisions against transfer pricing.[7] However, the Mines and Minerals Act has provisions to guard against thin capitalisation in the financing of mining projects. For instance, section 39(1) (e) of the Mines and Minerals Act, 1999 provides the following financing requirement:

> 'the proposed financing plan submitted as part of the feasibility study is in accordance with good financial practice, and provides for a debt to equity ratio of no more than 3:1 unless the Minister otherwise agrees;'

The law does not address the risk of transfer pricing through the supply chain wherein a subsidiary mining company may be purchasing major plant and equipment through its parent company.

Improved management and use of mineral revenue
The short term actions planned for this goal are reproduced from the action plan for the AMV document in Box 2 below.

Box 2 Short term actions by member states towards improved management and use of mineral resources

a) Explore strategies for investing windfall earnings and mineral rent into stabilization funds, infrastructure funds and sovereign wealth funds (applies to cluster 9 also)
b) Develop rent distribution systems for allocating part of mineral revenue to communities near mining areas and local authorities
c) Improve local communities' benefit from mineral resources through access to jobs, education, transport infrastructure, health services, water and sanitation

Source: Draft Action Plan for Implementing the AMV, December 2011

7 Deloitte, International Tax, Botswana Highlights 2012, downloaded from http://www.deloitte.com

Botswana uses a system of National Development Plans (NDP) for its economic planning. The NDP10 period began in April 2009 and will end in March 2016. Mineral revenues would be used only on development projects that are in the NDP10.

Botswana has two main elements of fiscal policy that deal with the investment of mineral rent. These are the Sustainable Budget Index and the Pula Fund. The Sustainable Budget Index (SBI), which is defined as the ratio of non-investment recurrent expenditure less recurrent expenditure on health and education (considered investments) to non-mineral revenue. The criterion is that the SBI should not exceed 1.0. For instance, an SBI index in excess of 1.0 would indicate a non-sustainable situation wherein revenues from non-renewable sources such as mining are used for current consumption instead of being used on investment type projects that would support future economic growth and prosperity. Put another way, this index provides a guideline whereby mineral revenues are spent on investment projects in health, education and infrastructure while non-mineral revenues are to fund recurrent expenditure.

A comparative study on natural resource rent cycling between Botswana, Indonesia and Venezuela, finds that, while in Botswana's case the fact that mineral revenues were steady or stable without serious shocks, the high level of dependence on diamonds was an ever present cause of concern that was reflected by such cautious fiscal policies as that of the SBI. Government was able to recycle the mineral rent by transferring part of it to the private sector through the public purchases of goods and services rather than through tax breaks, infant industry protection and price subsidies, all of which would have been unsustainable (Auty, 2009). In a related study, an econometric model of the relationship between per capita economic growth, natural resource abundance and governance, comparing Botswana against the rest of the world, it was concluded that natural resource abundance alone does not guarantee economic growth, while both natural resource abundance and good governance do. The author went on to observe that in '... developing countries, sound government regulation and anticorruption policies are of particular importance for natural resource management' (Limi, 2007).

The Pula Fund, which holds the bulk of the country's foreign exchange reserves, is similar to a sovereign wealth fund. This Fund helps in the fulfilment of Botswana's fiscal policy strategy '...of spending for development, affording stabilization and saving for future generations.' (Bank of Botswana, 2012).

All mineral royalties, profit taxes and dividends are paid into the central government account. Other less significant administrative fees, such as exploration and mining licence fees, are shared 50/50 between the local authorities and the central government. Local authorities also levy charges for surface rights rentals.

Communities hosting large-scale mining projects tend to benefit from educational and health infrastructure developed for the mining project. Regarding employment, there is no preference for local communities and any citizen has equal opportunity for access to such employment.

Programme Cluster 2
Geological and mining information systems
The objective for this programme cluster is to develop a comprehensive knowledge of Africa's mineral endowment. This will logically begin at the country level in the member states. In a recent interview with the Director of Geological Surveys in Lobatse, he provided the following account of the exploration coverage in Botswana. The whole country has been surveyed by airborne magnetic surveys at either 1km or 4km line spacing. In addition, 80% of the country has been re-flown at 200 to 250m line spacing. The remaining 20% is deep-seated under the Kalahari sands and the geophysical map indicates deep-seated activity that rules out prospectivity for solid minerals. High resolution electromagnetic surveys were carried out from 1993-2007 and involved low level flying at 250m line spacing. This is highly specialised work and it was therefore outsourced to private vendors.

The level of geological information available in the country rules out the need for a reconnaissance licence as data exists upon which prospectors can select areas for detailed exploration for target minerals.

The process to restructure the Department of Geological Surveys began in 2012/13. Progress to date has been the relocation of the Exploration Licencing Division to the Department of Mines in Gaborone. The mandate of the restructured Department of Geological Survey, which will be a parastatal company, will include the following:

- Geological mapping of the country;
- Assessing the country's mineral potential;
- Conducting geological studies, and
- Storage of geological data.

The National Geo-Science Information Centre manages all data sets, maps and reports in the Department. The National Integrated Geo-science Information System was designed to enable remote access to data but unfortunately it is not fully functional. Only information on some reports is available. The ideal situation is to have full geological data that can be accessed remotely by exploration companies.

The Fraser Institute's 2012/13 Annual Survey of Mining indicates that, on the measure of the attractiveness of a country's geological database – quality and scale of maps, accessibility, etc – Botswana ranked 43rd out of 97 mining jurisdictions internationally, behind South Africa, which was in 42nd place, followed by Namibia in 48th place, Ghana in 57th place and Zambia in 63rd place. The bottom of the list was the Democratic Republic of Congo (DRC). These rankings highlight the need to prioritise this programme cluster as it is only with better understanding of the mineral endowment of the continent that informed action in pursuit of the AMV can be planned with some degree of confidence.

Programme Cluster 3
Building human and institutional capacities

The objective of programmes under this cluster is to create a mining sector that is knowledge driven and is the engine of an internationally competitive African industrial economy. Box 3 below lists the short term actions that member states would have to take towards building their human and institutional capacities.

Box 3 Short term actions by member states towards building human and institutional capacities

a) Assess human resources needs for the mining sector
b) Strengthen industry's role in supporting academic training e.g. through provision of incentives
c) Diversify education and training funding sources to include private sector;
d) Strengthen continuing professional development through short courses;
e) Make available to all stakeholders and the general public all legal texts (mining laws, environmental laws, labour laws, company laws, tax laws, contracts etc) through a dedicated website
f) Coordinate and ensure policy coherence within and across public sectors

Source: Draft Action Plan for Implementing the AMV, December 2011

There is a Strategic Human Resource Development Plan for the Minerals, Energy and Water Resource Sector for the period 2013 to 2023. This is the first HRD plan for Botswana and it covers, among other things, trends in the future developments in the minerals sector including diamond beneficiation as well as the anticipated role that coal mining would play in the Botswana economy; the quantum and quality of skills that would be required and the current and future capacity of training institutions.[8]

Traditionally, mining companies have sponsored students to study for technology and engineering qualifications. Mining companies can also

8 Human Resources Development Advisory Council (HRDAC) Technical document to support a Strategic Human Resource Development Plan for the Minerals, Energy and Water Resource Sector for the period 2013 to 2023, for discussion with stake holders on 22/10/2013 Gaborone Sun.

take advantage of the Vocational Training Fund (VTF) that is administered by the Botswana Qualifications Authority which, until recently, was the Botswana Training Authority (BOTA), to train their employees up to certificate level.[9]

The office of the Attorney General's Chambers has created a website that holds all of Botswana's laws[10]. These are available through purchase. The Department of Mines also provides a website where they offer free downloads of mining laws and regulations, forms, and checklists for submission of applications for mining licences.[11]

The Botswana Chamber of Mines gets involved in training for the minerals sector. For instance, the BCM believes that the syllabus for the training of artisans is adequate but finds deficiencies in the areas of industry attachments for both the learners and the instructors. The BCM has been allocated two vocational schools, one in Francistown and the other in Gaborone. The German international development agency, GIZ, will provide technical assistance for the training of artisans, while part of the funding will come from the Vocational Training levy. It is anticipated that some 300 artisans will be produced up to the year 2019 (interview with Mr. Siwawa, CEO of BCM).

9 Botswana Training Authority- downloaded on 10/01/2014 from: http://www.bota.org.bw/

10 Botswana e-laws http://www.elaws.gov.bw/

11 Department of Mines http://www.mines.gov.bw/

Programme Cluster 4
Artisanal and small scale mining

The objective of programmes under this cluster is to create a mining sector that harnesses the potential of artisanal and small scale mining to advance integrated and sustainable rural socio-economic development. The attendant short term actions are listed in Box 4 below.

Box 4 Short term actions by member states towards harnessing the potential of artisanal and small scale mining to advance integrated and sustainable rural socio-economic development

a) Develop policies to encourage technical assistance for artisanal miners to upgrade them to small and medium scale mining enterprises and promote local service providers in the sub-sector
b) Develop programmes to upgrade knowledge, skills and technology in the ASM sector;
c) Develop models for partnership with government and large-scale mines to facilitate access to technology, skills, knowedge and markets;
d) Develop a financing and marketing strategy appropriate to the needs of ASM
e) Develop methodologies or templates for distinguishing potentially viable ASM operations for targeted support
f) Implement international guidelines banning the use of child labour

Source: Draft Action Plan for Implementing the AMV, December 2011

Botswana does not have a favourable geological potential for precious metals and high-value precious stones that can be exploited on a small scale. There is no artisanal mining and the few small-scale mining operations are limited to the gathering of semi-precious stones which are then tumbled before export or assembled into jewellery. The exploitation of building and industrial minerals is relatively mechanised with operators using machinery for unit operations such as drilling and blasting, loading and hauling, and crushing and screening of product into the various product categories for sale to the local construction industry.

The Acting Director of Mines, mentioned in a recent interview that there is currently a high level of illegal mining of river and pit sand which has created serious environmental degradation. In the short term stakeholders, such as the Botswana Police, have been roped in to assist with policing. The long-term strategy is on two fronts, the first being legislation and the second being that of eliminating the demand for river sand. In the former, the Ministry of Minerals Energy and Water Resources (MEWR) is in the process of reviewing mining legislation with a view to introducing stiffer penalties. In the latter, the government is considering ways of utilising less river sand in construction projects. For instance, some of the ways to eliminate the demand for river sand include the use of crusher dust for brick making, use of recycled rubble and choosing building materials that do not require plastering such as the use of face and clay bricks.

Regarding the issue of citizen empowerment and participation in mineral projects, the strategy under NDP10 would see this encouraged and the Mines and Minerals Act would be amended to include incentives for joint ventures between citizens and foreign companies to promote the transfer of technology and skills. The NDP10 strategy for small scale building and industrial minerals project was to identify suitable sites for which bankable feasibility studies would be conducted. Such projects would be linked to development and financing partners such as the Botswana Development Corporation (BDC), Botswana Export Development and Investment Agency (BEDIA) – now the Botswana Investment and Trade Centre (BITC), Local Enterprise Authority (LEA) and the Citizen Entrepreneurial Development Agency (CEDA) (Ministry of Finance and Development Planning, 2009). MEWR is still at the planning stage in the project to identify suitable sites for quarrying operations for which it would carry out feasibility and environmental impact assessment studies in fulfilment of its strategies under NDP10. These sites would then be made available to prospective quarry licence applicants through a tender system (interview with Tshekiso, Acting Director of Mines).

Programme Cluster 5
Mineral sector governance

The objective of programmes under this cluster is to create a sustainable and well governed mining sector that is inclusive and appreciated by all stakeholders including surrounding communities. The attendant short term actions are listed in Box 5 below.

Box 5 Short term actions by member states towards good mineral sector governance

a) Strengthen transparency and access to information
b) Improve public participation and domesticate in national policies, laws and regulations relevant provisions on public participation of the Aarhus Convention and Equator Principles
c) Resource the legislature to provide effective oversight over mineral sector institutions and mining companies
d) Provide capacity building programmes to strengthen the capacity of local communities and CSOs to make informed decisions on mining projects
e) Establish multi-stakeholder oversight bodies to ensure broad participation in the decision making, monitoring and evaluation of mineral projects

Source: Draft Action Plan for Implementing the AMV, December 2011

In Botswana, government is an investor in major mining projects in diamonds (Debswana Diamond Company), copper and nickel (BCL Limited and Norilsk Nickel), soda ash and salt (Botswana Ash), and coal (Morupule Coal Mine). The shareholder agreements over these projects cover, among others, the payment of royalties, profit taxes and dividends to the government. The Mineral Affairs Division at the Ministry of Minerals, Energy and Water Resources (MEWR) monitors and enforces these agreements. The Director of Mines sits on some mining company boards by invitation, but the Mineral Affairs Division is in charge of monitoring and enforcing shareholder agreements while the Department of Mines is mainly an enforcer of mining legislation. It is envisaged that the monitoring role of the Minerals Affairs Division will be taken over by the planned government Mining Investment Company once it is up and running.

As the mining companies in which government is a shareholder are not listed, it is not easy for the public to obtain information on the performance of these companies. One could therefore argue that they are not transparent to the general public or researchers.

Currently government-appointed Board members, which includes the Permanent Secretary, some senior government officials in the Ministry, and professionals outside of government, sit on the boards of the above major mining companies and it is accepted that they would discharge their duties diligently in line with good governance best practice.

Botswana also has a Minerals Policy Committee of Cabinet (MPC), which comprises heads of the Civil Service at the Permanent Secretary level from the Ministries of Mines and Finance, the Reserve Bank and the Attorney General. The MPC's role is to advise on all long-term policy issues, and negotiate mining concessions and commercial agreements between mining companies and the government. Some of the advantages of having the MPC are that it helps to decentralise power away from the Ministry of Minerals, Energy and Water Resources and also provides checks and balances and continuity, and ensures that the institutional memory built from various projects and negotiations then resides in more than one arm of government.

Botswana was amongst the first group of countries to set up the Kimberley Process Certification Scheme whose objective was to ensure that diamonds from conflict areas were not traded to benefit groups involved in civil wars in the producer countries.

The country is endowed with huge coal resources, in the order of 212 billion tonnes, and it has now moved to a tender system in awarding prospecting licences over the known coal blocks. Mining companies submit bids to stand a chance to be awarded a prospecting licence over a block in a known coalfield.

Programme Cluster 6
Research and Development

The objective of programmes under this cluster is to create a knowledge-driven mining sector that is a key component of a diversified, vibrant and globally competitive industrialising African economy. The attendant short term actions are listed in Box 6 below.

Box 6 Short term actions by member states towards research and development

a) Develop mineral (and tax) law and policy instruments that will encourage R&D and HRD;
b) Promote strategies to develop R&D in industries that adopt beneficiation approach for primary minerals
c) Develop and update detailed statistics on mineral production, exports, investments direct and indirect public revenue generated by the minerals and mining industry, direct and indirect power and water consumption, local content, labour, etc

Source: Draft Action Plan for Implementing the AMV, December 2011

The Botswana Innovation Hub is meant to lead the country towards a knowledge-based economy as well as diversifying the economy away from diamond mining and creating jobs. It has been charged with operating the Science and Technology Park in Gaborone, where some of its goals are to support new ventures and existing companies, and to attract companies, universities, research and advanced training institutes to establish in the Science and Technology Park.[12] It is anticipated that local diamond beneficiation (cutting, polishing and jewellery manufacture) will provide demand for research in areas such as engineering, electronics, and laser technology; better equipment for polishing and cutting; use of laser technology to increase productivity at minimum costs, and research aimed at the consumer level of the diamond jewellery market.

The Mines and Minerals Act, 1999, requires mining companies, during the last quarter of each year, to submit their annual production plans

12 Botswana Innovation Hub- downloaded on 10/01/2014 from: http://www.bih.co.bw/

for the following year to the Director of Mines. When a mining company submits its production returns in the current year, these are compared to those submitted in the annual production plan and the company would be required to provide a detailed report explaining any deviation from the mining plan

Mining companies also submit monthly returns in the following forms: Monthly Health and Mortality Returns and Monthly Labour and Wages Returns. Production Returns for quarries and small scale mines and semi-precious stone are submitted quarterly[13]. The Department of Mines collects these statistics and produces annual reports for use by the general public, researchers and potential investors in the mining industry. However, the Department is not able to collect and analyse all of the data that is required to be collected by it under the Act because of capacity constraints. There is no IT system (customised software) in place to analyse and generate reports based on the information submitted.

13 see Department of Mines website for these forms at: http://www.mines.gov.bw/).

Programme Cluster 7
Environment and social issues

The objective of programmes under this cluster is to create a mining sector that is environmentally friendly, socially responsible and appreciated by all stakeholders and surrounding communities. The attendant short term actions are listed in Box 7 below.

Box 7 Short term actions by member states on environmental and social issues

a) Make SEAs, EIAs, HIAs and SIAs mandatory tools for project approval
b) Develop and implement guidelines for impacts and benefits agreements with communities in mining areas
c) Monitor implementation of environmental and social funds as part of mandatory requirements for continued mining operations
d) Develop a sustainable environmental and health & safety strategy to reduce or eliminate the adverse impacts of ASM
e) Build capacities of communities and CSOs to negotiate impact and benefits agreements

Source: Draft Action Plan for Implementing the AMV, December 2011

The Environmental Assessment Act, 2012 provides requirements for environmental impact assessments (EIAs), strategic environmental assessments (SEAs), environmental audits (EAs), etc, with the pre-requisite for project approval being the EIA. For mining projects, the consultation process includes meetings with stakeholder groups that are typically conducted at the Chief's premises in the rural areas. The evaluation of the EIA and environmental monitoring programmes (EMPs) is carried out by the Department of Mines and they provide their written opinion to the Department of Environmental Affairs.

Section 65(9) of the Mines and Minerals Act requires a mining company to make adequate financial provisions for post-mine rehabilitation. Mining companies establish environmental trust funds (ETFs) into which they save the funds estimated to be sufficient to cover future rehabilitation costs.

Regarding environmental degradation due to river and pit sand mining, Botswana has had to outlaw river sand extraction due to the realisation that the available stock was actually exhausted around the major demand centres in Gaborone and Francistown. The policing against illegal river sand extraction has been cascaded to the community level as enforcing it from the central government level proved to be ineffective.

Perhaps due to the state ownership of mineral rights, there is no requirement for mining companies to enter into impact and benefit agreements with the communities they operate in. However, mining companies enter into surface rights rental agreements with the local authorities.

Programme Cluster 8
Linkages and diversification

The objective of programmes under this cluster is to create a mining sector that catalyses and contributes to broad-based growth and development through upstream, downstream, side-stream and infrastructure linkages. The attendant short-term actions are listed in Box 8 below.

Box 8 Short term actions by member states towards achieving economic linkages and diversification

a) Identify and promote viable beneficiation Projects
b) Create a database on tariff and non-tariff barriers to mineral-based value added products and expand their access to regional and global markets

Source: Draft Action Plan for Implementing the AMV, December 2011

In November 2013, and as part of the ten year Sales Agreement signed between the Botswana government and De Beers in September 2011, the aggregation and sales function that were performed at the London offices of the Diamond Trading Company International (DTC), were relocated to Gaborone.[14] Some of the benefits of this relocation are job creation as well the capturing of value add as the country moves to downstream activities in the diamond value chain. Currently, the Diamond Trading Company Botswana (DTCB) has some 21 local sight-holders with diamond

14 Diamond Trading Company http://www.dtcsightholder.com/en/About-DTC/DTC-Botswana/

cutting and polishing factories in Botswana.[15] The Diamond Hub was set up under MEWR to, among others, facilitate the downstream diamond mining business. There is no law that imposes export tax on rough diamond exports.

As Botswana depends largely on diamonds, diversification is also regarded as including the widening of the mineral base to lessen dependence on diamonds. Areas that hold promise are copper, coal and coal bed methane.

The BCL Limited's copper and nickel mining and smelting complex's employment, which has remained at about 4,500, continues to make the company the largest mining employer in Botswana. There has always been concern regarding what would become of the town when mining eventually comes to an end. In response to these concerns a number of programmes, such as the Financial Assistance Policy and the Special Incentive Package, were set up to attract investors to set up in the town of Selebi Phikwe in a bid to diversify the region's economy and set it on a path away from dependence on mining. Currently, the Selebi Phikwe Economic Diversification Unit (SPEDU) under the Ministry of Trade and Industry is charged with, among others, promoting the region to attract investment, removing barriers to business efficiency and creating employment in the region.

The major source of funding for SPEDU is the re-employment account that was set up under the European Union's Sysmin loan facility to BCL Limited. The funds are put towards infrastructure projects that would enhance the competitiveness of the region.[16]

Economic diversification is a priority area for the government and the recently launched Economic Diversification Drive takes a holistic approach that brings together all stakeholders to devise policies, strategies and programmes to realise similar goals of '...employment creation, wealth creation, poverty eradication, industrialisation and economic development.'[17]

The Botswana Chamber of Mines (BCM) sits on the High Level Consultative Committee (HLCC) in the Office of the President. This provides the

15 Diamond Trading Company Botswana http://www.dtcb.co.bw/about_us.php

16 Selebi Phikwe Economic Diversification Unit http://www.finance.gov.bw/index.php?option=com_content1&parent_id=216&pparent=264&id=266

17 Economic Diversification Drive http://www.mti.gov.bw/content/economic-diversification-drive-edd

BCM with an avenue to elevate issues that affect the minerals sector. This may range from infrastructure constraints to training of artisans. For instance, the lack of a railway line to either the East or West to link to possible export ports is presenting a serious challenge to the development of the country's huge coal resources.

Programme Cluster 9
Mobilising mining infrastructure and investment
The objective of programmes under this cluster is to increase the level of investment flows into mining and infrastructure projects to support broad socio-economic development. The attendant short term actions are listed in Box 9 below.

Box 9 Short term actions by member states towards achieving economic linkages and diversification

a) Develop strategies to promote local and international financial resource mobilization
b) Develop effective investment promotion and protection strategies
c) Develop improved strategies to target emerging market financiers for R4Is with emphasis on greenfield projects in mining and infrastructure
d) Create or strengthen PPI units in member States to enable the participation of the private sector in infrastructure projects

Source: Draft Action Plan for Implementing the AMV, December 2011

The Botswana Stock Exchange has both domestic and foreign company stock for trading. The foreign company index is dominated by junior mining companies who also have multiple listings in their home countries and other established stock exchanges in Sydney, Vancouver, Toronto, London, etc.

The Botswana Investment and Trade Centre (BITC) was recently established (2011) under the Ministry of Trade and Industry to provide investment promotion and attraction, export promotion and development including management of the Botswana Brand[18].

Regarding infrastructure, the strategy under NDP10 was that of transforming the existing parastatal, Botswana Railways (BR), from being a transit railway line operator to one that is geared for mineral exports (mainly coal). The government would consider private sector participation wherein the latter would build and operate the railway infrastructure. Some advantages of this strategy would include relieving BR of the construction and operational risks associated with such infrastructure projects as well as lessening the burden on the government to coordinate and regulate such projects if they were undertaken as wholly-owned government projects.

A coal road map was unveiled at a meeting between MEWR and industry stakeholders on January 31st, 2012. The meeting shared government's vision for the development of the country's huge coal resources and the preliminary concepts for the railway and port infrastructure that would have to be developed to facilitate this. The coal road map study would investigate the viability of exploitation of Botswana coal for the following uses: exports, power generation or coal to liquids plants. The Ministry of Transport and Communication's Transport Hub has a 'Strategic Railway Project' portfolio in Botswana. The railway line and port projects include the following: 1) the Trans Kalahari Railway Project, which would run along the route Mmamabula-Gaborone-Gobabis-Walvis Bay in Namibia and is estimated to cost some US$11.2 billion. The pre-feasibility study for this project is complete. 2) The Ponta Techobanine Project would see a railway line from Botswana, through Zimbabwe and ending up at Techobanine in Mozambique. The governments of Botswana, Zimbabwe and Mozambique resolved in early 2012 that a prefeasibility study for this project be carried out. 3) the Mmamabula–Ellisras (Lephalale) in South Africa and 4) Mosetse–Kazungula and through to Zambia. The last two projects have gone through their prefeasibility study stages.[19]

18 Botswana Investment and Trade Center, http://www.bitc.co.bw/

19 Coal road map presentations available from: http://www.mmewr.gov.bw/pitso/crmp/

Conclusion

This study adopted an approach that was mainly desk-top research to find out how well aligned Botswana's efforts are to the AMV in the nine programme clusters that make up the action plan for implementing the AMV. While the country is yet to devote resources to the AMV effort, there is evidence that the mining and environmental laws, mineral sector governance structures, fiscal policies, strategies for local beneficiation of minerals and economic diversification spearheaded by the creation of economic hubs such as the Diamond Hub, the Transport Hub, the Innovation Hub, and the current efforts being made by Selebi Phikwe Economic Diversification Unit to diversify the economy of Selebi Phikwe and the region away from the mining and smelting of copper and nickel, do align with the Africa Mining Vision of leveraging the goals for poverty reduction, industrialisation, economic diversification and growth of African countries on the direct and indirect economic benefits from the minerals sector. Specifically, some examples of the areas where there has been good progress include the following:

a) there is evidence that the mining laws and fiscal regime are globally competitive and that mineral rents are put to good use guided by good governance and good fiscal policies such as the Sustainable Budget Index and the sterilisation of windfall revenues through the Pula Fund;
b) the completion of Human Resource Development plan for the minerals sector, the first sector to be covered, emphasises the value that the country places on the sector,;
c) the National Integrated Geo-science Information System which will allow remote access by exploration companies to geological data;
d) Botswana laws and mining laws are available on the web.

Mining requires infrastructure and this is one of the areas where the country fares poorly and it is therefore encouraging that the Transport Hub has strategic railway line and port projects that would help unlock the country's potential to export coal. The other area is lack of human capacity. For instance there is no up to date report from the Department of Mines that researchers can rely upon regarding mining activity in Botswana.

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Programme Cluster 1 – Mining revenues and mineral rents management
Programme Cluster 1 Goal - To create a mining sector that generates adequate income and rents to eradicate poverty and finance African growth and development

Table 1 Short Term Action Items for Programme Cluster 1 at the Country Level

End State Vision / What Success Will Look Like	Short term (<5 years) Activities at the Country-Level	Progress on Actions Taken in Botswana
1. Enhanced share of mineral revenue accruing to Africa mining countries	a) Negotiate or renegotiate contracts to optimize revenues and to ensure fiscal space and responsiveness to windfalls b) Review the current fiscal environment in African mining countries to develop guidelines for optimizing tax packages in a manner that does not discourage mining investment c) Develop systems to evaluate components of tax regimes for leakages and transfer pricing d) Review applicability and terms of double taxation agreements and BITs with host countries of mining companies.	• Progressive mining fiscal regime in place (rated in the top ten globally and 1st position in Africa); • Diamond mining fiscal regime negotiated on a project by project basis as it is not practical to develop a taxation formula that will yield optimum mineral rent due to very high differences in profitability from one diamond mine to the next. • Transfer pricing in the sale of mineral products and thin capitalisation covered in the Mines and Minerals Act; risk of supply chain transfer pricing not covered.

2. Improved management and use of mineral revenue	a) Explore strategies for investing windfall earnings and mineral rent into stabilization funds, infrastructure funds and sovereign wealth funds (applies to cluster 9 also) b) Develop rent distribution systems for allocating part of mineral revenue to communities near mining areas and local authorities c) Improve local communities' benefit from mineral resources through access to jobs, education, transport infrastructure, health services, water and sanitation	• Dependence on diamond mineral revenues has meant that fiscal policy is deliberately cautious to ensure that such revenues are spent only on investment projects in education, health and infrastructure (guided by the Strategic Budget Index) • The Pula Fund is practically a sovereign wealth fund.

Programme Cluster 2

Geological and mining information systems

Programme Cluster 2 Goal - To develop a comprehensive knowledge of Africa's mineral endowment

Table 2 Short Term Action Items for Programme Cluster 2 at the Country Level

End State Vision / What Success Will Look Like	Short term (<5 years) Activities at the Country-Level	Progress on Actions Taken in Botswana
Improved geological and mining information systems to underpin investment in exploration and mine development	Improve resourcing of national geological survey institutions	• Over 80% of the country has been covered by electromagnetic surveys flown at close line spacing with the remaining 20% being that covered by deep Kalahari sands where preliminary surveys showed little potential for near surface mining. • A National Geo-Science Information Centre is in place and manages all datasets, maps and reports in the Department. • A National Integrated Geo-science Information System was designed to enable remote access to data but is not fully functional. • Botswana ranks 43rd among 96 jurisdictions globally in terms of ease of access to geological and related data. • The Department of Geological Surveys is undergoing restructuring to turn it into a parastatal.

Programme Cluster 3 – Building human and institutional capacities

Programme Cluster 3 Goal – To create a mining sector that is knowledge driven and is the engine of an internationally competitive African industrial economy

Table 3 Short Term Action Items for Programme Cluster 3 at the Country Level

End State Vision / What Success Will Look Like	Short term (<5 years) Activities at the Country-Level	Progress on Actions Taken in Botswana
Improved geological and mining information systems to underpin investment in exploration and mine development	a) Assess human resources needs for the mining sector b) Strengthen industry's role in supporting academic training e.g. through provision of incentives c) Diversify education and training funding sources to include private sector; d) Strengthen continuing professional development through short courses; e) Make available to all stakeholders and the general public all legal texts (mining laws, environmental laws, labour laws, company laws, tax laws, contracts etc) through a dedicated website f) Coordinate and ensure policy coherence within and across public sectors	• The Strategic Human Resource Development Plan for the Minerals, Energy and Water Resource Sector for the period 2013 to 2023 is in place. • Botswana Qualifications Authority administers the Vocational Training Fund which employers can use to train their employees up to certificate level. • Botswana laws are available for purchase from the Attorney General's Chambers website. • Botswana mining laws, mineral promotion materials, application forms and checklists available on the Department of Mines website.

Programme Cluster 4 – Artisanal and small scale mining

Programme Cluster 4 Goal – To create a mining sector that harnesses the potential of artisanal and small scale mining to advance integrated and sustainable rural socio-economic development

Table 4 Short Term Action Items for Programme Cluster 4 at the Country Level

End State Vision / What Success Will Look Like	Short term (<5 years) Activities at the Country-Level	Progress on Actions Taken in Botswana
A viable and sustainable artisanal and small-scale mining sector that contributes to growth and development	a) Develop policies to encourage technical assistance for artisanal miners to upgrade them to small and medium scale mining enterprises and promote local service providers in the sub-sector b) Develop programmes to upgrade knowledge, skills and technology in the ASM sector; c) Develop models for partnership with government and large-scale mines to facilitate access to technology, skills, knowledge and markets; d) Develop a financing and marketing strategy appropriate to the needs of ASM e) Develop methodologies or templates for distinguishing potentially viable ASM operations for targeted support f) Implement international guidelines banning the use of child labour	• No geological potential for traditional small scale mining in Botswana. • Small scale mining limited to semi-precious stones and building and industrial minerals. • Problem of illegal river and pit sand mining to be addressed on two fronts: legislation – stiffer penalties and eliminating the demand for river sand by shifting to crusher dust for brick making, use of recycled rubble and choosing building materials that do not require plastering such as the use of face and clay bricks. • Identifying deposits of building and industrial minerals and conducting feasibility studies over these before they are licensed to prospective quarry operators.

Programme Cluster 5 – Mineral sector governance

Programme Cluster 5 Goal – To create a sustainable and well governed mining sector that is inclusive and appreciated by all stakeholders including surrounding communities

Table 5 Short Term Action Items for Programme Cluster 5 at the Country Level

End State Vision / What Success Will Look Like	Short term (<5 years) Activities at the Country-Level	Short term (<5 years) Activities at the Country-Level
1. A well governed mining sector that is inclusive and appreciated by communities and other stakeholders	a) Strengthen transparency and access to information b) Improve public participation and domesticate in national policies, laws and regulations relevant provisions on public participation of the Aarhus Convention and Equator Principles c) Resource the legislature to provide effective oversight over mineral sector institutions and mining companies d) Provide capacity building programmes to strengthen the capacity of local communities and CSOs to make informed decisions on mining projects e) Establish multi-stakeholder oversight bodies to ensure broad participation in the decision making, monitoring and evaluation of mineral projects	• Government has access to information on mining companies both as regulator and also as a shareholder. • As the mining companies are not listed, they are not transparent to the general public or researchers. • The Minerals Policy of Cabinet ensures that institutional memory is spread over key Ministries of Mines, Finance, Justice and the Bank of Botswana. • A state mining investment company is envisaged and its role would be to manage and monitor government investment in mining projects.
2. Improved human rights in Africa's mineral sector	a) Empower HR institutions to monitor and enforce human rights standards in relation to mineral operations b) Develop methodologies and tools for mainstreaming health and human rights issues into impact assessment procedures and policy planning frameworks	See programme cluster 7

Programme Cluster 6 – Research and Development
Programme Cluster 6 Goal – To create a knowledge-driven mining sector that is a key component of a diversified, vibrant and globally competitive industrialising African economy

Table 6 Short Term Action Items for Programme Cluster 6 at the Country Level

End State Vision / What Success Will Look Like	Short term (<5 years) Activities at the Country-Level	Progress on Actions Taken in Botswana
A knowledge-driven, diversified, globally competitive mining sector that is a key component of an industrializing African economy.	a) Develop mineral (and tax) law and policy instruments that will encourage R&D and HRD; b) Promote strategies to develop R&D in industries that adopt a beneficiation approach for primary minerals c) Develop and update detailed statistics on mineral production, exports, investments direct and indirect public revenue generated by the minerals and mining industry, direct and indirect power and water consumption, local content, labour, etc	• The Innovation Hub operates a Science and Technology Park in Gaborone which aims to support new ventures and existing companies, and to attract companies, universities, research and advanced training institutes to establish in the Park. • Mining companies submit monthly returns that include production statistics to the Department of Mines, which, due mainly to resource and capacity constraints, it is not able to publish in reports for the general public.

Programme Cluster 7 – Environment and social issues

Programme Cluster 7 Goal – To create a mining sector that is environmentally friendly, socially responsible and appreciated by all stakeholders and surrounding communities

Table 7 Short Term Action Items for Programme Cluster 7 at the Country Level

End State Vision / What Success Will Look Like	Short term (<5 years) Activities at the Country-Level	Progress on Actions Taken in Botswana
A mining sector that is environmentally friendly, is socially responsible and is appreciated by communities	a) Make SEAs, EIAs, HIAs and SIAs mandatory tools for project approval b) Develop and implement guidelines for impacts and benefits agreements with communities in mining areas c) Monitor implementation of environmental and social funds as part of mandatory requirements for continued mining operations d) Develop a sustainable environmental and health & safety strategy to reduce or eliminate the adverse impacts of ASM e) Build capacities of communities and CSOs to negotiate impact and benefits agreements	• The Environmental Assessment Act, 2012 sets requirements for environmental impact assessments, (EIAs), strategic environmental assessments (SEAs), environmental audits (EAs), etc, • All projects must have an EIA before they can be approved. • The consultation process includes meetings with stakeholder groups that are typically conducted at the Chief's premises in the rural areas. • The evaluation of the EIA and environmental monitoring programmes (EMPs) is carried out by the Department of Mines and they provide their written opinion to the Department of Environmental Affairs. • Mining companies establish environmental trust funds (ETFs) into which they save the funds estimated to be sufficient to cover future rehabilitation costs.

Programme Cluster 8 – Linkages and diversification

Programme Cluster 8 Goal – To create a mining sector that catalyses and contributes to broad-based growth and development through upstream, downstream, side-stream and infrastructure linkages

Table 8 Short Term Action Items for Programme Cluster 8 at the Country Level

End State Vision / What Success Will Look Like	Short term (<5 years) Activities at the Country-Level	Progress on Actions Taken in Botswana
Enhanced mineral based industrialization and diversification of African economies	a) Identify and promote viable beneficiation Projects b) Create a database on tariff and non-tariff barriers to mineral-based value added products and expand their access to regional and global markets	• Diversification is also viewed as broadening the mineral base to include other minerals such as copper, coal and coal bed methane. • The Diamond Hub was set up under MEWR to, among others, facilitate the downstream diamond mining business. • Diamond Trading Company Botswana (DTCB) has some 21 local sight-holders with diamond cutting and polishing factories in Botswana. • There is no law that imposes an export tax on rough diamond exports. • The Selebi Phikwe Economic Diversification Unit (SPEDU) aims to make the region around Selebi Phikwe competitive for inward investment.

Programme Cluster 9 – Mobilising mining infrastructure and investment

Programme Cluster 9 Goal – To increase the level of investment flows into mining and infrastructure projects to support broad socio-economic development

Table 9 Short Term Action Items for Programme Cluster 9 at the Country Level

End State Vision / What Success Will Look Like	Short term (<5 years) Activities at the Country-Level	Progress on Actions Taken in Botswana
Enhanced investment in mining infrastructure projects in Africa	a) Develop strategies to promote local and international financial resource mobilization b) Develop effective investment promotion and protection strategies c) Develop improved strategies to target emerging market financiers for R4Is with emphasis on greenfield projects in mining and infrastructure d) Create or strengthen PPI units in member States to enable the participation of the private sector in infrastructure projects	• Under NDP10, government adopts a strategy for private participation in the building and operation of rail infrastructure to support mineral exports, mainly coal. • Coal road map – study to identify the viable options for coal exploitation (coal for export, power generation or coal to liquids plants). • Prefeasibility studies undertaken for four strategic railway lines that would serve, primarily, the mining sector.

CHAPTER TWO
DEMORACTIC REPUBLIC OF CONGO

By MT Lukamba

Introduction

The mining industry in the Democratic Republic of Congo (DRC) is one of the key sectors of the country's economy especially on the fiscus side. A poor performance in the mining sector has negative repercussions on the national treasury and therefore delivery of social and essential services to the citizens of the nation. According to the International Monetary Fund (2014:6), the 'mining sector is expected to remain the main driver of economic growth, including the investment phase Sino-Congolese which is a joint-venture (SICOMINES) between the two nations'. In addition, Oxford Policy Management (2013) said that, since 2010, 21 companies were operating in the mining sector and paid US$ 773 million in taxes (EITI, data), equivalent to more than 10% of the government's estimated total revenues of US$ 6.4 billion. In 2014 the national budget went to US$ 9 billion. It shows that for the past four years there is an increase on the national budget. (Radio Okapi: 2014). .

For more than two decades all public enterprises involved in the mining sector have been virtually bankrupt. This situation is not only found among state mining companies, but also in various public enterprises, the reason being inefficient governance and political interference by Congolese politicians, especially those in positions of power (Lukamba:2013). Before the country became independent on 30 June 1960, most of the mining companies were well-managed, but the post-independence government tried to control the entire production of the mining industry. The result was that, after three decades of independence, the DRC began to show a sharp decline in production in most mining companies across the country. This drop in mineral production was linked to the political situation during that particular period.

The DRC is richly blessed in terms of its mineral resources. According to Kabemba (2011), this is by no means a new disclosure. It has been known for more than a century that the geology of the DRC is unique and has a wide diversity of mineral deposits.

The purpose of this chapter is to investigate whether the DRC is responding appropriately to the Africa Mining Vision promulgated at the conference of Africa's ministers responsible for mineral resources held in Addis Ababa, Ethiopia, in October 2008. This study is based entirely on desk-top work; no empirical study was conducted in the DRC. Secondary source material has been used to compile this report.

Before the DRC became independent on 30th June 1960 most of the mining companies used to be managed by private companies. At the end of the civil war in 1965, former president Mobutu Seseko took the initiative in 1966 to start nationalising most of the mining companies. For example, with the implementation of Act No 66-419 of 15/07/1966 regarding the nationalisation of OKIMO, the company lost its mining license and other licenses with the BAKAJIKA law. The company was requested to apply for a new mining license in accordance with Act No 66/413/08/07/1966. Several mining[20] laws[21] were passed on to OKIMO .

Today some of these mining concessions are managed by private companies in Itury region. For example AngloGold Ashanti signed a joint venture with state-owned company Kilo Moto.

The restructuring of mining policy started around 1982. Following the introduction of the New Mining Policy, the IMF and World Bank advised government to undertake Structural Adjustment Programmes as a way of liberalising the economy.

History of Mining in Congo

The Democratic Republic of the Congo is a nation in which monumental political and administrative problems have occurred since independence. It has the third largest population (more than 70 million people) and is the second largest land area in sub-Saharan Africa (SSA). Indeed, the DRC has a surface area equivalent to that of Western Europe.

The DRC has a surface area of 2,344,845 square kilometres (905,365 square miles) and borders on nine other countries. These neighbouring

20 These laws are maintained in French as footnoted so as not to lose their meanings due to English translation.

21 La concession 38 accordée par arête, No 206/CAB/TME du 15/11/1968 pour une période de 30 ans et découlant des permis d'exploitation (P.E: 70-71-73-74-83-134-135 et 136 couvrant les anciennes concession minières de: MOTO-MOKU-YEBU- AZI MOGU-ADMURUKU-GANGU et TERIDE.

1. La concession 39 accorde par le même arête et découlant du titres miniers (P.E 72). Elle constitue pour ainsi dire la reconduc tion de l'ancienne concession minière de KIBALI.
2. La concession 40 accorde par le même arrête et découlant de titres miniers ci-après: P.E 65-66-68-69-75-77-78-80-81-82-148 et 468 couvrant les anciennes concession minieres: VIEX-KILO, PILI-PILI, N'ZEBI KANGA, MONGWALU, TSHURU, LOGA, LUTCHUNGA, DZIPWAMBU, MUSOMA, NIZI, TALOLO et RUSA (AEMAPRI, 2006: 5).

Mining map Democratic Republic of Congo

Source: The Royal Museum for Central Africa, Tervuren, Belgium.

states are Angola in the southwest and west; and the Republic of Congo to the west; the Central African Republic and South Sudan in the north; Uganda, Rwanda, Burundi and Tanzania in the east; and the Republic of Zambia in the southeast (Columbia Encyclopaedia, 2007: 1).

It is rich in natural resources, having fertile soils, abundant water resources and enormous mineral wealth. Forests cover approximately 62% of the national territory and the DRC's biodiversity is a globally important asset (International Fund for Agricultural Development, 2012).
The DRC is potentially one of the wealthiest countries in Africa, but stands today as an impoverished developmental tragedy. Gifted with

fabulous natural resources, including copper, cobalt, gold, silver, tin, fertile soil and bounteous water supplies, the DRC has failed to fulfil its promise. According to the Columbia Encyclopaedia (2007: 2) mining is centred in Katanga Province, which provides copper, cobalt, zinc, manganese, uranium, cassiterite (tin ore), coal, gold, and silver.

Diamonds are mined in the Kasai Province and in Oriental Province. Major petroleum deposits have been discovered offshore, near the mouth of the Congo River, and also in Lake Albert in Oriental Province. According to the Ministry of Mines in the DRC (2013) all eleven of the provinces have rich mineral resources. It should be clarified that some of these resources have not yet been exploited.

The mining exploration in the DRC started in the Ituri region in Oriental Province. In 1903, two Australians by the names of Hannam and O'Brien, sent by King Leopold II of Belgium, discovered gold in the Agola River. This discovery was made in the territory occupied by the followers of Chief Kilo. After three years, gold was discovered in the Moto River (General Moulaert, 1940: 15), leading to the colonial power naming the mining company Kilo-Moto. The mining of gold only began with the arrival in the DRC of the Belgian colonial master.

The mining of diamonds began in 1906 in the province of Kasai by a company called la Société forestière et minière du Congo (Forminière) (Ndaywel è Nziem, 1998). After the DRC gained its independence (Forminiere) changed its name to Societe Miniere de Bakwanga (MIBA).

The third province where mining operations began is the Katanga Province. In 1909 a Scottish businessman, Robert William, established a company called Union Miniere du Haut Katanga (UMHK) which started the exploitation of copper in Katanga. The first copper mining concession in the DRC was called Etoile du Congo and it began processing copper. The UMHK used that particular site for a period of 16 years from 1910 until 1926. To cut the colonial history of mining sector short, during that period the majority of mining companies were under private control.

In 1966, after five years of independence, the DRC government decided to nationalise all the mining companies with the implementation of Act No. 66-419 of 15/07/1966. The government took over the Office de Mines de Kilo Moto OKIMO; the company lost its mining licence and other licences with the Act Bakajika. The company was requested to apply for another mining licence in accordance with Act No. 99/413/08/07/1966.

The major transformation took place in 1967 when the government decided to nationalise UMHK to become a state-owned company (called GECOMINES) with the government becoming the 100% shareholder. This decision by the DRC government was not well received by the business community in Belgium (Blummenthal Report: 1979). In 1971 GECOMINES changed its name to General de Carrièreet de Mines (GECAMINES). After 1967 the company produced 100,000 tons of copper per annum, and in 1974 it achieved an output of 360,000 tons. This state-owned company was responsible for 75% to 85% return in foreign currency for the government (Crem, 2013). During those years, in terms of contributions to the national treasury, it was estimated that it comprised about 30% per annum of the national treasury. In addition, in 1980 the production of copper reached one of the highest levels of 470,000 tons per year. This output dropped to 16,018 tons in 2005 (Gecamines, 2012).

One of the big disappointments during this particular period was that the government did not return some of the profits from the sale of copper to the state owned enterprises (SOEs). Instead, the funds were forwarded to the company called State Mineral Trading Company (SOCOCOM)[22]. This company was under direct presidential control. From there, some of the funds were misused for the personal gain of certain senior political figures. The collapse of the copper price in 1975, and the fall in prices of other minerals on the international market, had an extremely negative impact on the DRC economy.

The result of this system of organised private looting from government funds led to the collapse of the DRC economy. These circumstances went on until the beginning of the civil war in 1997 (Basedau, 2005). The Gecamines scenario was not an isolated case; most of the state-owned mining companies had similar problems. For example, Miba, SoKimo, Sodimico, Sominki, Sakima, and Kisenge Manganese were declared bankrupt. The result of this financial meltdown was that the government tried several times to go into partnership with certain private companies but nothing positive came out of these attempts.

Furthermore, the collapse of state-owned mining companies across the country led to widespread illegal mining activity. Those who undertook these illegal activities avoided paying tax to the government and accumulated some considerable wealth. In several provinces there was an expansion of artisanal mining activities. According to Building Capacity

22 Or Societe Congolaise de Commercialisation de Minerais in French.

Worldwide (2008:1), there were an estimated 2 million people 'actively involved in artisanal mining ... responsible for producing more than 50% of the minerals exported from the country'. In other words, about '15% to 20% of the population is directly dependent on this dangerous, illegal activity'. This became such a problem that, in Katanga Province, the provincial authority closed down some of these mines and declared artisanal mining illegal.

Much of this illegal mining was carried out on sites such as the Gecamines exploration site, in the Itury region, on the gold mining SoKimo site, and also at the MIBA site in Kasai, Oriental Province, where there were illegal diamond explorations. Furthermore, there was illegal mining activity in the eastern part of the DRC in Northern Kivu and Southern Kivu provinces. Most of these activities in the eastern part of the country were controlled by the rebel movements.

Before 1997, there was a very limited number of private companies which were involved in the mining sector. When President Laurent Desire Kabila took power in 1997, the DRC experienced the entrance of many private companies in the mining sector. The government signed contracts with a number of private companies. Most of these private mining companies signed contracts with SOEs that were involved in the mining sector. It is alleged that some of the contracts signed between the Congolese SOE and private companies were dubious and that money changed hands between institutions.

It is argued by Kabemba (2011: 16) that

> *'the state determines the framework within which mineral exploitation occurs as well as the manner in which contracts are negotiated and mineral wealth is used and distributed. The existence of loopholes in the system exposes the system to manipulations'.*

This is among the realities investors encounter in the DRC. The government is trying to work hard to address some of the problems that prospective investors faced previously. The table below (1) shows the contracts signed between the DRC's SOEs and private companies in the mining sector. Some of the companies are international investors and a few are based in the country. Most of the international mining companies are headquartered outside the country.

List of Contracts between private companies and SOE in the mining sector

Table 1
1. KISENGE MANGANESE CONTRACT

1.	Joint-venture EMK-Mn and OPL
2.	MDDK, Gold mine Kisenge, Scarl
3.	Joint-venture EMK-Mn and Cluff Mining Limited
4.	Joint-venture EMK-Mn and Sentinelle International Group Ltd

Source: DRC Ministry of Mines (2014)

This joint-venture does not state the year Kisenge Manganese signed these different deals with private companies. Some of these companies are still working with Kisenge Manganese to mine manganese and gold. Table 2 lists the 31 private companies that signed partnership agreements with Gecamines. Some of the partnerships were not well negotiated and favoured the SOE. For example, there was lack of transparency in the way many of the contracts were signed with the different private mining companies. The DRC parliament appointed a commission called the Lutundula Commission (named after the chairperson of the commission). In 2009, when the commission submitted its report to parliament, it was discovered that there were many dubious aspects in the contracts. So much so that 63 of the contracts had to be revised by the government (Lutundula Report, 2009). The outcome of the report reflected negatively on the accuracy of the information which the government had passed onto the media. Based on the findings of the commission, questions were raised on the commitment of the DRC government to the Extractive Industries Transparency Initiative (EITI). Table 2 indicates the partnerships entered into between Gecamines and a number of different private mining companies.

Table 2.
GECAMINES CONTRACT 2.
GECAMINES

1. Contract between Gecamines and EXACO Sprl for the exploitation of mines in Kalumbwe and Nyunga (July 2001).
2. Joint-venture between Gecamines and KINROSS-FOREST Ltd for the exploitation of the KAMOTO mine (February 2004).
3. Contract to establish a company between Gecamines and Swanepoel Ltd for the exploitation of the CHABARA mine (November 2005).
4. Contract to establish a company between Gecamines and SALREF Congo for the exploitation of Mutandaya Mukonkontamine (May 2001).
5. Joint-venture between Gecamines and Global Enterprises Corporate Ltd for the exploitation of an open mine at KOV and the reserve of Kananga and Tilwezembe (September 2004).
6. Contract for the creation of company between Gecamines and Western Mining for the exploration and exploitation of the Kasombo mine corridor (November 2005).
7. Amended mining contract between Gecamines and Lundin Holding Ltd, CHUI Ltd, FARU Ltd, MBOKO Ltd, MOFIA Ltd, and TEMSO Ltd (September 2005).
8. Contract to establish a company between Gecamines and AVCO Sprl for the Polygon mine of Kasonta Lupoto (October 2002).
9. Contract between Gecamines and China National Overseas Engineering Corporation relating to the exploitation of a mine in Musonie Global (November 2005).
10. Contract to establish a company between Gecamines and H&J Swanepoel Family Trust for the exploitation of the quarry at Kalukundi (February 2001).
11. Contract to establish a company between Gecamines and East China Capital Holding Ltd for prospecting and exploration of the quarry at Shitureu (July 2005).
12. Agreement to establish a company between Gecamines and Congo Minerals for the exploration of mines (September 2000).
13. Agreement to create Ruashi Mining in partnership with Gecamines, and Cobalt, Metals Company Ltd to explore the quarry

at Ruashi (June 2000).

14. Agreement of association to establish a mining company between Gecamines and Congo Minera and Developments Ltd for the quarries at Musonoi and Kasobantu.
15. Agreement of joint-venture between OMG B.V. and SA Group George Forrest and Gecamines.
16. Contract to establish a company between Gecamines and General Malta Forrest for the exploitation of a certain quarry.
17. Contract to establish a company with Gecamines and LEREXCOM Sprl for the exploration of polygon of Tondo (November 2005).
18. Agreement to establish a company between Gecamines and MELKIIOR RESOURCES, Inc. for the exploitation of the mines at Kabolela and Kipese November (1999).
20. Contract between Gecamines and Congo Investment Corporation, to create a company called Congolese Development Mining (February 2002).
21. A joint-venture between Gecamines and TRMALT Ltd.
22. Agreement of association between Gecamines and United Resources AG (February 2007).
23. Government Act to establish a Congolese company between Gecamines and STL Sprl, GTL, Group Forrest and OMG KOKKOLA for the mining of certain other minerals (September 1999).
24. Establishment of Boss Mining and Gecamines, and SHAFORD CAPITAL Ltd (January 2005).
25. A merger between MUKONDO MINING Sprl, and KABABANKOLA MINING COMPAG, and BOSS MINING (February 2005).
26. Contract to establish a company between Gecamines and Swanepoel for the collection of minerals in the Zinc industry plant in Kolwezi (November 2005).
27. Agreement between Gecamines and CHINA NATIONAL OVERSEAS ENGINEERING CORPORATION to mine certain minerals (March 2006).
28. Act of agreement between Gecamines, Forrest International Afrique Sprl and Societe Nationale des Chemins de Fer du Congo (SNCC).
29. Agreement between Gecamines and EGECIM to establish CIMSHABA. Note: No contract was submitted
30. SOFIDE; no contract was submitted.
31. Prospection de la zone centre Est.

Reading through the list of contracts in the table above, it is clear that many private companies signed agreements with the State Owned Enterprise (Gecamines). One of the negative aspects of these partnerships was that the government did not define the objectives and principles of the strategy the state company was supposed to follow.

Gecamines tried several times to get credit from international financial institutions and some of the private banks overseas. However, it did not manage to lessen its financial burden. Lack of funding brought it to the verge of bankruptcy and the only solution was going into partnership with private companies. The Lutundula Commission Report (2009) highlights that ‘several plants stopped working and Gecamines mineral resources were sliced up, mostly to satisfy the immediate needs for cash of the governmental authorities, rather than to finance the revival of the bankrupt enterprise’. The result of slicing up the SOE by the government brought the establishment of several private mining companies in the DRC.

The Table 3 presents another agreement between MIBA (the state diamond company) and its joint ventures with private companies.

Table 3. MIBA CONTRACTS
3. MIBA

1. Agreement between MIBA and DE BEERS CENTENARY AG.
2. Agreement between MIBA and DGI MINING Ltd.
3. Contract between MIBA and INDO AFRIQUE MINING.
4. Contract between MIBA and BHP BILLITON WORLD EXPLORATION ING.
5. Contract between MIBA, NIJNE-LENSKOYE and 1 & L CANADA Ltd.
6. Agreement between MIBA and ELEMENTAL MINERALS Ltd.

Source: Lutundula Commission Report (2009).

One of the reasons MIBA signed several of these agreements or contracts was in the hope of resuscitating diamond production. However, the outcome of these contracts did not assist MIBA to become a competitive international diamond company again. Even today the company is still struggling to purchase new materials and equipment to boost flagging diamond production.

An SOE in the gold mining sector, OKIMO, also signed contracts with private mining companies. Table 4 provides a list of these private companies.

Table 4. OKIMO CONTRACTS
4. OKIMO

1. Assistance, technical contract, and finance between OKIMO and BORGAKIM MINING Sprl.
2. Agreement to exploit gold in the northern concession between OKIMO, MOTO GOLDMINES and BORGAKIM MINING Sprl.
3. Lease agreement between OKIMO and KIBALI GOLD Sprl.
4. Lease agreement between OKIMO and GORUMBWA MINING.
5. Lease agreement between OKIMO and MWANA AFRICA HOLING.
6. Lease agreement between OKIMO and BORGAKIM MINING Sprl.
7. Lease agreement between OKIMO and AMANI GOLD Sprl.
8. Lease agreement between OKIMO and TANGOLD Sprl.
9. Lease agreement between OKIMO and BLUE ROSE.
10. Mining agreement between OKIMO and KIMIN, and ASHANTI GOLDFIELDS.
11. Lease agreement between OKIMO and RAMBI MINING Sprl.

Source: Lutundula Commission Report (2009).

The participation of private companies to invest in the gold mining sector was one of the government's objectives to improve the production of gold and other minerals.

In the case of OKIMO many international gold companies approached it to invest. Most of the private companies decided to go for a joint venture with the state owned company OKIMO. However, the end result of this was not positive because of undue political involvement and mismanagement of funds by senior executives (Lukamba, 2013).

Some of these mining companies are still requesting funding so that they can begin to mine gold. Others have started but their production is limited. It is argued by the Catholic Agency for Overseas Development (CAFOD) (2010, 51) that the estimated value of the DRC gold deposits creates a strong incentive to invest in gold mining in the Itury region. Anglo Gold Ashanti has been conducting exploratory work in the north-eastern Itury region, near the town of Mongbwalu. Moto Goldmines is also carrying out exploration work in this region. There are already a few private mining companies which have started producing gold in the Oriental Province and Southern Kivu. For example, BARON GOLD MINING and KIBALI GOLD MINING are both in production. However, the involvement of many private companies in the gold sector has not had the positive results the government predicted.

As shown below in Table 5 the cassiterite mining company called SAKIMA, based in Maniema Province, is struggling to raise funds to become operational again. The stark reality is that SAKIMA has been in financial difficulty for the past two decades. A list of the private mining companies which signed lease agreements with SAKIMA for the production of various mineral resources is provided.

Table 5. SAKIMA CONTRACT
5. SAKIMA

1. Lease agreement between SAKIMA and D.F.S.A. MINING CONGO (DMC) Spd.
2. Lease agreement between SAKIMA and GEMICO (La Generale des Mines a Congo GEMICO).
3. Lease agreement between SAKIMA and Group Mining BAGANDULA (GMB).
4. Preliminary agreement between SAKIMA and SUMMERVALE OVERSEAS LIMITED to explore the gold quarry at Kalima.
5. A management contract between SAKIMA and CAR. The management contract was proposed by CAR, not SAKIMA.

Source: Lutundula Commission Report (2009).

Unfortunately the agreements listed above did not boost the production of cassiterite in SAKIMA. In 2012 the Ministry of Mines took a decision to change the structure of SAKIMA to allow outside investment. The Ministry of Mines was hoping to facilitate partnerships with international investors (Horizon Mines, 2012).

The last SOE in the mining sector to be discussed in this report is SODIMICO which is based in Katanga Province not far from the Zambian border. There are six lease agreements the company has signed with private sector companies. See Table 6 below.

Table 6. SODIMICO CONTRACTS
6. SODIMICO

1. Lease agreement between SODIMICO and EGMF, to establish MMK.
2. Contract between SODIMICO and SOCOMIE.
3. Contract to rent containers of SODIMICO to MUYAFA CONGO Sprl.
4. Contract between SODIMICO and KGHM.
5. Contract between SODIMICO and LONG FEI.
6. Contract between SODIMICO and WESTERN MINING.

Source: Lutundula Commission Report (2009)

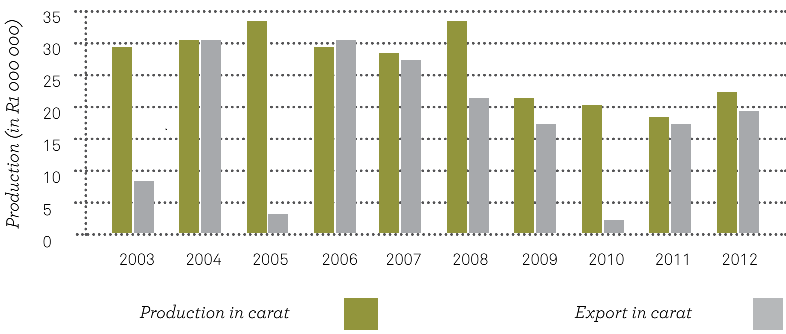
SODIMICO took over several mining properties from the UMK (Gécamines) in 1967, when President Mobutu partially nationalised the Congolese economy (Kenneth & Omeje, 2008). SODIMICO was a subsidiary of the giant state-owned Gécamines. The primary focus was on gold mining (IMF, 2007). However, that focus changed later and the company began producing copper and other minerals. In 1988 the Kinsenda mine was flooded, halting production for two years. In addition, the management of SODIMICO was ineffective and poor financial management brought it to the brink of bankruptcy. The last resort was for the government to invite private companies to invest their money in SODIMICO.

The contracts SODIMICO signed with EGMF for the establishment of MMK is one of the success stories for the SOE. According to International Mining (2007), MMK holds 75% of Copper Resources Corp.; a 20% share is owned by SODIMICO; and 5% is held by the Forrest Group. In return, Forrest owns 40% of CRC. Forrest is one of the biggest private companies in Katanga Province and in the DRC. As for the other agreements, it is unclear whether these bore any fruit.

Output Trends in the DRC Mining Sector

The production of various minerals in the mining sector across the country is presented below. Most of the data is provided by the Department of Mines. The data on diamond production is registered with the System of Certification Process of Kimberley. This includes diamonds produced by MIBA and also artisanal production. Other statistical data is sourced from the Department of Mines based in Kinshasa.

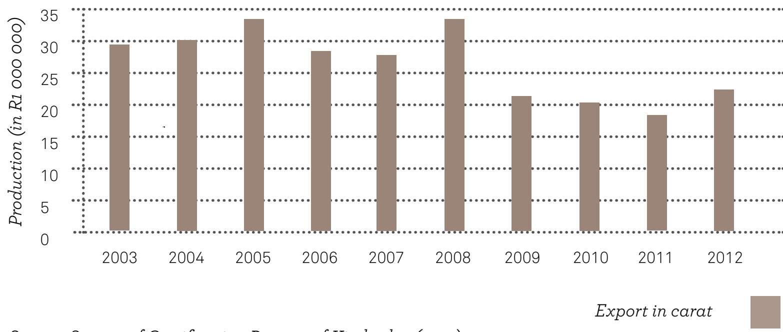
Figure 1: Diamond production, 2003 to 2012



Source: System of Certification Process of Kimberley (2013).

The data presented in Figure 1 above are linked with the production and exports of diamonds (including artisanal production) across the DRC. Indeed, this data is dominated by artisanal diamond production.

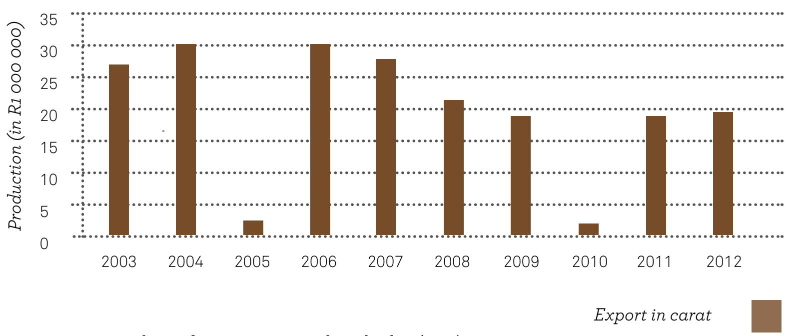
Figure 2: Diamond production in carats



Source: System of Certification Process of Kimberley (2013).

In terms of production, the diamonds produced from artisanal mining play a huge role, while MIBA production is low. Figure 2 shows that in 2009 diamond production dropped. This was linked to the worldwide financial crisis.

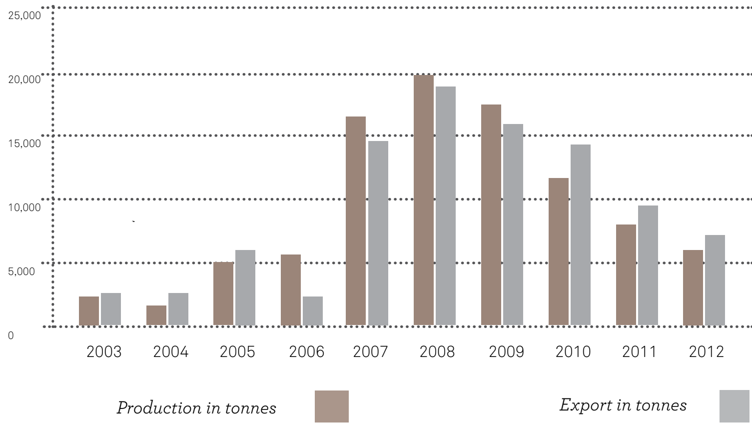
Figure 3: Diamond exports in carats



Source: System of Certification Process of Kimberley (2013).

Diamond exports in carats, shown in Figure 3, are based on the certification system applicable in Kimberley. Exports by MIBA fell markedly and the Ministry of Mines could not produce exact export data. MIBA exports were (and still are) reduced by the worldwide financial crisis. Indeed, compared to other minerals, the value of diamonds fell more sharply (Certification of Kimberley, 2013). This scenario appears to be specific to DRC diamond production and is reflected in both the production and export statistics between 2008 and 2010.

Figure 4: Cassiterite production, 2003 to 2012

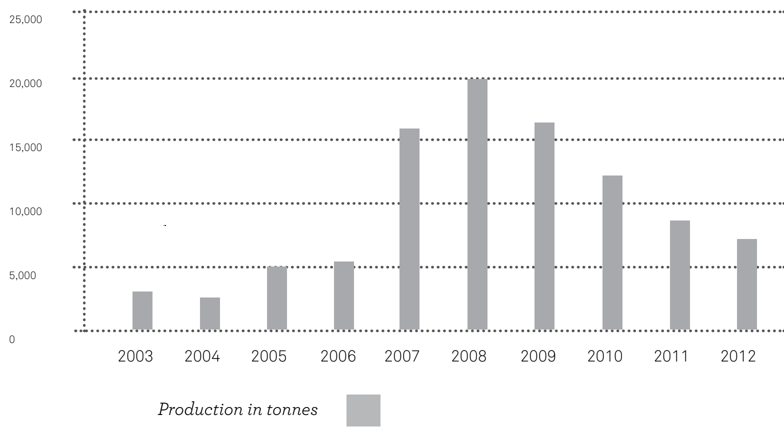


Source: System of Certification Process of Kimberley (2013).

Production of cassiterite in the DRC is still very low due to lack of finance in the SOE. Official statistics for the export of cassiterite from Goma (North Kivu) and Bukavu (South Kivu) in 2004 were obtained from the Office of Congolese Control (OCC) (Global Witness, 2005). The production began slowly and increased with time. In 2007 and 2008 production increased but then dropped again. The fluctuation of production and exports can be linked to the financial troubles in the DRC.

Most of the cassiterite produced in DRC is through artisanal mining in the eastern part of the DRC in the north and south Kivu Province. Another part where cassiterite is widely produced by the local people is in the northern part of Katanga Province.

Figure 5: Cassiterite production in tonnes



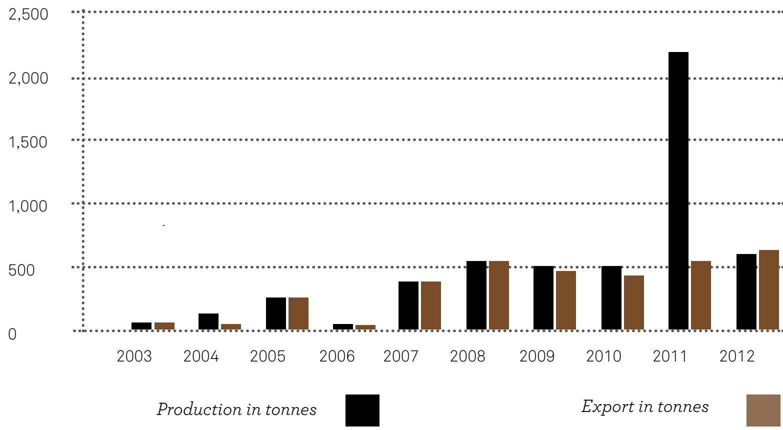
Source: Ministry of Mines (2013).

Figure 6: Cassiterite exports in tonnes

Source: Ministry of Mines (2013).

The export of Cassiterite is very low because artisanal production lacks the necessary machinery to produce more tonnage of the mineral. The SOE SAKIMA needs to start producing cassiterite again and exports will hopefully increase with time. A small group of rebels in the eastern part of the DRC benefit from this informal mining activity.

Figure 7: Coltan (Colombite-tantalite) production, 2003 to 2012

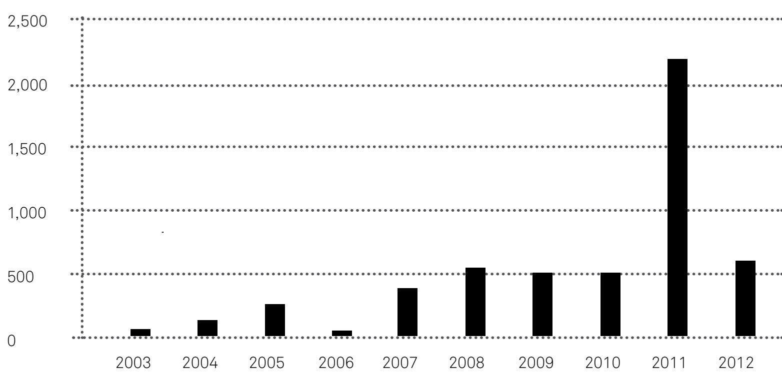


Source: Ministry of Mines (2013).

Coltan is a mineral from which the metals columbium (also known as niobium) and tantalum are extracted. The most well-known use of tantalum is in the manufacture of capacitors required for electronic goods such as mobile phones and computers.

The price of coltan dropped in 2000 because of conditions in the international market. Figure 7 reveals very low production and in the years from 2000 until 2006. The demand then picked up again in 2006. Exports show a similar trend.

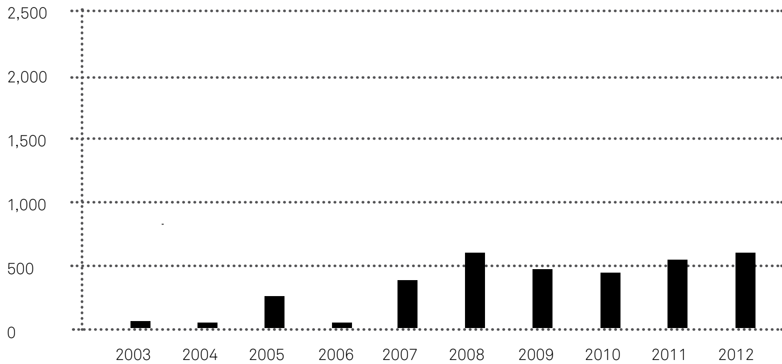
Figure 8: Coltan production in tonnes



Source: Ministry of Mines (2013).

The production of coltan in the DRC is still at the stage of informal mining activity in the eastern part of the country. As yet there is no formal or industrialised mining. Figure 8 indicates that production increased slowly from 2007, reaching a high point in 2011. In 2012 production levels dropped off again.

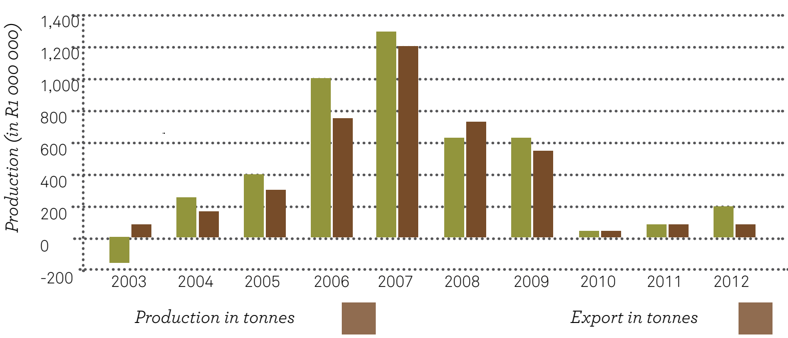
Figure 9: Coltan exports in tonnes



Source: Ministry of Mines (2013).

When the export and production of coltan in the DRC are compared, the way the mineral has been mined is not a factor. The fluctuation of data can be linked to low levels of industrialisation and mining activity for that product. Much of this mining is artisanal (manual) mining, which has been recognised by the Ministry of Mines.

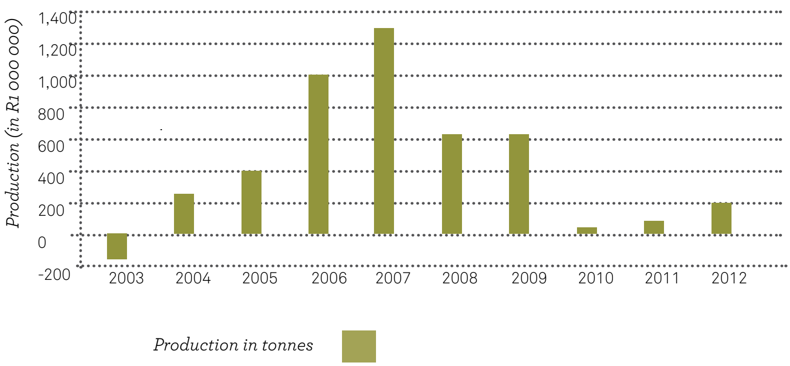
Figure 10: Wolframite production, 2003 to 2012



Source: Ministry of Mines (2013).

Wolframite was originally mined in three provinces of the DRC (Maniema, North-Kivu and South-Kivu). The data in Figure 10 demonstrates that in 2003 the production was almost nil but production increased from 2004 onwards. In 2009 production dropped, declining to 304 tonnes (from 548 tonnes in 2008) as shown in this figure.

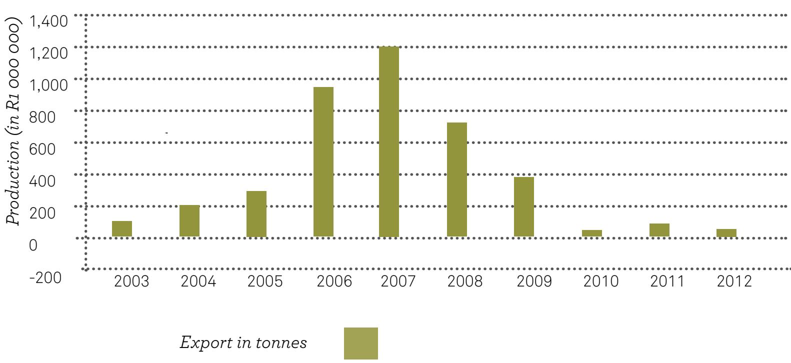
Figure 11: Wolframite production in tonnes



Source: Ministry of Mines (2013).

According to Yager (2011) Wolframite is produced in the Maniema Province, mainly by means of artisanal mining but also by small mining concerns in those provinces. There is not yet a specific company that focuses on producing Wolframite.

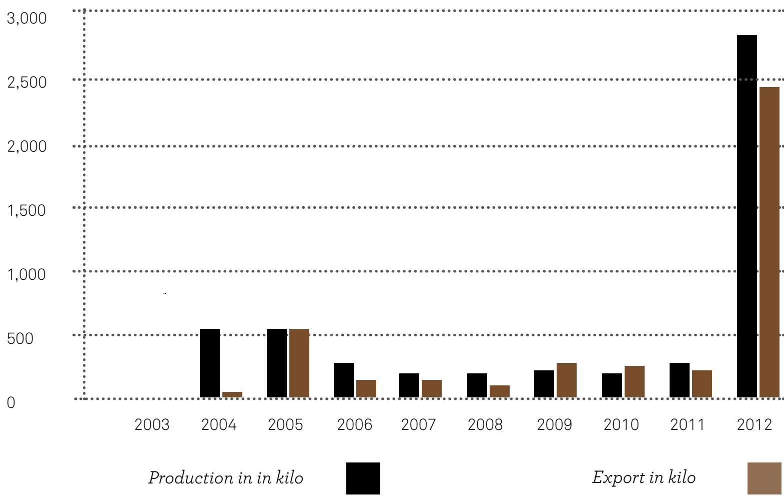
Figure 12: Wolframite exports in tonnes



Source: Ministry of Mines (2013).

There are fluctuations in the data on exports of this mineral. Almost 68% of the Wolframite exported from North and South Kivu in 2009 was mined in Maniema. Export levels of Wolframite dropped in 2010 and 2012 because many miners moved to other areas to mine cassiterite (Yager, 2011).

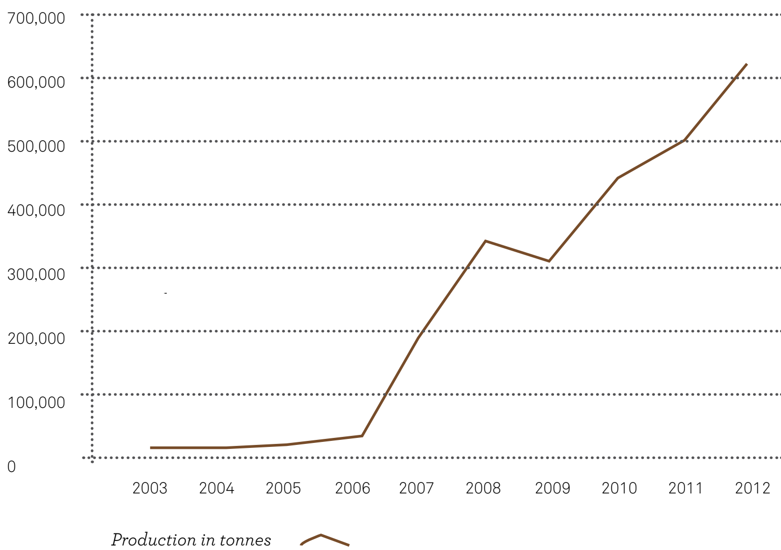
Figure 13: GOLD production, 2003 to 2012



Source: Ministry of Mines (2013).

Artisanal and small-scale companies produced gold in the Itury district of Oriental Province, North-Kivu and South-Kivu provinces in the eastern part of the DRC. After the collapse of OKIMO, the industrial production of gold was virtually nil and the small quantity produced was by artisanal miners. Production and export of gold fluctuated in the DRC until 2012. Then there was significant improvement in both production and export because a private gold mining company, TWANGIZA mining company (a subsidiary of BANRO Gold), which operated in the eastern province, became one of the main gold producers in Africa (Ministry of Mines, 2012)

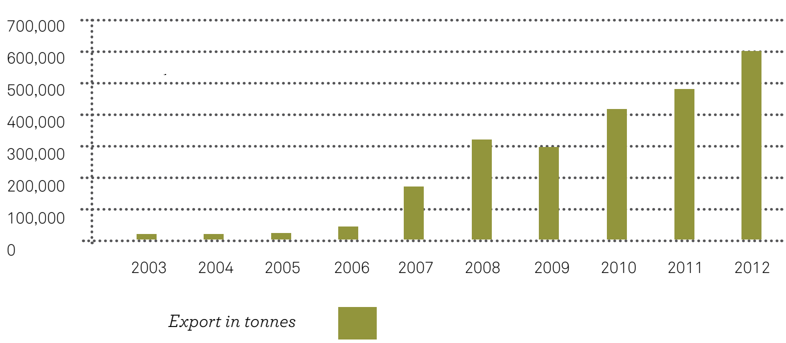
Figure 14: Copper production in tonnes



Source: Provincial Division of Mines, Katanga (2013).

The production of copper in the DRC from 2003 to 2006 was solely by the SOE, Gecamines. Only in 2007 did production increase, largely due to Anvil Mining Congo (Gecamines, 2013).

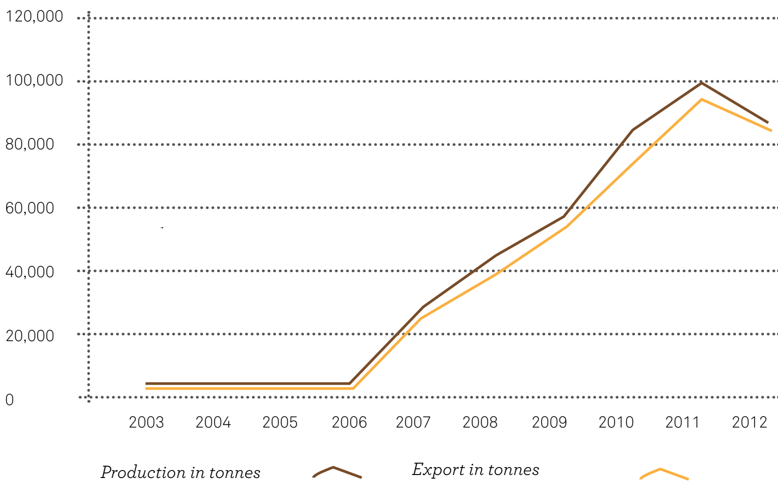
Figure 15: Copper exports in tonnes



Source: Provincial Division of Mines, Katanga (2013).

As Figure 15 illustrates, exports have increased steadily since private companies began to mine copper. Big private companies, such as Tenke Fungurume (TFM), Kamoto Copper Company (KCC) and Mutanda Mining (MUMI), all invested substantially in copper mining in Katanga Province. Because of this, in the year 2010 there was an increase in production of 400,000 tonnes of copper, and 70,000 tonnes of cobalt in the DRC. This level of production overtook the output in the prestigious years of Gecamines (1980-1990) when the state-owned SOE was producing about 350,000 tonnes of copper per annum. From 2011 to 2012 the export of copper climbed to over 600,000 tons as Figure 15 illustrates.

Figure 16: Cobalt production, 2003 to 2012

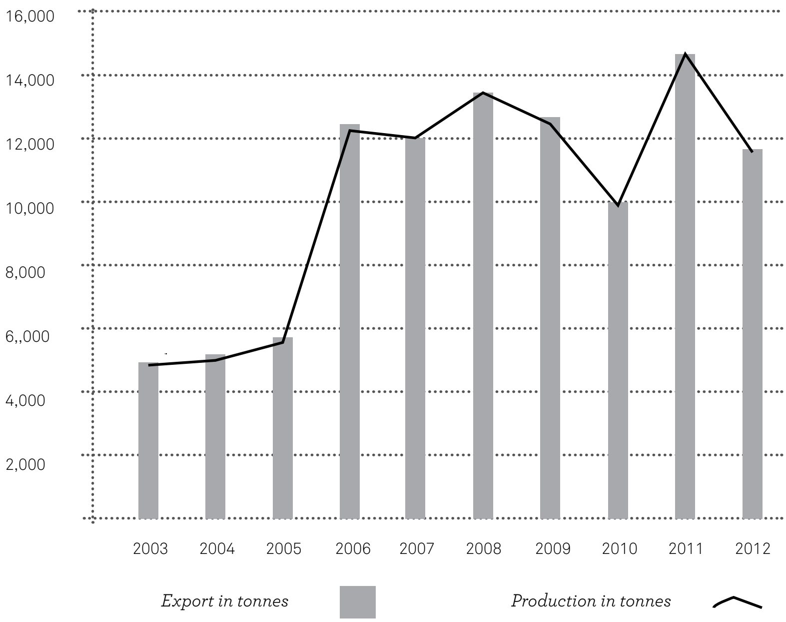


Source: Provincial Division of Mines, Katanga (2013).

As shown in Figure 16 above, the production of cobalt produced by Gecamines in the period from 2003 to 2006 was very limited. When the SOE concluded agreements with private mining companies and they began to mine cobalt on an extended scale, production increased. From 2007 to 2013 the production and export of cobalt reached their highest levels.

The fluctuation in the production of cobalt in the DRC in turn impacts on the levels of exportation of that mineral. The international price of cobalt is very unstable which means that exports are limited. The drop in the production of cobalt between 2011 and 2012 (see Figure 16) also had a major role in terms of the supply and demand of cobalt.

Figure 17: Zinc production, 2003 to 2012



Source: Provincial Division of Mines, Katanga (2013).

In Figure 21 above it is shown that from 2003 onwards there was an increase in the production and export of zinc. Once again the involvement of different mining companies pushed up production. In a report issued by the Provincial Division of Mines in Katanga (2013) it is claimed that the increase of zinc production plays a positive role in the economy of the DRC.

In light of the above data on the exploitation of mineral resources in the DRC it is possible to project an increase in the production of copper, cobalt, zinc, gold and other minerals. There is a need for all the players in the mining sector to improve their management skills and ensure that production levels are raised. Many mining companies are complaining that the availability of electricity in the DRC is very erratic which is problematic if the mining process is to run smoothly. The national government needs to give serious attention to stabilising the electricity supply to the provinces where mining companies are located.

DRC Mining Legislation

The mining legislation in the DRC should be carefully scrutinised dating back to when the country gained its independence. Prior to this most mining activity was under private control. This situation changed when President Mobutu took power on 24 November 1965. For example, in terms of the legal framework, 'the implementation of Act No. 66-419 of 15/07/1966 regarding the nationalisation of OKIMO, the company lost its mining licence with the Bakajika law[23].' The company was requested to re-apply for a new mining licence in accordance with a presidential decree, Act No 66/413 of 08/07/1966. Similarly, Gecamines, one of the biggest SOE's in the mining sector in the DRC, was obliged to reapply for a new mining licence.

This company was also nationalised in terms of a presidential decree. According to the World Bank (2008:2) 'with the collapse of the Mobutu regime in 1997 which followed the period of civil war across the country, the transitional government took important steps to boost the development of the mining sector. One of the critical elements was the restructuring of SOE's in the mining sector and allowing the participation of private companies in that particular area'.

This decision encouraged private companies to invest in the mining sector. The main step in this process was the passing in 2002 of a new Mine Law. 'This achievement, together with the higher commodity price of minerals has resulted in a renewal of investment in exploration and exploitation activities in the mining sector' (Yager 2011:11) It is also noted by Yager (2011) that the DRC parliament decided to pass a Mining Code in July 2002 which replaced Ordinance No. 81-01 of 3/04/1981. This new legislation also stipulates that all mining rights are vested with the government.

At the same time the government decided to become a signatory of the Kimberley Process, which has laid down a certification system to reduce the trade in conflict diamonds. In passing these new measures the government was making an effort to bring its Ministry of Mines in compliance with international demands. Table 7 presents a list of DRC mining legislation dating from the period prior to independence until the present time.

23 Quoted from AEMAPRI report:2006: Revisions des contracts miniers en province Oriental, un rapport de l'ONG AEMAPRI, Bunia.

Table 7: Legal Provisions Applicable to Mining Operation in the DRC

Selected Legislation

1. Constitution of the Democratic Republic of Congo of 18 February 2006, as amended on 20 January 2011.
2. Decree of the King-Sovereign, 27 February 1887, on Commercial Companies, as amended (very similar to the Belgian Company Law) and related legislation.
3. Decree of the King-Sovereign, 30 July 1888, on Contracts or Contractual Obligations (most provisions were taken over from the Napoleon Civil Code).
4. Royal Decree, 22 June 1926, on Companies Ltd by share, as amended (very similar to the Belgian Company Law) and related legislation.
5. Code of Civil Procedure (Code de Procedure Civile-Decree, 7 March 1960).
6. Code Judiciary on Organisation and Competence (Code de l'organisation et de la competence Judiciaire-Ordinance) Law No. 82/020, 31 March 1982.
7. Mining Code (Code Minier) Law No. 007/2002/ of 11 July 2002, available in French with English translation on the website of the Cadastre Minier (Mining registry): www.cami.cd/ an unofficial English translation which has some inaccuracies.
8. Law No. 10/002, 11 February 2010, authorising the adhesion of the DRC to OHADA.

Source: Dumont, 2011.

The DRC mining industry is regulated by the Mining Code, which was adopted in 2002 and other auxiliary protocols adopted in 2003. The two laws are implemented countrywide. Over the years the Ministry of Mines has issued a number of decrees, which regulate specific mining processes.

These include:

- Specifications for the certification of all precious and semi-precious minerals and stones;
- Suspension of mining activities in North and South Kivu and the Maniema; and

- Instructions to prepare the mining sector in these provinces for a range of enhancements to combat fraud and illegal exportation (DRC Mining Law, 2014). Currently, mining activity across the country has to abide by the stipulations of the mining legislation. Furthermore, investment also has to comply with this legislation.

According to the Ministry of Mines (2010), cited by Dumont (2011:37), 'when the parliament enacted the Mining Code in 2002, there existed limited mining conventions with foreign investors: for example Sengamines now cancelled three for gold (Miniere d' Or de Kisenge [MMDK], AngloGold Ashanti-Kilo [AGK] and Baron); one for copper and silver (Anvil Mining for its Dikulushi project, now operated by Mawson West) and one for copper and cobalt (Tenke Fungurume Mining)'.

In 2007 the DRC government signed other mining contracts with Chinese companies (exchanging copper for infrastructure development in the DRC). Those contracts were severely criticised by the DRC partners in Europe and other financial institutions. It was alleged that the 'mining conventions were suppressed by the Mining Code' (Dumont, 2011:37). Thereafter the state signed other mining contracts such as that with AREVA, a French mining company, to extract uranium in Likasi in Katanga Province. As mentioned above it also signed many mining contracts with private companies. One of the problems the Congolese want to see addressed is the impact of these contracts on the poor people.

State Ownership

The DRC mining legislation reserves the right of ownership of all mineral resources in the soil and subsoil to the state. This implies that there is a distinction drawn between surface rights and mining rights. If one owns a piece of land one does not automatically have the prerogative to mine the minerals found in the soil on one's property. However, any entitled group can apply and obtain (provided that all the necessary requirements are met) the authorisation to explore and mine mineral resources and transport, process and market the mineral products extracted (DRC Mining Legislation, 2002). The owner of mining or quarry exploitation rights therefore acquires the ownership of the products for sale by virtue of these rights.

The principle of state ownership of mineral resources was already in place when the DRC was a Belgian colony. 'The path had already been laid by article 552 of the Napoleonic Code, on which the Congo colonial legislation was based, which provides that the owner of the land is entitled to the subsoil subject notably to specific legislation of mines' (Dumont, 2011: 38).

Many of the DRC laws have their foundation in Belgian law. Readers will note that many references in this chapter are of Belgian origin.

Member of Extractive Industries Transparency Initiative (EITI)

Following discussions by the DRC government on whether to join the EITI (a body that regulates transparency in the mining sector), the government took the decision in 2005 to join. The application to join was not without difficulties. The DRC government had to comply with the requirements laid down by the EITI. It was only after meeting the candidacy requirements that the DRC was accepted as a signatory on 1 November 2007. According to the EITI Report (2014:2): 'Since then, the DRC has undertaken the implementation of the EITI through activities aimed at enhancing transparency in revenues from its resources. These activities are included in the work plans approved by the Multi-Stakeholder Group called the "Executive Committee" and have been made publicly available'. The EITI board of management requested the DRC government to comply with certain clauses of the organisation and to meet these demands took the DRC some time. The government only submitted its report to the EITI in 2011. The EITI decision on the DRC's submission is provided below.

> The conclusions by the EITI board were ... rigorous: instead of 3 requirements considered as not complied with as concluded by the validator, the members of the highest board of EITI International concluded that 6 [requirements] were not met [requirements No. 9, 11, 12, 13, 14 and 15]. They were related to the setting of materiality, and the completeness and reliability of the disclosures in the EITI reporting process' (EITI, 2014:3). To the utter disappointment of the DRC, the Board decision was a suspension of the Democratic Republic of Congo. However, 4 July 2014, the office of Premier Minister excellency Augustin Matata Ponyo proclaimed that the board of EITI confirmed the DRC is recognised officially as a member of EITI. The government made a lot of effort to satisfy all the demands the board of EITI requested (Africatime: 2014). This decision allows the Congolese people to have access to all information concerning the management of mining in the DRC.

However, this study is not going to focus on the EITI decision to temporarily suspend the DRC.

Instead it will focus on the Africa Mining Vision which was discussed in Addis Ababa in October 2008 by the ministers of minerals from the various African states who attended the African Union (AU) conference. The purpose of this study is to assess the compliance of the DRC government with the different programme clusters recommended by the African Union.

Programme Cluster 1
Mining revenues and mineral rents management

All mining companies based in the DRC are expected to honour the payment of their income tax to the General Tax Department (DGI) (in French the ***Direction Generale des Impots***). The DRC's tax system is based on direct taxes (levied on land, mining, vehicle, roads, and oil concessions). There is also income tax payable on rental received, property etc. and salary/wages earned etc. The collection of these taxes is done by the DGI (in French, the ***Direction Générale des Recettes Administrative*, *Judiciaires, de Participation et Domaniales*** or DGRAD) (DRC country profile, 2012).

Mining taxes must be paid by the holder of the mining rights, based on the holder's domestic turnover on sales and provision of services. In French this is known a ***Impot sur le chiffred'affaires*** (ICA).

Since 2005 the DRC government has tried to reorganise turnover tax and the new system was to have been implemented by 1st January 2012 with a value added tax (VAT). This is a modern and simplified tax on the value added in each stage of the production and distribution process, which is applied in 140 countries worldwide, including many African countries. When a mining company purchases a product from a local manufacturer for use in a certain mining process this will be taxed on a preferential mining code rate of 3% instead of 15% as required by the state.

Profits made are also taxable. Article 247 of the Mining Code states that the company is liable for tax on profits at the rate of 30%. In terms of taxable profit, it is laid down by the government that profit from mining is subject to occupational tax 'in accordance with the fiscal legislation as well as the provisions of article 249 to 258 of the present code' (DRC Mining Code, 2002). There are other forms of taxation that have not been discussed in this report.

It should be understood that the DRC government complies with some of the international (EITI) demands for extractive industries. It also adheres to the demands the African Union has adopted as its African Mining Vision.

Programme Cluster 2
Geological and mining information systems

The Ministry of Mines in the DRC has a department called the Directorate of Geology. This body has the responsibility of conducting geological research in the mining sector. The department compiles and publishes information on geological issues in the mining sector across the country.

> The Geology Directorate conducts the research activities and studies provided for in article 8 paragraph 2 of the current Mining Code. It is the only entity entitled to receive or request the submission of duplicate samples from sample batches taken in the National Territory [of the DRC] for analysis. It gives consent pursuant to the provisions of the present Code (DRC Mining Code, 2002).

The Geology Department has responsibility for the:

- Classification, declassification or reclassification of mineral substances such as mines or quarry products;
- Opening and closing down of an artisanal exploitation area; and
- Classification or declassification of a substance declared to be a 'reserved substance'.

The Mining Regulations set forth the organisation and the operation of the Geology Directorate.

The requirements of the African Mining Vision feature under this particular cluster. What the government should do is endeavour to expand its technology and provide updated technology in the DRC's public universities. Currently the available geological studies are out-dated. Most were compiled by Belgian scholars prior to independence. See for example the geological map provided at the beginning of this report.

Programme Cluster 3
Building human and institutional capacities

The DRC government should invest a substantial amount of money to provide universities with the necessary capacity and expertise to train competent mining engineers. There is only one university (University of Lubumbashi), based in Katanga Province, which trains mining engineers. Currently, the demand for fully qualified personnel far exceeds the supply. The government should provide scholarships for talented students who want to study mining engineering or other auxiliary fields linked to the mining industry. The World Bank (2008) maintains that universities in the DRC are poorly funded and under-equipped. Furthermore, there is an urgent need for well-qualified academics to teach economic and financial expertise. The DRC must train its own people to evaluate companies' financial statements and conduct feasibility studies.

In the DRC very few mining companies are prepared to provide scholarships for students to study engineering courses at universities. In 2009 AngloGold Ashanti sponsored two students in Mongbwalu (Itury region) to study geological engineering at a university in the DRC. This is an example of what can be done to show the community that private companies can make a positive impact in a particular area (CAFOD, 2009).

Some progress is being made in that the number of graduates in the DRC with qualifications in geology, mining, metallurgy, chemistry and so forth is growing. With the revitalisation of the mining industry in recent years these young people should provide an injection of expertise in the mining sector.

Government should upgrade the skills of the public officials working in the Ministry of Mines to enable them to work with other partners in industry. This kind of training should be permanent in the ministry. The mission of the Ministry of Mines should be to respond positively to the demands of the Africa Mining Vision.

Programme Cluster 4
Artisanal and small-scale mining

Artisanal mining activity has been recognised by the government since the Mobutu regime which collapsed in May 1997. In 1982 former president Mobutu gave official sanction to artisanal mining activity across the country (International Peace Information Service, 2012). This mining activity was at first focused on diamond and gold mining. During the second civil war from 1998 to 2003 there was a wide range of artisanal mining for copper, coltan, cassiterite, and so forth. For example, in 1990, industrial mining in the eastern part of the DRC collapsed and mineral exploitation became artisanal. The Mining Code article 109 outlines the following:

> An artisanal mining area is created pursuant to an order issued by the Minister after he has received the opinion of the Directorate of Mines and the Governor of the province concerned (Mining Code, 2002).

Most of the illegal mining activities being carried out in private quarries owned by private companies were closed by a provincial or central government decision. A quarry covered by a mining title cannot be changed to an artisanal mining area. According to the Mining Code (2002) the Directorate of Geology can take a decision to proceed with exploration work in the artisanal mining areas. Furthermore, the mining regulations can grant a special exploration licence to a group of artisanal miners.

There are a large number of people who are involved in artisanal mining across the country. The Ministry of Mines claims that as many as 500,000 individuals are involved in this informal mining in the eastern part of the DRC alone. According to the International Peace Information Service (2012:21):

> *'The capacity of state services to oversee the artisanal mining sector is extremely limited. The Mining Regulations of 2003 established several technical services within the Ministry of Mines with specific responsibilities in the artisanal mining sector, such as the Service for Assistance and Organisation of Artisanal and Small-scale Mining (SAESSCAM) and the Centre for Evaluation, Expertise and Certification (CEEC). SAESSCAM is the closest service to the miners themselves: it is dedicated to supporting them, helping them to create artisanal mining co-operatives and ensuring taxes are collected correctly'.*

The importance of small-scale mining activity is also recognised because it involves the community where these activities are located. The new Mining Code states that every person who wants to be involved in small-scale mining must obtain a Small-Scale Mining Exploitation Licence. According to Article 98 of the Mining Code (2002:42):

> 'If the technical conditions characterising certain deposits of mineral substances do not allow for a large-scale mining exploitation which is economically viable, but instead for a small-scale mining operation with a minimum of fixed installations using semi-industrial or industrial procedures, these shall be considered small-scale mining deposits.'

For a person to be granted a licence for small-scale mining exploitation, the Ministry of Mines must advertise a tender. This should be in accordance with Article 33 of the existing Mining Code. The current Minister of Mines (Martin Kabwelulu) is inspiring artisanal miners and small-scale mining operations to form co-operatives. This will typically be financially viable small organisations which will benefit from involving a larger number of people.

Programme Cluster 5
Minerals sector governance

In terms of governance in the mining sector, the current DRC Mining Code is among the best in Sub-Saharan Africa. This legislation explains the role of government, the investor and other stakeholders involved in the DRC mining sector. The fruit of this legislation is that the DRC is able to interact with international partners such as the World Bank, European Union (EU) and financially powerful Western countries. The DRC government wanted to comply with the demands of potential investors as far as good governance in the mining sector is concerned.

This is the reason why, in 2005, the DRC government decided to join the Extractive Industry Transparency Initiative (EITI) to become more transparent in the mining sector. The motive of the government is to organise the mining industry in such a way that it encourages outside investment in the DRC.

Looking at the relationship between the communities surrounding the mining companies, the DRC government recommended that the mining entities must invest in corporate social responsibility around the areas where their activities are located. This included the building of schools, clinics and other social and recreational amenities

In addition, the mining policy in Article 215 (2002:75) section V says 'before commencing his activities, the holder of a mining or quarry right has the obligation to appear before the local authorities in whose jurisdiction he will carry them out, and hand in, against the issuing of a receipt, a copy of his mining or quarry title'. There is no clause under the new DRC mining legislation which states that the communities should be part of the board or sit in the management decision-making of the mining companies. It is recommended by the DRC legislation for the mining company to pay royalties to the government. The current legislation is clear on that, it is up to the government to pay that royalty back to the communities. For example, in Itury where AngloGold Ashanti is based, the company is providing scholarships for students who want to study engineering.

Other companies have achieved the following around the CSR discourse:

- 'Banro has built 11 schools and rehabilitated two more, currently serving 5,500 students in the communities around its operations. Members of the local community are also able to make use of adult

education facilities such as the Makalanga Women's Centre, built in 2011
- TFM (Katanga): In 2012, TFM drilled 78 new water wells with pumps and introduced a system of regular repair and maintenance. Five schools have been built by TFM and one rehabilitated. TFM covers operational costs and wages of staff. A health programme provides support to the Fungurume Health Zone
- Katanga Mining Limited (Kolwezi): At Mwangeji Hospital, Katanga Mining has supported a major refurbishment, restocked the pharmacy, drilled boreholes, provided the infrastructure to access water, and constructed two sanitation blocks'(Oxford Policy Management; 2013:16).

Government also adopted the attitude of public participation (more especially with organisations that specialise in the mining sector) to provide their input in the Mining Code.

The Ministry of Mines has taken substantial strides over a number of years to improve governance in the mining sector. One of these decisions was to work with the EU regarding mining in war conflict areas (Ministry of Mines, 2014). This will mean that an expert from the DRC, who has worked in the Ministry of Mines, will collaborate with the EU Parliament. This will serve to enhance governance of the mining sector in the DRC.

Moreover, there is regional collaboration with, for example, the Great Lakes countries and the Southern African Development Community (SADC), to organise conferences, workshops and seminars on mining sector management. There is also talk of putting in place a regional collaboration mechanism for the mining industry. In addition, the DRC government is working hand in hand with other ministries to combat corruption in the mining sector. There is a zero tolerance slogan which government has put in place to deal with fraudulent practices with regard to mineral resources.

Programme Cluster 6
Research and development

Under this rubric the DRC government is looking into the possibility of establishing a School of Mines. This will be under the management of the Ministry of Higher Education in collaboration with the Ministry of Mines. This will hopefully be up and running before the end of 2014. The government also wants to realise the following priorities:

- To promote research and development in the geology and exploration of minerals. This will help to revitalise the DRC mining map.
- To ensure the transfer of technology and expertise in the mining sector.
- To provide a critical audit of expertise in the mining sector across the country. This should be done before the end of 2014.
- To promote a partnership between private mining companies. This will provide scholarships to institutions of higher learning. The target will be a technical institution where there is a curriculum on mining and geology as a major subject (Ministry of Mines, 2014).

Programme Cluster 7
Environmental and social issues

In order to conduct mining activity the company concerned must first apply for, and be granted, approval from the Ministry of the Environment for an exploitation permit. A proper Environmental Impact Study (EIS) must then be carried out. The Ministry will also request the company to have an Environmental Management Plan (EMP) before any mining activity can begin. In addition, the survey operations under a research permit are subject to the prior approval of a Mitigation and Rehabilitation Plan. The DRC government has put the mechanism in place so that the mining companies are obliged to comply with the DRC legislation. This process is to make it clear to the private mining companies and SOEs that they must at all times protect the environment and avoid water pollution.

In April 2014 the Ministry of Mines laid down recommendations which need to be addressed. These include:

- To provide an environmental audit for all the mining industries to establish whether they are conforming with the required environmental standards.
- To put a coercive measure in place for the companies who do not respect the prescribed environmental practices.
- To promote an environmental awareness programme to educate the community about the protection of the environment (Ministry of Mines, 2014).

Mining companies must provide a Corporate Social Responsibility (CSR) plan for the community where the company plans to operate. The mining company should invest in the community in a meaningful manner, such as providing primary health care for the workers and the people in the vicinity; providing a school for the community; and other similar initiatives that will make a positive contribution to the social development of these areas.

Programme Cluster 8
Linkages and diversification

The interaction of mining with other sectors of the economy is to be actively encouraged. One of the sectors where there is some linkage is the transport sector. Once the minerals have been mined, mining companies have to arrange transportation with transport companies based in that same province or hired from a neighbouring province or even another country. For example, the transport of minerals mined in Katanga Province is undertaken by companies based in the DRC, Zambia, Tanzania, Zimbabwe and South Africa.

The local players in the transport sector are finding it very difficult to penetrate the market due to lack of support from the government. The mining sector in Katanga Province has now agreed to help the provincial government to repair the roads which were in a very poor condition. Well maintained roads in turn make it easier for the people living in the province to transport their agricultural produce from the countryside to the urban areas where the mining activities are located. Not all the roads are in good repair. The national government and the province should work together to maintain a good network of roads (World Bank: 2011).

Other subsidiary services could also interact with the mining companies in the DRC. There is, for example, a possibility of the development of secondary industries to serve not only the mines but also the surrounding communities with a wider range of goods and services. It would be encouraging to see local entrepreneurship develop.

Government should try to provide policy direction to allow private companies to become involved in the mining sector to work with local communities in a specific area. This could be a way to empower local communities in a number of ways.

Programme Cluster 9
Mobilising mining and Infrastructure investment

Looking at new investment across the mining sector, there is an increase in demand for new infrastructure. As stated in the previous section, to stabilise the current investment in the mining sector the government should develop new infrastructure such as new hydropower plants, or refurbish those that have been decommissioned so that they can start operating again. The energy sector is a very key area where the government and the public utility must invest money to respond to the energy demand. Many of the mining companies are struggling regarding electricity supply. Water infrastructure is another area where attention is needed. In terms of linkage and diversification, government needs to work with all stakeholders to provide a better outcome in a number of areas.

The road networks need a huge investment because the DRC has huge needs when it comes to its roads network. In the mining province of Katanga the provincial government completed a tarred road from the border post of Kasumbalesa to Kolwezi a distance of 350 kilometres. According to the World Bank (2011) the quality of the road demonstrates that the 'state of the country's limited paved network (fewer than 3000Km) has improved considerably and is now comparable with those less advanced countries in the region. However, the unpaved road which at more than 30 000 Km still represents the vast majority of the networks are in serious disrepair, with only 42% in a good condition'. Other southern African countries have highly developed road systems for rapid transportation of goods.

The railway infrastructure in the DRC needs new investment to respond to current demand. There are two state-owned companies which operate the railways across the country. The first company called le Chemin de Fer Matadi Kinshasa (CFMK) covered a distance of 360 Km of railway, and the second company called La Societe Nationale des Chemin de Fer du Congo (SNCC). More than 2,000 kilometres of railway network are not in good condition. as reported by the World Bank (2011) 'Congolese rail networks have seen their traffic decline sharply due to deficient service and strong intermodal competition, so neither is playing its historic role. Despite the relatively good condition of CFMK's track, its rolling stock has deteriorated and its quality of service has declined. The recent rehabilitation of the road corridor parallel to the track has led many businesses to send their bulk freight by road rather than rail'.

The government needs to empower local entrepreneurship to invest in the mining sector. This should be done in partnership with the local DRC banks. Currently, there are a growing number of financial institutions which operate across the country. It will require better planning if local businesses are to be drawn in to participate in the mining industry. The mining sector needs enormous capital investment and there must be sound collaboration with outside partners which will assist local business to participate. The government has taken the initiative to be more open in terms of public/private partnership in the mining sector. This will hopefully be a win-win situation for all parties involved.

Conclusion

The mining sector in the Democratic Republic of Congo is growing rapidly. The reason for this accelerated progress is largely because of the mining legislation which was enacted in 2002. The country is complying with the demands of the African Mining Vision which was adopted by the ministers of mines who attended the AU conference held in Addis Ababa in October 2008.

The government responded favourably concerning the nine programme clusters of the AMV. The total implementation of the nine programme clusters will be needed because the government must improve the infrastructure sector across the country.

Looking at the AMV vision, many companies based in different provinces of the DRC are following the AMV recommendations. There is no doubt about what many mining companies are doing to improve their corporate social responsibility programmes within the surrounding areas. The DRC government must also provide a stable policy to guarantee investors a long stay in the country.

In 2005 the DRC government decided to join the EITI to become more open and transparent in its regulation of the mining sector. The motive of the government was to encourage investment in the mining industry. One cannot argue that everything is managed perfectly in this important sector, but the DRC government is making an earnest attempt to respond to the requirements that investors are demanding. Based on what has been discussed in this report, the growth of the mining sector in the DRC is dependent to a large extent on the political stability and quality of governance in the country.

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CHAPTER THREE
SOUTH AFRICA

by Betchani H. M. Tchereni

Introduction

The importance of the mining sector to the social, political and economic life of the Republic of South Africa and its people cannot be overemphasised. The mining industry in RSA is one of the chief drivers of economic activity and growth; and the development of the country depends on it to a significant extent. South Africa ranks in the top 10 countries in the world regarding known deposits of minerals in terms of 2009 records (Economic Commission for Africa & African Union, 2009).

Historically, mining laid the basis for the establishment of South Africa's modern economy. Its impact on the broader political economy of the country is even more significant, ranging from land tenure systems, historical taxes, transport and other infrastructure, the emergence and evolution of tertiary education, labour relations regimes that evolved over the years, and activism against the apartheid system – to quote some significant instances.

Despite the importance of the mining industry to South Africa, there are a number of issues surrounding the sector needing urgent redress. Generally, due to colonialism and apartheid, there are historical imbalances regarding ownership of mineral and prospecting rights. Under apartheid colonialism, Black South Africans were excluded from ownership of these rights. After the attainment of democracy in 1994 a number of initiatives were introduced aimed at making the resource endowment available to as many economic and social participants as possible.

The international community actively participates in the process of designing policies and regulatory frameworks aimed at narrowing the gap of ownership and benefit from the mineral endowment in South Africa. In this regard, the African Mining Vision and the African Minerals Development Centre seem to have stood the country in good stead, in part because it was also an active participant in these initiatives. The AMV identifies, for example, the Down-Stream, Lower-Stream and Side-Stream linkages which are aimed at developing not only the mining sector, but also other areas of the economy such as transport and communication, industrialisation, infrastructure, research and development, finance and community social transformation, among others.

The Africa Mining Vision and other 'commitment' policy documents[24] on the continent recognise that, just like in the market for agricultural commodities, the mineral sector faces the same turbulence of having to be the producer of the raw materials and a buyer of the finished product (Obeng, 2013).

Purpose of the Study and Objectives

The basis to industrialise stems from the success stories of the industrial revolution in Western Europe and the USA where the growth and development of industry was undertaken or underpinned by owners of the land in which resources were endowed. In Africa in general, and South Africa in particular, the mining sector was for the privileged few, which literally meant colonialists who could employ fellow skilled settlers and cheap black labour essentially for extractive purposes, with beneficiation conducted off-shore. It is this value-addition outside Africa which contributed to the further development of the colonial powers and a subordinate relationship with the colonies.

In the post-1994 period, a raft of policies was introduced to change the skewed distribution of wealth and income. The generic Black Economic Empowerment policies which were introduced early on, covered matters such as ownership, skilling and management positions, labour relations and occupational safety. Informed by this experience, the government initiated discussions with the mining companies, out of which emerged the Mining Sector Charter which set out specific targets on these issues as well as beneficiation of the minerals and Social and Labour Plans which also outlined the responsibilities of the mining companies in relation to the communities located close to their operations.

This, however, was deemed insufficient, particularly at the turn of the second decade of the 21st century. After much debate in the build-up to its National General Council in 2010, South Africa's ruling party, the African National Congress (ANC), commissioned a study to examine possible ways through which there could be speedier transformation of the sector, including with regard to ownership, geological information, skills de-

24 The Freedom Charter (1955), The Abuja Declaration (1975), The South African Mining Charter.

velopment and the full exploitation of mining-related opportunities. The country-specific case studies that went into this report clearly showed that resource-based industrialisation and job creation were dependent on establishing the crucial mineral economic linkages (MEL) comprising of fiscal linkages, backward linkages, forward linkages, knowledge linkages and spatial linkages (ANC SIMS, 2012).

Overall, in revising and refining its approach to the mining industry, South Africa has drawn largely from the prescripts of the AMV. Yet there are both opportunities and constraints in realising the Vision in the country setting, given the variety of circumstances in which South African policy-makers operate. Among these are: the fact that the country is a small open economy with a low savings rate and thus hugely dependent on foreign capital flows; the main operators in the industry are large multinational corporations who enjoy not only global mobility, but also much influence in the domestic and global body politic; and the legal frameworks some of which have congealed over many years. In this regard, it is imperative to evaluate the extent to which policies represented by the AMV have been implemented in the country. The purpose of this chapter therefore is to conduct:

(a) An investigation into the extent to which South Africa has moved towards realising the objective of the African Mining Vision.
(b) A Study of the various measures, if any, that have been introduced in pursuit of the African Mining Vision.
(c) An evaluation of the effectiveness of the measures.

This study depended on secondary data obtained from a number of institutions and government departments. Based on the objectives of the AMV, the study interrogates data on mining employment, ownership structures, beneficiation activities and other linked areas. Literature reviews and interviews were also conducted. Government policies, legislation and monitoring efforts were also assessed. Overall, the yardstick that has been employed is informed by the congruence or otherwise of SA's mining and related programmes to the AMV Action Plan.

Mining and Industrialisation Challenges in Africa

There are a number of challenges which the African continent is facing regarding the mining industry. Firstly, in many countries, mining policy was not formulated by the government. Other stakeholders, particularly from the multilateral institutions, influenced the direction of mining policy. Many governments do not include other stakeholders such as academics, civil society and media. Secondly, poor contract negotiation skills are amplified by corrupt practices by those charged with the task of details of the contracts and the signing on behalf of their nations.

Thirdly Africa, although rich in mineral and other natural resources, lacks basic geological mapping or, at best, the geological potential is poorly mapped (AMV 2009). As a result, investors regard this as a risk leading them to demand extremely favourable tax regimes for any operation that may result from their blue-sky exploration.

However, there will always be a grey area between known assets (auction) and unknown assets (exploration license) of partly known (indicated) resources. This gap could possibly be best dealt with by allowing a form of public-private partnership. This is done in oil & gas exploration, where seismic survey companies are recompensed partly or fully with step-in rights to any blocks later auctioned in the survey area. The size of the "earned" step-in rights (5% to 20%) would be determined by the cost and extent of the exploration programme, as well as the prospective aspects of the terrain.

The determination of "known" and "unknown" mineral terrains needs to be transparent and objectively based on sound geo-data. In this regard, existing resource classification systems could be used such as JORC (Australia) and SAMREC (South Africa) that require sign-off by a "geo-auditor" (competent person), but Africa should look to the establishment of a continental system, or "AMREC" (African Mineral Resource Classification) under a continental professional body (such as an expanded Southern African Institution of Mining & Metallurgy (SAIMM)).

In addition, the continent has a poor skill base in the actual process of beneficiation leading to having most of the minerals sold abroad in a raw form. The consequence is that the continent exports jobs in that way and low economic growth and development is experienced. Further, the value that is added to the minerals escalates the price of the mineral products back to Africa leading to a further decline in levels of welfare of the people.

How has South Africa sought to deal with these and other challenges, in the context of the attainment of democracy?

Mining and Industrialisation Policy Regime in South Africa

The dictates and ambitions of the African Mining Vision were in large measure part of the political struggle for freedom in South Africa. The efforts aimed at maximising the benefits of the economy to the the marginalised under colonialism can be traced as far back as the 1943 Africans' Claims which was developed against the backdrop of the Atlantic Charter and adopted by the ANC during the same year. Arguing for full citizenship rights, it also calls for, among others, the right to land ownership, equal opportunity to take part in industry, trade and any occupation, and 'the right of the Africans to freedom of trading'.(www.anc.org.za) This later congealed in 1955 with direct reference to mineral wealth in the Freedom Charter adopted at the Congress of the People in 1955, and later adopted by the ANC. In part, the Freedom Charter states that:

> *'The People Shall Share in the Country`s Wealth!*
> *The national wealth of our country, the heritage of South Africans, shall be restored to the people;*
> *The mineral wealth beneath the soil, the Banks and monopoly industry shall be transferred to the ownership of the people as a whole;*
> *All other industry and trade shall be controlled to assist the wellbeing of the people;*
> *All people shall have equal rights to trade where they choose, to manufacture and to enter all trades, crafts and professions'.*

As the negotiations process was unfolding, with a clear possibility that the ANC would assume political office, the ANC (1992) reiterated the position of the Freedom Charter in its 'Ready to Govern' document (African National Congress, 1992). After the 1994 elections, this was formalised through legislation on the Reconstruction and Development Programme (RDP). Developed in consultation with civil society organisations and political allies of the African National Congress as 'an integrated programme, based on the people, that provides peace and security for all and builds the nation, links reconstruction and development and deepens democracy' (RDP, 1994), the RDP became the foundation stone of South Africa's transformation policies.

The programmes of the RDP outlined a number of areas needing attention such as meeting basic needs, developing human resources, building the economy, and democratising the state and society (RDP, 1994). The RDP aimed to take the position advanced in the Freedom Charter by 'correcting' the errors of the past where distribution of wealth was exclusively skewed towards the white community.

The RDP was an integrated programme cutting across the social, political and economic areas of human endeavour. Among the emphases, in relation to the African Mining Vision, was the injunction to enhance industrialisation through manufacturing and mining beneficiation. It also advocated for labour relations that offered the right to strike and negotiate for better wages and work conditions.

The RDP did not particularly succeed in immediately bringing accelerated economic growth. Generally, government experienced difficulties in implementing the programme especially because of the poor fiscal and economic legacy it inherited from the Apartheid regime. In addition, the new government had to contend with public servants who were either inherited from the past and not oriented towards change or the new corps who lacked the necessary experience immediately to give practical meaning to the transformative ideals. This led to poor policy coordination and implementation (Harsch, 2001; Visser, 2004).

In other words, the initial distributive programmes could not achieve all the objectives of the new government. Moreover, public expenditure was hamstrung by the huge budget deficit with the country teetering at the edge of debt trap. At the same time, attempts at attracting new investments were not entirely successful in the early years, as both local and international investors were apprehensive about the economic direction of the country. In order to balance the macroeconomic situation and in an effort to reassure investors, a self-imposed structural adjustment programme, called the Growth, Employment and Redistribution Strategy (GEAR) was formulated. Its essence was (Gumede, 2007; Gevisser, 2009) in compliance with orthodox high street economic policies advanced through the Washington Consensus and the Structural Adjustment Programmes as advocated by the World Bank and International Monetary Fund aimed at opening up national economies and creating a more globalised world economy (Gumede, 2007).

GEAR therefore represented a move away from the previously interventionist economic policy of the ANC to a more free market bundle of economic plans, which the ANC argued was a necessary bitter pill to swallow in order to ensure long-term macroeconomic sustainability. It was believed that, by following these policies, the investment environment would also improve, attracting private investments that would serve as a catalyst for higher economic growth. But investment did not happen at the envisaged level and the reduced expenditure on social development only served to slow down (socio-economic) transformation (Visser, 2004;

Gumede, 2007).

One therefore realises that the ideologies that were at the core of the struggle for freedom in South Africa could not be adopted in full at the advent of democracy in 1994. Many reasons are given for this. First, the presidency of Nelson Mandela emphasised unity, reconciliation and peace. As a result, the effort to transform ownership and management of big business, which was largely led by white-owned mining corporations, could not forge ahead.

Secondly, at the time of assuming political power, government realised that it needed the support of other stakeholders, both domestic and global. The adoption of GEAR signalled at least a detour on the part of the African National Congress.

Thirdly, in the earlier years, much attention was paid to social policies such as extension of access to water, electricity, subsidised housing and other basic services which were quick wins that could be extracted from reprioritisation of expenditure patterns; as well as the attempts at stabilising the macroeconomic environment. As such, microeconomic interventions and industrial policy did not receive the attention they deserved. This started to change at the turn of the decade of the 1990s, with the adoption, among others, of the Microeconomic Reform Strategy (MERS). It is in this context that new legislation and programmes on mining were initiated.

The Minerals and Petroleum Resources Act (MPRDA, 2002) sought to address these issues, starting off with vesting ownership of all mineral resources (under the soil) in the hands of the state on behalf of all the people. It addressed a variety of issues ranging from ownership to skills training, community development and Social and Labour Plans. Its various provisions are elaborated upon under the relevant AMV Cluster Programmes below.

That the impact of these policies was inadequate is reflected in many statements by various Ministers charged with regulation and transformation of the mining industry. In government's Ten Year Review (2003), this challenge is dealt with partly as reflective of 'continued pressure on the viability of mining enterprises' and a change in the structure of the economy, with a shift 'away from public services, construction and mining and quarrying towards the internal trade and finance, real estate and businesses service sectors' (Towards a Ten Year Review, www.gov.za)

Amendments to the MPRDA were initiated; and in December 2007 the ANC National Conference adopted an Economic Transformation Resolution which stated that:

> *'...the developmental state should maintain its strategic role in shaping the key sectors of the economy, including the mineral and energy complex....'*

The document further takes the position that:

> *'the developmental state must ensure that our national resource endowments, including land, water, minerals and marine resources are exploited to effectively maximise the growth, development and employment potential embedded in such national assets, and not purely for profit maximisation.'*

Resolutions from this Conference were further debated in the context of the development of actual government policies and programmes, with a relatively strong voice calling for greater state participation in the mining sector, including nationalisation. Thus, at its mid-term gathering between conferences (the National General Council) in 2010, the ANC noted:

> *'Our research shows that our economy has the potential to create employment on the necessary scale – through the plans for a large-scale expansion in infrastructure; in mining, agriculture; in the services, construction, tourism; in the new economy areas such as the green economy and knowledge-based sectors; rural development; African regional development; and through the social economy and the public sector.*
>
> *The challenge is to take advantage of this potential. But we should acknowledge that this cannot be done easily or overnight.'*

The General Council further called for the "establishment of a state mining company to consolidate all assets of the state in mining. The mining company should be given a mandate to consider various forms of ownership including partnerships with the private sector". In order to address the continuing debate about the extent to which such transformation could go, it was further resolved that the government would:

> *'...develop a mining sector strategy within 12 months, which takes into account the country's developmental needs and which should also help clarify the state's role in the sector. Among others, the state must ensure an increase in beneficiation of all mineral resources and increase beneficiation targets from the current 10% to about 50% in the next 20 years.*

> *'The above will require consequential amendments to the Mineral and Petroleum Resources Development Act in order to support the objectives of our mineral sector strategy.' (2010 NGC, www.anc.org.za)*

This was followed by a commissioned study called 'Maximising the Developmental Impact of the People's Mineral Assets: State Intervention in the Minerals Sector (SIMS)' published in March 2012. In many respects, the SIMS Report drew from the African Mining Vision's Action Plan.

It was observed that while profitability under GEAR was the major objective, with an implicit implication of faster economic growth and therefore expected increase in job opportunities, redistribution, equity and ownership of capital were neglected. The SIMS Report marked a notable reassertion of historical thinking within the ANC that the State be accorded a prominent role in economic development. The SIMS report came in an environment where government had already taken a bold step towards social economic goals aimed at increasing benefits of economic endowments to the state and communities of the country through the Mining Charter and Broad Based Black Economic Empowerment Act. However, these were seen as inadequate in righting the historical injustice and ensuring equitable economic development.

As these discussions were evolving, many mining companies had started to depart from their previous approaches to development and community relations, variably characterised as 'strictly business' and 'practical partnerships' to adopt 'less instrumentalist and more holistic' corporate social responsibility charters and development approaches that had a better potential to significantly uplift and empower local communities (SAIMM, 2011).

SAIMM further notes that corporations were required to address environmental concerns associated with pollution and land degradation emanating from emissions coming from mining activities. As a result, investors embraced a broader moral undertaking that sustainable development in the mining sector should include mineral extraction and beneficiation around the globe that not only promotes financial progress but also environmental, economic and social dimensions, without throwing out market dynamics, technological innovation, community involvement, health and safety, and institutional set-ups. (SAIMM, 2011)

> It has become imperative for the corporate world to understand that successful mining entities and industries will be assessed according to a triple bottom line, namely financial success, contribution to social and economic development, and environmental stewardship

It is this principle that in 2004 guided the Global Reporting Initiative (GRI) in preparing the mining and metals sector supplement of its reporting guidelines. The GRI contains social, environmental and economic indicators that cover several aspects including revenue capture, management and distribution; value-add disaggregated to country level; compensation payments to local communities; employee benefits beyond those legally mandated and description of equal opportunity policies or programmes, to name a few. However, they are generally silent on the integration of mining into the local and regional economies through making the critical up-, down- and side-stream linkages. Consequently, African governments, through their ministers, adopted the African Mining Vision with clear ambitions of spreading the benefits from mining to all members of the society.

What has been the performance of South Africa based on the AMV?

How has South Africa performed regarding the implementation of AMV related policies? In this assessment, reference is made to the AMV Action Plan through which benchmarking of the AMV's adherence by the individual countries can be conducted. Annex I provides a detailed benchmarking of the vision for South Africa by comparing the goals of the cluster areas.

Programme Cluster 1: Mining Revenues and Mineral Rents

The first cluster takes its context from the conflict between mining companies and governments of resource-rich nations. The goal of this cluster is to create a mining sector that generates adequate income and rents to eradicate poverty and finance African growth and development. In any resource rich country, as argued by Otto et al (2007), the relationship between government and the mining sector is one of conflict where government believes the mining companies do not pay enough taxes (either because the tax system is too generous or under-declaration of earnings by the companies) while the companies believe that government is collecting too much taxes. The central point is a common ground to all in which improved profitability is desired by all stakeholders including members of the community (the general public). High profits, holding other factors constant, imply more revenue to finance the fiscus side of the government budget. Therefore a well-balanced, healthy, stable and accommodative fiscal regime is important to attract foreign investment as well as sustain them beyond risky establishment phases when huge initial outlays are made.

In the case of South Africa, the mining sector has clearly contributed to economic growth, creation of wealth and generated foreign exchange. However, there is an expectation that the sector can do more and better to alleviate poverty and create more and better jobs. The perceived interventions that can maximise these benefits include nationalisation of mines, shared participation in the industry and a progressive taxation system (Solomon, 2007). Government has used the taxation system to realise revenue aimed at financing its generic mandates. Taxation has also been used to encourage certain types of investments in mining such as deep gold extraction; and also to discourage certain investor behaviours such as exportation of raw minerals without beneficiating them locally (Solomon, 2012).

Solomon (2007: 204) observes that currently the South African government employs fiscal instruments of charging taxes on private sector mining activities, which include the following:

- "Mineral royalties. These were introduced from 2010 and do not impose arbitrary rates for each mineral/mining sector. The royalty rates are determined on the basis of a single formula targeting rents, after classifying minerals as either refined or unrefined. It fluctuates according to the ratio of earnings to sales for each company.
- Corporate income tax. Taxable income derived from gold mining is taxed on a formula that takes account of windfalls. Taxable income from mining diamonds, base metals and other minerals is taxed on a flat rate of 28 % and these mining companies are liable for a withholding tax on dividends at a rate of 10 %.
- Tax incentives such as tax-deductible allowances for capital expenditure, environmental management trust funds and mining recoupments".

The SIMS report deemed these taxes inadequate and thus proposed a progressive resource rent tax at 50% of windfall profits (beyond a certain reasonable return). Triggered at this level, such an approach would encourage investors to commit their funds into minerals even within areas where mineral deposits are marginal or can only provide average returns. This proposal has, however, not been adopted by government.

In spite of this, it can be argued that South Africa has performed relatively better compared to other resource-rich African countries, in this programme cluster. The taxation system in South Africa is efficient and robust. Revenues from mining and other sectors of the economy stand the government in good stead to finance its multiplicity of mandates to improve people's quality of life. Mining Vision is slowly being achieved although more can be done, especially with regard to mining rents.

It is also noted that many foreign mining companies invest in Africa through subsidiaries which gives them the room to avoid taxes. Therefore, a 'Mineral Foreign Shareholding Withholding Tax' is proposed (SIMS, 2012). However, like many other SIMS proposals, this has not been effected.

The management and maximisation of mineral revenues and rents can be improved with inclusive ownership structures. This would then improve control and therefore transparency. Complaints of transfer pricing have been raised in South Africa where companies are alleged to use an offshore mother company as a buyer of the mineral resource at a lower price, thereby reducing the amount of rents available to the people and other stakeholders.

Equity and ownership

The Department of Mineral Resources (DMR) estimates the current asset value of mineral endowments to be of the order of R2 trillion. In 2009, DMR amended the Mining Charter by among other things setting the new ownership target by HDSA to be at 26%. This, the DMR argues, has not been achieved; while many mining companies argue otherwise. According to the DMR's assessment BEE ownership by HDSA in 2010 was no more that 9%, by far the biggest bulk of which was vested in the hands of anchor partners or Special Purpose Vehicles (SPVs).

According to the DMR, the underlying model of funding empowerment has resulted in the actual ownership of mining assets intended for transformation purposes being tied to loan agreements. Accordingly, the net value of a large proportion of empowerment deals is negative, due to high interest rates on the loans and moderate dividend flows, compounded by the recent implosion of prices of minerals. The DMR refers to the 'rapacious tendencies of the capital markets (that) have consistently thwarted the intended progress towards attaining the goals of transformation, as embedded in the Charter'. The DMR also refers to the lack of HDSA representation at board and management levels and, as a consequence, minimal impact by the new owners with regard to strategy and operations of the companies.

Note should also be made of a unique kind of ownership, reflected in 'communal ownership' through traditional authorities. As an example, the Kingdom of Bafakeng in the North-West Province devised a shareholding system where the whole community holds shares in some platinum mines. Dividends are shared among the people in the form of public and social amenities such as schools, clinics, roads, water and electricity. It is believed that, through this process, over fifty thousand people from within the community have benefited. However, the place, role and authority of the traditional structures – and royal families in particular – have resulted in communal conflicts that call for better regulation of these relationships.

The Chamber of Mines estimates that the weighted average of BEE ownership in the industry is presently at 28% as measured according to the Charter. In addition, retirement savings, which constitute a large portion of institutional investors in the sector, are increasingly black dominated. They do acknowledge the challenge, arguing that future deals should be sufficiently broad-based; that there should be sufficient cash flow for the BEE partners and that the dilemma of full ownership versus lock-in guarantees should be resolved.

The mining companies further complain that the original estimates of the value of the industry and the value of the 26% BEE quota seem to have been replaced by the DMR with a new estimate and that this has changed what companies can claim as BEE ownership levels. There is continuing discussion on these matters.

Programme Cluster 2: Geological and Mining Information Systems
Improving the level and/or quality of the resource potential data

The AMV 2050 notes that in Africa there is little capacity to collect resource potential data. This inevitably leads to poor knowledge of the actual or estimated amount of mineral resources underneath the soil. Governments and public agencies do not have state-of-the-art equipment to enable them to carry out their work. Further, there are few qualified personnel to conduct such activities.

The South African scenario is largely different in that the mining industry is matured. As a result, through collaboration with the private sector, government is able to know how much minerals are in the seams. There is capacity and equipment for these processes. Yet, the black-owned mining companies and aspirants do complain that this information is either not readily available, or is concealed through the purchase of mineral-rich land for game farms.

According to Camisani-Calzolari (2004), the first serious attempt to compile a South African Code for reporting Reserves and Resources dates back to 1992, when a committee was formed by the Geological Society of South Africa (GSSA), including the Geostatistical Association of South Africa (GASA) for that purpose, in response to a request to that effect by the international Council of Mining and Metallurgical Institutions (CMMI). The final draft (Draft 6) was presented under the auspices of the South African Institute of Mining and Metallurgy (SAIMM) at the 1994 CMMI conference at Sun City, South Africa. Draft 6, though amply discussed at the Conference, failed to be endorsed by the JSE and by the major role-players such as the SAIMM and the Chamber of Mines of South Africa (CoM) and remained on the drawing board. However, after its adoption, other stakeholders in the private sector started to update their mineral reserve books using the same procedures (Anglo Gold, Pan Africa Resource Limited etc.).

It is for this reason that SIMS proposes that part of the resource rent tax should be used to undertake extensive and professional geological mapping, with appropriate co-ordination between the DMR and the Department of Trade and Industry where the responsibilities pertaining to various aspects of mining are located. (SIMS, 2012)

Programme Cluster 3: Building Human and Institutional Capacities

Employment equity

South Africa is a country that mainly depends on unskilled workers.

It comes from a historical background in which the black community was mainly involved in mining as underground workers or, at best, as clerks. Participation in the management of mining activities was restricted to the white minority. Consequently, top management positions in both mining firms and the ministry responsible for mining were held by people from the privileged communities.

However, mines continue to face critical frontline and professional skills shortages that affect day-to-day operations. Although training programmes have improved, there is still a lack of experienced skills in frontline positions, such as artisans and supervisors, as experienced personnel retire or leave the company (Musungwini et al, 2012; Solomon, 2012)

Following the Skills Development Act 1998, formal education and training were negotiated as catalysts through which employees can acquire formal mining skills at different levels. It is also the process through which employees and locals can enter the formal National Skills Framework and obtain skill levels following the National Qualification Framework (NQF). Further, government created the Mining Qualifications Authority (MQA) in 1998 which is a "Sector Education and Training Authority (SETA) responsible for the administration of skills development programmes for the mining and minerals sector in South Africa" (MQA, 2015). Mining companies are expected to train their employees by way of empowering them with the relevant skills using the qualification levels prescribed by the MQA. This helps to set clear milestones towards the attainment of the set objectives.

Central to the skills base is the process of including HDSAs in strategic positions. The Department of Mineral Resources (DMR) research claims that only 37% of companies have developed employment equity plans and that these plans are not always submitted to the department. It also claims that only 26% of mining companies have achieved a 45% threshold of HDSA participation at management level, while the industry average suggests that 33% of companies have achieved these levels. It maintains further that only 26% of mining companies have complied with the requirement of 10% of female representation in the actual mining business including assuming top decision making positions.

The Chamber, on the other hand, supplies the following figures for targets reached on employment equity: Top Management 28%; Senior Management 36%; Middle Management 42%; Junior Management 56%; and Female employees make up 9% of senior management and 16% of middle management.

As can be observed, there is wide discrepancy between the DMR and Chamber statistics.

At the official level, the Mining Charter impact assessment in 2009, found that many companies did not achieve the required level of developing employees towards acquisition of the necessary skills.

According to the Southern African Institute of Mining and Metallurgy (2012), the following can be observed about the performance of the mining sector regarding its adherence to the African Mining Vision:

> *The Chamber of Mines reported that the target of 3% of budget of mining companies on Human Resource Development was exceeded. Companies spent about 4.6% of their budget on HRD indicating that there could have been adherence to the Mining Charter. However, there is no disaggregation of the expenditure to attest the exact amount that went into actual training and education of employees excluding overheads for the same process.*

It is important to note that, without disaggregation and drilling deeper into actual lived experiences, it would be unwise to conclude that the large expenditure on HRD had a direct impact on mine workers. Other factors need to be considered . Some researchers have raised issues regarding inflexibilities, causing employees to lose interest in enrolling for the training and education programmes. For instance, workers are not released during the day to attend classes since they get paid hourly. As a result, classes have to be attended after hours. They also do not have time to study, leading to poor results and longer completion periods. Consequently, much as there was expenditure towards HRD, the results in actual practice are not commensurate with the expenditure.

While current learnerships do produce high volumes of graduates, these graduates often lack the necessary hands-on experience. This directly affects output, quality and safety, while increasing overhead costs (Deloitte & Touche, 2013).

The report further asserts that professional skills are also difficult to attract and retain in mining. The mining industry competes with many other industries for professional talent, and mines are at a disadvantage due to the harsh conditions and remote locations in which they operate. At a global level, South Africa is losing professional skills to other countries as experienced professionals emigrate. Executives are challenged to develop an understanding of the human resource capabilities required, and to implement structures that attract, develop and retain these skills. However, the dynamic nature of the industry (and the industries that drive resource demand) means that it will become increasingly challenging to balance the skills required today and the skills needed by mines in future.

An additional element that has resulted in some level of resentment relates to the perception that black foreign-born nationals occupy managerial positions (allowing the companies to tick the right boxes) while the locals do the actual extraction and other blue collar jobs.

Programme Cluster 4: Artisanal and Small-Scale Mining

Realising the important role small-scale mining is playing in the socio-economic spectrum of the country, the Department of Mineral Resources created a special directorate of Small Scale Mining. The aim of this directorate is to assist aspiring small scale miners with the following[25]:

- Establishment of a legal entity;
- Guidance towards the identification of mineral deposits;
- Environmental impact assessment (EIA);
- Legal and contractual arrangements, mineral rights etc;
- Reserve estimation of the selected deposits;
- Mining feasibility study;
- Market study; and
- Development of the mining equipment.

These attempts are commendable. However, government needs to examine the role of women and children in Artisanal and Small Scale (ASC) mining. In addition, government still has to address a number of issues which have a direct effect on the operations of small scale miners. For example, access to markets and cutting edge technological improvements are yet to be documented as a policy. In addition, operators in this category face the challenges of not belonging to any umbrella organisation, poor skills and knowledge, and generally uncoordinated and disorganised business entities (Phiri, 2011).

It may also be of great help to examine regulations pertaining to abandoned large-scale mining operations, in order to curb and/or properly

25 http://www.dmr.gov.za/small-scale-mining.html

regulate illegal mining activities that have resulted in loss of life and the thriving of an illicit 'value-chain' of operations in this regard.

Programme Cluster 5: Mineral Sector Governance

Through the Mineral and Petroleum Resources Development Act (MPRDA, 2002), government endeavours to reaffirm that the ownership of mineral resources (under the soil) is in the hands of the people with the State being the custodian.

According to the logic in SIMS (2012) the objective of the governance of the mineral sector is ***'to have state intervention that will realise the crucial economic linkages and the development of quality technical human resources' (engineers, scientists, technicians) at which we are currently failing badly'.***

The ANC proposes the establishment of a State Mineral Company (SMC) to operate in the mining sector throughout all the levels. Thus, if it comes to realisation, the SMC will do exploration, mining and beneficiation of mineral resources. Such a company would be constituted through the consolidation of various small mining entities already owned by the state and through the acquisition of new rights.

Another form of ownership is found in communal arrangements such as that of Royal Bafokeng Holdings and other communities. Others have proposed clear employee shareholding schemes as a way of ensuring that workers become part of decision-making at the highest level, and share in the company's prosperity (Netshitenzhe, 2014). Other profit-sharing approaches have been mooted.

To give effect to Mineral and Petroleum Resources Development Act Number 28 of 2002 Section 100 (2) (a), and thus promote transformation in the mining sector, the South African Mining Charter seeks to achieve the following six objectives:

(a) Promote equitable access to the nation's mineral resources to all the people of South Africa;
(b) Substantially and meaningfully expand opportunities for Historically Disadvantaged South Africans' (HDSA), including women, to enter the mining and minerals industry and to benefit from the exploitation of the nation's mineral resources;
(c) Utilise the existing skills base for the empowerment of HDSA's;
(d) Expand the skills base of HDSAs in order to serve the community;
(e) Promote employment and advance the social and economic welfare

of mining communities and the major sending areas; and

(f) Promote beneficiation of South Africa's mineral commodities.

The Mining Charter introduced nine elements (incorporating relevant legislation) aimed at redressing past racially discriminatory practices that were perpetuated during the apartheid era to exclude the HDSA's from actively participating in the ownership and management of the mining sector. Stakeholders have agreed to create an enabling environment for the empowerment of the HDSA's by adhering to the following:

(a) Human resource development (Skills Development Act 97 of 1998)
(b) Employment equity (Employment Equity Act 55 of 1998)
(c) Migrant labour (Immigration Act 13 of 2002)
(d) Mine Community development
(e) Housing and living conditions
(f) Procurement (Preferential Procurement Policy Framework Act 5 of 2000)
(g) Ownership and joint venture (Competition Act 89 of 1998)
(h) Beneficiation
(i) Reporting

Mining Companies Own BEE Evaluation

Because of the serious discrepancies between the Chamber of Mines and DMR research findings, the Parliamentary Minerals Portfolio Committee called for submissions from individual companies. The committee asked how companies structured empowerment deals if they had already met the 26% empowerment target.

A presentation by BHP Billiton indicated that their BEE partners were given equity on property that had been contributed to projects, and that deals were never structured too onerously for the partners (Lund, 2011). Anglo American claimed to have reached 26% BEE ownership. Godfrey Gomwe, the then chief executive officer in South Africa, argued that the government research only calculated ownership at holding company level, while ownership at asset level was overlooked. Gomwe said that Anglo had concluded R60 billion in BEE transactions since 1994, and had been responsible for setting up a number of BEE companies, such as ARM and Exxaro. Anglo had 'acted like a bank' and contributed towards vendor funding (Lund, 2011 in Solomon, 2012)

Reporting and Compliance

According to the DMR, only 37% of companies have audited reports, while only 11% purport to have submitted their progress reports to the DMR. It is also alleged that mining company compliance data is not subject to independent audits by BEE verification agencies. The Chamber claims that its members have, as far as they can ascertain, submitted compliance reports both to the Chamber and to the DMR. KPMG, in its annual BEE compliance survey, which covers a wide range of JSE and multinational companies including mining companies, found that 90% of these companies used BEE rating agencies in monitoring compliance (KPMG, 2010 in Solomon 2012)

In a snap survey conducted by the South African Mining Development Association (SAMDA) on junior mining BEE transactions in 2010, it was found that the smaller mining companies expected the BEE partner to raise their own capital for the transaction. This often resulted in these BEE entities diluting their shareholdings to raise finance for expansion projects.

Firms reported a number of challenges they claim to be stifling the efforts to improve empowerment efforts in the mineral sector.

Firstly, they observe that, to make the BEE initiative work, they sometimes acquire partners who in due course find it profitable to sell off their stake.

Secondly, there have been instances where the flow of dividends dried up and many BEE partners have opted out.

Thirdly, the management of the stake through other community investment consortia raises challenges of trust and corruption. As a result, there are more internal issues to be solved within communities taking focus away from dealing with improvement of such packages.

In spite of these challenges, in the case of South Africa, there has been an improvement in governance issues and ownership of mineral resources. While state ownership is being ratcheted up and communities are mastering processes to claim their rights, such transformation in ownership largely benefits black businesspeople, a number of whom continue with practices of the erstwhile owners in relation to the workers, communities and national imperatives such as beneficiation.

Programme Cluster 6: Research and Development Enhancing Contracts Negotiating Capacity

South Africa has well-developed legislation aimed at licensing mining rights to people approved to be qualifying for the activities. It has to an extent been able to address weaknesses that attach to relations with well-resourced private interlocutors. The first of such weaknesses is that public officials become corrupt in the process of drawing up contracts for mining and the process of licensing. As a result, public officials as agents end up benefiting more than the population. Meanwhile, the taxation grants and concessions that are given to the new mining firms imply that very little goes to government, an entity charged with the distributive responsibility of the proceeds from endowments of the nation. While there have been reports and even court cases pertaining to the licensing process, this does not seem to be systemic in South Africa. The major concern though has been the fact that it is mainly politically-connected individuals who are able to benefit from these arrangements.

Secondly, there is generally a lack of understanding of the industry, especially where it relates to geological data. This is mainly due to poor surveying capacity. As a result, shrewd firms simply under-declare the actual or expected value of the quantities. However, South Africa, through concerted efforts, has managed to train a number of mining engineers, chemical engineers, geologists and other skilled personnel who have been absorbed into the private sector as consultants, into government as civil servants and into universities as academics. All these are able to provide expert opinions and scientific verification regarding any new findings and expected quantities to be licenced for mining. Yet, as intimated earlier, concerns do remain that the system is still opaque.

Through the Mineral and Petroleum Resources Development ACT (2002), government enforces the process of contract drafting and implementation. The Act clearly states that anybody wishing to participate in the mining process from prospecting to beneficiation must apply for a specific license which is not perpetual. The licenses expire and can be renewed, adding to the government's leverage to enforce compliance across a wide spectrum.

Programme Cluster 7: Environmental and Social Issues

In the first evaluation of the achievements of the Mining Charter, stakeholders ignored issues of the environment, especially regarding emissions emanating from mining activities, water utilisation and post-mining responsibilities such as acid mine-water drainage. Emphasis was placed on beneficiation interventions aimed at first increasing the benefits of mining activities within communities. Secondly, a proposed Integrated Development Plan for the mining towns was also emphasised to avoid creating ghost towns in the future. Thirdly, provision of social amenities such as water, schools and employment to the local people was also emphasised.

In addition, the Scorecard for the Broad Based Socio-Economic Empowerment Charter for the South African Mining Industry, as a monitoring tool on adherence to the Mining Charter, did not include environmental and sustainable development matters.

There have been developments also regarding community development and consultation with affected communities. According to the Chamber, its members spent R961 million on community development programmes in 2010. The Chamber notes that clarification needs to be sought on the formula for CSI spend. The costs proportionate to size of investment need to be clarified.

According to the DMR, 63% of companies engaged in consultative processes with communities, while 49% participated in regional or local integrated development plans. Only 14% of the companies extended their plans to labour-sending areas, while 37% showed proof of expenditure in accordance with the Social and Labour Plans (SLP).

Housing and Living Conditions

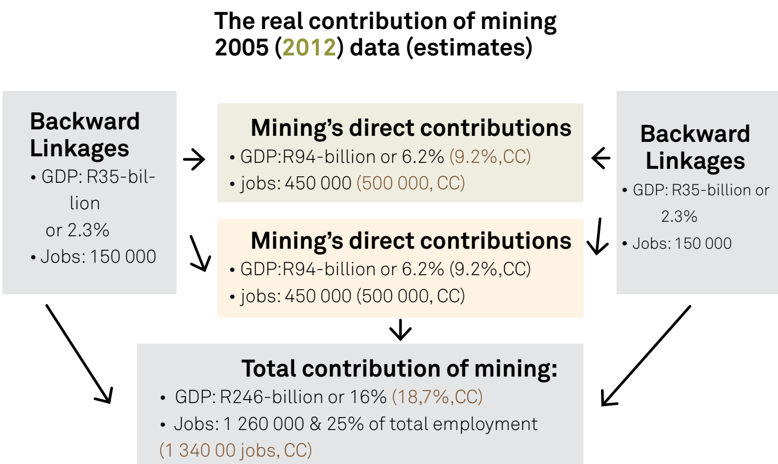
The DMR research notes in its 2010 report that 26% of mining companies have provided housing for employees, 29% have improved existing standards, 34% have facilitated home ownership and 29% have offered nutrition to employees or have implemented plans to improve nutrition. Occupancy rates in mining hostels has been reduced on average from 16 per room to four per room.

The Chamber, on the other hand, notes that most members do not have hostels provided to accommodate their employees. Single occupancy rate for 2011 stood at 24 %. Housing is affected by the life of a mine and the inability of local municipalities to provide basic services (electricity and water). Facilitation of home ownership is now at 10% which is not satisfactory.

Indeed, it is precisely weaknesses in these areas that aggravate pressures on cash wages, as worker settlements have to fend for themselves with regard to basic services. Ironically, the living-out allowance has in some instances encouraged workers to find accommodation in informal settlements so they can treat the allowance as a top-up to their wages. It is a combination of these problems that were partly responsible for the extended strikes in the platinum sector and the Marikana tragedy where massive loss of life was experienced.

Programme Cluster 8: Linkages and Diversification
An important element of the African Mining Vision is to see to it that the Mineral Energy Complexes are linked well with proper beneficiation mechanisms and establishments to foster further economic growth through several other linkages. The South African Government realises the important contribution the mining sector can make in creating other support and offshoot industries. To this end, the SIMS report makes proposals for a policy framework towards creating and ensuring five strong linkages, namely fiscal linkages, backward linkages, forward linkages, knowledge linkages and spatial linkages.

Forward and Backward Linkages of the Mining Sector in South Africa



Source: (Netshitenzhe, 2014)

Mining makes a direct contribution to the gross domestic product of South Africa of about 9% per year using 2013 estimations (Netshitenzhe, 2014). In terms of forward linkages, the mining industry contributes about 55,000 jobs and adds 1.7% to the GDP. The backward linkages have contributed over 150,000 jobs with almost 2.3% of GDP. There is also an 'induced effect' of more than 600,000 jobs created.

Procurement

The DMR research indicates that 89% of companies have not given HDSA suppliers preferential status, while 80% have not indicated commitment to the progression of procurement over a three- to five-year time frame. The value of HDSA procurement as a percentage of total procurement is 3% according to their estimate. It is claimed that procurement mainly consists of non-core activities, such as cleaning and food supplies to the mines.

The Chamber estimates the total procurement spend for the South African mining industry at R228 billion (Chamber of Mines, 2011). The procurement figures, as supplied by Chamber members, comprises of capital goods R40 billion (38% BEE), services R75 billion (46% BEE) and consumables R50 billion (36% BEE), among the most significant categories. Total Chamber members expenditure on procurement is R165 billion. The key driver has been the Mining Charter.

Beneficiation

As intimated above, beneficiation is one area where debate continues to rage. Beyond such narrow activities as refining, government argues that South Africa could massively improve its industrial and manufacturing base if it develops capacity to process the minerals at a higher level of sophistication. The production of catalytic convertors from platinum group metals and coal-to-liquid technology are some of the examples in this regard. While the principle itself is accepted across the board, debate is around the pricing structure for the inputs, with new legislation before parliament (amendments to the MPRDA) proposing developmental pricing for strategic minerals.

The new MPRDA Amendment Bill has triggered some concern among mining stakeholders, in particular in relation to the powers given to the minister to declare the percentage of a mineral resource or petroleum that must be beneficiated and to ensure that the exported quantity has been beneficiated inside the country. According to the Chamber of Mines the sector is open to calculations based on gate prices (export price minus transportation). Their concern is that, if there is no certainty in this regard, pricing for local industry would be determined by fiat on the part of the Minister, making long-term investment commitments difficult. Thus they would be expected to subsidise the beneficiation industry, the sustainability of which cannot be guaranteed. On the other hand, some in government argue that such matters should be subsumed under the rubric of the national interest to facilitate industrial development and job-creation. While debate continues on these issues, it is quite possible that a resolution will be found which addresses the interests of all parties. Among these, for instance, could be a combination of gate pricing and cross-ownership between the miners and the beneficiators (at least in the early stages of the emergent industry), to allow for some of form of vertical integration. The establishment of Industrial Development Zones proposed by the Department of Trade and Industry should also help facilitate the achievement of common ground.

Programme Cluster 9
Mobilising Mining and Infrastructure Investment

In addressing the infrastructure gap, government has been at the forefront of providing a world class road and rail network to enhance the transportation of people and goods. There are up to 12 national highways connecting all the provinces. However, there still remains a challenge, especially in proper road networks to mining sites. Usually mining companies have applied their own efforts and resources to build either makeshift roads or permanent ones. They have even gone further to impress upon government to provide airports for easy and quick movement of goods and people to and from mining sites.

The state-owned rail haulage company, Transnet, has over the years improved its interactions with mining companies about infrastructure required to the industrial zones and the ports. Efficiency in this regard has been improving, though much more still needs to be done.

If there were any major challenge in the current period to which South Africa needs to pay attention, it is electricity generation. The current gap between demand and supply and the intermittent 'load-shedding' have wrought major havoc on production. In the immediate, alignment of schedules in a manner that causes minimal disruption to production is critical in the medium- to long-term, the involvement of Independent Power Producers and self-generation capacity within the mines, should help lighten the load on the state entity, Eskom.

Conclusion and Policy Recommendations

This chapter set out to review South Africa's progress in the implementation of the African Mining Vision 2050 adopted by Mineral Resources and Mining Ministers in 2009. The AMV 2050 is spearheaded by the African Union.

As can be observed from the analysis above, South Africa has taken a number of significant strides towards improving the mining sector in the country. This includes the benefits accruing not only to government but also to communities and companies themselves. Many of the initiatives may not be a direct response to the AMV, but the many proposals and the legal and policy frameworks available seem to address most of the aspirations of the vision.

Further, the adoption and reviews of the Mining Charter, which are congruent with the African Mining Vision, attests to the commitment of the South African government to seriously implement many aspects of the mining vision. In addition, although the action plan is not definitive, there is a clear indication that the many initiatives undertaken by the government of South Africa and its stakeholders in the mining sector are aimed at transforming the lives of communities and society as whole, including through adequate basic services, job creation, skill development and ownership structures.

From the analysis above one can conclude that, for the attainment of the goals and objectives of the AMV, South Africa has done relatively well. It has responded, directly and indirectly, to the aspirations of the Mining Vision by creating the necessary policy and legislative infrastructure. However, for many of the intended interventions, there is still a lot to be done.

The following recommendations are made:

(a) The Mining Charter should be clearly aligned to the AMV. Although the goals and objectives are identical, some areas must be clear. For example, the Mining Charter must indicate issues of environmental sustainability.
(b) The enforcement mechanisms need to be improved to include, not only notified visits and audits, but also ad hoc ones to make sure that adherence is not just a ticking of the box exercise but rather an everyday activity.
(c) Employee shareholding needs to be pursued in South Africa to

abate long, unproductive and sometimes destructive industrial actions.

(d) A state mining company has the potential to contribute to transformation of the sector; but for this to succeed it should work in partnership with the private sector and be operated on the basis of strict ethical principles.

(e) Ideals and conference resolutions should be turned into practical programmes, with requisite willingness and capacity to consult all stakeholders; but also to enforce policies and laws once adopted.

(f) All stakeholders should engage in a process to review the Mining Charter, and to align it with the recently-adopted National Development Plan, and they should work together to attain the national vision.

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CHAPTER FOUR
ZIMBABWE

by James Muzondiya

Introduction

This chapter examines the progress that has been made by Zimbabwe in implementing the Africa Mining Vision 2050 (AMV 2050) which was adopted by the African Union in 2009, and to which the country became a signatory.

The discussion focuses on the following key questions defined in the project TORs:

- An investigation into the extent to which Zimbabwe has progressed towards realising the objectives of the AMV 2050.
- A Study of the various measures, if any, that have been introduced in Zimbabwe in pursuit of the AMV.
- An evaluation of the effectiveness of the measures that have been introduced in Zimbabwe.

Key Investigative Issues

The assessment focuses on the following five crucial intervention areas outlined in the African Mining Vision 2050:

- Availability of data on the level and quality of the resource potential
- Capacity of African states to negotiate contracts with transnational corporations
- State capacity for resource development and governance
- Capacity to manage mineral wealth and account for revenues paid to governments from mining ventures
- Whether the requisite infrastructures, such as transport and energy supply, have been put up so as to unlock the natural resources potential.

More precisely, it examines Zimbabwe's progress in achieving the key results outlined in the Action Plan for the short term action (5 years) of the African Mining Vision. These key result areas specifically focus on issues of:

- Policy and licensing
- Geological and mining information systems
- Governance and participation
- Investment, linkages and diversification
- Artisanal and small-scale mining
- Human Capital and institutional capacities
- Communication and advocacy

Contextual Overview: Zimbabwe's Mining Potential and the Africa Mining Vision

In order to develop a proper appraisal of the progress that has been made by Zimbabwe in fulfilling the objectives of the AMV, it is important to do an overview of the country's mineral resource deposits and the place of the mining sector in the country's economy.[26] Zimbabwe has vast, rich and diversified mineral resources deposits. A geological survey in 1990 revealed that the country has more than 66 base and industrial mineral deposits. It has the world's second largest platinum and chrome deposits after South Africa. It has one of the biggest alluvial diamond discoveries in the world (currently producing 7% of global output by volume but expected to match 30% of global demand for rough diamonds) and 4% of the world's palladium deposits. The Marange diamond fields in Chiadzwa, an area of Zimbabwe's eastern province of Manicaland and part of the Zimbabwe Craton (a lithology conducive to kimberlite deposits) that were discovered in June 2006, are one of the world's largest deposits of alluvial diamonds.[27] The country also has significant reserves of coal, nickel, uranium, iron ore, ferrochrome, copper and silver, chrysotile asbestos, limestone, pyrite, black granite and lithium minerals, such as columbite-tantalite and cassiterite.[28]

The country's economy is currently anchored on the mining sector. The mining sector has to date been the most dynamic sector of the Zimbabwean economy, leading the 2009-2011 economic rebound with an average annualised growth rate of 35 percent. As a result, mining has now overtaken agriculture as the backbone of the Zimbabwe economy. From a 10.2% contribution to the GPD in the 1990s, mining contributed an

26 "The Persian Gulf of Strategic Minerals," The Sunday Mail, 6 July 2014.

27 Partnership Africa Canada (2009), Zimbabwe, Diamonds and the Wrong Side of History. Available at www.pacweb.org/ . . . /diamonds . . . /18_Zimbabwe-Diamonds_March09-Eng.pdf.

28 S. Mtisi, Mining Contracts Monitoring and Review: What to Look Out For in a Mining Contract (Harare: Zimbabwe Environmen tal Lawyers Association, 2014), p.4; M. Sibanda and Gilbert Makore, 'Tracking the Trends: An Assessment of Diamond Mining Sector Tax Contributions to the Treasury With Particular Reference to Marange Diamond Fields, Harare, Zimbabwe Environmental Lawyers Association, 2013 p.3.

average 16.9 % to the GDP between 2009 and 2012.[29] Taxes and royalties from the mining industry currently contribute 13% of government revenue. Mining has on average been contributing around 65% of the country's earnings from exports, ahead of agriculture and manufacturing.[30] The major drivers of this growth in export earnings are diamonds, platinum and gold[31]. In 2012, mineral exports accounted for 64 percent of total exports. Recognising the importance of the mining industry in the revival of the country's economy, the Government of Zimbabwe (GoZ) has identified mining as the cornerstone for economic growth in its medium- and long-term planning. Mining has already been classified as part of the four main clusters in Zim Asset, Government's medium term economic blueprint for 2014/18.[32]

Despite its vast mineral resources, the country and its population have not sufficiently benefitted from the mineral wealth. An estimated 72% of the population was reported as living below the poverty datum line of US$507.96 in 2013.[33] For instance, the 2011 Ministry of Finance budget statements showed that diamond royalties amounted to US$20.7 million only, after sales of up to US$593.8 million from January to September 2010.[34] The Zimbabwean mining industry is rife with corruption, mismanagement, human rights abuses, infrastructural decay, and environmental degradation. As Zimbabwe Environmental Law Association (ZELA) has argued, 'the bottom line is that natural resources are being exploited for the benefit of a few politically and economically connected individuals, a few state institutions and foreign nations to feed their insatiable market with raw materials at the expense of all Zimbabweans?[35]'

Policy and Licensing:
Policy Initiatives since Adoption of AMV in 2009

The AMV 2050 urges African countries to effectively leverage their natural resources in their dealings with Transnational Corporations (TNCs) by instituting proper laws and governance policies so as to unlock the value

29 'Policy needed for beneficiation: Mhembere', Financial Gazette, 8 August 2013.

30 Mtisi, Mining Contracts Monitoring and Review, p.4; Sibanda and Makore, 'Tracking the Trends, 2013 p.3; ZELA, Extractive Industries Policy and Legal Handbook: An Analysis of the Key Issues in Zimbabwe's Mining Sector: Case Study of the Plight of Marange and Mutoko Mining Communities, Harare, Zimbabwe environmental lawyers Association, 2011, p.7.

31 Sibanda and Makore, Tracking the Trends, 2013 p.3; 'Take Beneficiation Warnings Seriously', BH24, 11 March 2014. Available at http://www.bh24.co.zw/take-beneficiation-warnings-seriously.

32 See Government of Zimbabwe, Zimbabwe Agenda for Sustainable Socio-Economic Transformation (ZIMASSET), 2013.

33 Mtisi, Mining Contracts Monitoring and Review, p.4.

34 ZELA, Extractive Industries Policy and Legal Handbook: 2011, p.7.

35 ZELA, Extractive Industries Policy and Legal Handbook, 2011, p.7.

of minerals in Africa. To create a sustainable and well-governed mining sector that effectively garners and deploys resource rents and contributes to broad-based growth and development, the AMV action plan sets out the following key result areas:

- Creating AMV compliant policies
- Optimising tax regimes
- Improving management of mineral revenue.[36]

The government has since 2009 tried to come up with policy initiatives in line with the AMV. The Ministry of Mines and Mineral Development, for instance, has been working on a new Mineral Policy which is anchored on the vision of the AMV. The Draft Mining Policy is also based on progressive enactments to the new constitution such as principles of good governance (section 3[1]g and 9[2]), of equitable sharing of natural resources (section 3[2][j]) and the principle of equitable access by all Zimbabweans to the country's natural resources (section 18). Section 315 of the same constitution requires procurement and government contracts/leases to be done in a transparent, fair, honest, cost effective and competitive manner. Draft Mineral Policy also aims to promote a 'Development Corridor' in which mining assists other sectors such as agriculture.

The Draft Mineral policy attempts to move away from the dictates of the Mines and Minerals Act as it aims at a mutually beneficial natural resources exploitation strategy involving TNCs, Government and local communities. It also aims at environmentally friendly, ethical, gender and ethnically inclusive mining and availing an opening to artisanal miners. In view of this, the government has been trying to come up with a new national mining policy with aspirations towards making it possible for indigenous companies to own 51% of mining concerns. The Draft Mineral Policy includes issues such as community rights in areas affected by the extractive mining industries.

Zimbabwe's recent economic blueprint for the period 2013 and 2018, Zimbabwe Agenda for Sustainable Socio-Economic Transformation (ZIMASSET), just like the AMV, aims to promote socio-economic transformation and rapid industrialisation through value addition and beneficiation in the mining sector. In doing this, the ZIMASSET policy guideline imposes onerous export taxes on raw minerals such as unrefined

36 See Action Plan for the Implementation of the African Mining Vision (Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development AGM, Geneva, 16-18 October 2012).

gold, unprocessed diamonds and platinum ore as of 01 January 2014.[37] This departure from the business-as-usual approach of exporting raw minerals was borne out of the realisation that the country, in doing so, was exporting jobs, revenue and postponing its industrial take-off. This approach has always benefited foreign countries and companies more than communities where the resources were extracted from in particular, and the whole economy in general, as shown by the high offshore retention, transfer pricing, minimal threshold for royalty payment, export of unprocessed mineral ores without adding value and due to the hugely mechanised plants that employ very few locals. For example, Chiadzwa diamonds have reportedly created around 60,000 jobs in the Indian town of Surat compared to the 50,000 jobs that it is said to have created in Zimbabwe.[38] In instances such as these, export taxes make it economically prudent for TNCs to cut costs by engaging in local beneficiation thereby unlocking value in Zimbabwe.

ZIMASSET also aims at leveraging the country's national resources by encouraging and institutionally forcing TNCs to set up industrial processing plants and supporting infrastructure in the country's mining industry. Diamond companies and those engaged in mining platinum have been given onerous targets to set up such processing and industrial plants as quickly as possible. On the face of it then the Zimbabwe government, through its ZIMASSET policy pronouncements, seems to have seen the need for harnessing its bounteous and diversified mineral reserves in building up-, down- and sideway industrial streams around the mining industry. In addition, government has been working on creating a Sovereign Wealth Fund Bill in order to ensure that there is intergenerational wealth sharing.[39] On paper, the Zimbabwean government appears to be moving in the right direction in implementing the precepts of the AMV 2050. However, the reality on the ground suggests that Zimbabwe is still far from realising the fundamental objectives of the Vision and there are a number of challenges and contradictions that need to be resolved in order to realize the objectives of the Vision.

Mining Contracts Management

African countries have largely been cheated out of their competitive advantage in natural resources by their failure to negotiate and sign mining contracts that are beneficial to their economies. Owing to the fact that most African governments do not know the level, quality and quantity of

37 Sibanda, Analysis of the 2014 Budget Implications on Mineral Resources Governance.

38 Sibanda, Analysis of the 2014 Budget Implications on Mineral Resources Governance, p. 2.

39 ZELA, Zimbabwe Alternative Mining Indaba 2013 Report, p.10.

their mineral deposits, their negotiating capacities have been hampered. Secondly, countries like Zimbabwe do not have commercial lawyers capable of clinching good contracts. In view of this, most mining contracts that were signed by Zimbabwe were signed from a position of weakness. The AMV posits that, if African countries are going to effectively leverage their resources, negotiating weaknesses in mining contracts have to be addressed so as to enter into agreements that do not accord unreserved rights to mining companies without corresponding duties and responsibilities.

Because of a number of reasons, the Zimbabwean state has encountered some serious challenges around meeting AMV objectives on mining contract negotiations.[40] The first challenge arises from the nature of the Zimbabwean state and how it operates. Despite being a constitutional democracy, Zimbabwe is governed by a highly centralised state where power is concentrated in the executive and the government is not all that accountable to other arms of the state such as Parliament. Government business has always been done in highly secretive ways, and even government institutions that are supposed to oversee government business transactions such as the Government Tender Board and the Public Accounts Committee of Parliament have not been able to effectively monitor government economic deals because of the difficulty in accessing information. State secrecy around government economic transactions have particularly intensified in the last 15 years of economic sanctions by the EU countries and the United States, with government arguing that release of information about its economic transactions would expose it and its clients to more sanctions. Most government contracts, including mining contracts, negotiations have thus continued to be conducted secretively, with very few government officials involved.

The lack of transparency in both mining contracts negotiations and the terms of such contracts has exposed government to manipulation by the mining companies during the negotiations and to signing deals that prejudice the nation and communities.[41] Secret negotiations are ideally suited to corruption, and the limited number of individuals involved in these negotiations has increased the risk of bribery. Resource extraction companies are well known for bribery to ensure that they receive favourable contract terms, and there have been a number of reports in the media about bribery involving top government officials such as ministers in

40 ZELA, Zimbabwe Alternative Mining Indaba 2013 Report, p.10.

41 'Minister Chidhakwa risks being Corrupted', The Standard, 19 January 2014.

mining contract negotiations.[42] Contracts signed with all diamond companies operating in the Chiadzwa diamond fields were all done secretly and government and its officials have not been able to disclose enough information about them to date. This has even led to the non-disclosure of critical mining information that affects local communities and the national interests, especially on issues to do with dividend sharing.[43] The cloak of secrecy in Zimbabwe mining contracts is also enhanced by laws such as the Access to the Protection of Privacy Act used to suppress publication of information regarded as 'sensitive'.

Contract negotiations that have been consummated in Zimbabwe are generally not broad-based, transparent and in the public interests as they are dominated by government and at times a single ministry. Sustainable resources governance regimes, as encapsulated in the Africa Mining Vision, depend on strong participatory, statutory and transparent husbandry of natural resources along the beneficiation process chain so as to achieve sustainable industrial take-off in Africa based on mining.[44] The Mines and Minerals Act (21:05) of 1961, which is currently being used for negotiating mining contracts, has self-limiting sections that allow a degree of secrecy to the minister, mining boards and the president of the country in contract negotiations since all these government functionaries are not mandated to make the contract public. The act also allows the minster to deviate from legal provisions since he has the power to negotiate certain terms with the private investor.[45]

The litany of bad mining deals ranging from the diamond to platinum mining industries may be explained in terms of this archaic, weak and self-limiting colonial piece of legislation. This legislation goes against the letter and spirit of the Africa Mining Vision to an extent that it retards employment creation, revenue generation and infrastructural development due to the bad mining contracts that it forces the country into. Section 315 of the new Zimbabwean Constitution may in the long run promote public access to mining contracts signed by the government and mining companies in order to prevent the mortgaging of non-renewable natural resources to foreign companies. Section 111B of the constitution allows Parliament to approve any convention, treaty or agreement signed by the executive arm of government with foreign states, organisations, and companies.

42 See 'Obert Mpofu in $10 million Bribe Storm', The Chronicle, 8 July 2014; "Minister's office raided," The Herald, 17, 2010.

43 Sibanda and Makore, 'Tracking the Trends, IV.

44 M. Dhliwayo, "Zim's Shady Mining Deals: A Case for African Mining Vision," The Zimbabwe Independent, 27 July 2012.

45 Mtisi, Mining Contracts Monitoring and Review, p. 6.

Another serious challenge that has negatively affected the country's capacity to negotiate mining contracts that benefit the nation is the limited knowledge in government about the nature and extent of the underground resources it seeks to sub-contract mining companies to exploit. By its own admission, government has limited knowledge of the minerals within its domain. In many cases mining corporations have had more information about the geology and mineral potential of Zimbabwe than the government. As the Minister of Mines and Mineral Development, Walter Chidhakwa, recently conceded when commissioning the Mining Promotions Corporation (MPC) whose role includes quantifying the amount of minerals in the country:

> ***Zimbabwe has not done detailed, countrywide minerals exploration in almost three decades, which has resulted in the government relying on private investors to quantify resources. We are in the unenviable position where some private sector organisations know more about our minerals than we do as Government.***[46]

What the above suggests is that government has negotiated contracts with investors who have more knowledge and information about the quantity and quality of a mineral in a particular place than the government itself. This information asymmetry has resulted in bad deals which have benefitted investors at the expense of the people of Zimbabwe.[47]

The Zimplats and ZISCO Steel-ESSAR mining deals, as government officials admitted, exposed the government's weaknesses in negotiating mining contracts. Government negotiators in these deals glaringly overlooked issues related to principles of equity, fairness, benefit sharing and future intergenerational obligations in the use of the mineral deposits.[48] The government negotiators did not follow guidelines set forth in the Africa Mining Vision, and this resulted in the blatant under-pricing of such a strategic enterprise. The Indian-based company, Essar, as per the agreement, was to pay US$750 million only to resuscitate the company operating in an area with iron ore deposits worth over US$30 billion. Both the Essar/Ziscosteel and Zimplats deals should have taken into account the difference between working capital and equity capital. Essar was charged US$750 million, which would be used only to pay the debts Zisco owed as well as provide some working capital, but the Ministry of Industry and Commerce had not put a realistic value to the resource un-

46 'Evaluating Country's Minerals Vital', The Patriot, 8 May 2014.

47 Centre for Natural Resource Governance, Turning Zimbabwe's Natural Capital Into Wealth (2013)

48 "Zimbabwe: The Diamonds Are ours," Newsday, 17 October 2013.

derground. Zimbabwe is yet to find better valuation methods if it has to gain a competitive advantage in resource exploitation and valuation negotiations with better placed TNCs.

The Zimbabwe government has also failed to get into beneficial contracts with the various platinum companies that have been exploiting the country's rich mineral resource because the government has negotiated from a weak position. Since the beginning of Zimbabwe's political and economic crises at the turn of the 21st century, the national economy has become so weak that government has been desperately seeking for investment and cash loans from international investors. While the economy managed to at least stabilise in the last 5 years of inclusive government (2009-2013), the government continued to struggle to raise enough capital to meet its public service obligations and service a national debt which has ballooned to $100 billion.

Economic desperation has weakened the government's bargaining position in mining contracts. The current plans by the government to securitise the nation's mineral resources in exchange for loans is bound to further weaken its bargaining position.[49] Most economists and policy analysts have argued that the suggested plans by government to securitise the country's minerals in order to acquire desperately-needed funding for infrastructural projects and its latest economic blueprint, ZimAsset, will be detrimental to the welfare of future generations because government would be trading on unseen and unexploited resources and thus severely weaken its negotiating powers.

The mining companies that have continued to do business with Zimbabwe have sought to exploit the country's economic desperation to extract favourable contracts whose provisions are generally detrimental to the nation. For instance, in the Zimplats contract for the mining of platinum that was entered into at the height of the Zimbabwe economic crisis, the company had been given a US$4 billion resource at the time, and invested US$400 million. Yet, when they were negotiating for indigenisation, they charged government US$150 million for the ground they gave up, yet they never paid for it.[50] The 2011 contract for the revival of Zimbabwe's iron making company, Ziscosteel, by the Indian company, Essar, was similarly controversial because of its highly lopsided and exploitative nature. During the negotiations for the Zisco deal, Zimbabwe's Ministry of Indus-

49 'Government moves to securitise minerals', The Herald, 26 May 2014; "Securitization of minerals 'desperate, risky' decision', Zimbabwe Independent, 20 June 2014; 'No to mortgaging minerals', Zimbabwe Mail, 16 June 2014.

50 'Zim shortchanged in mining deals- DPM', Zimbabwe Independent, 24 May 2013.

try and Commerce agreed to a deal that gave Essar 90% of Zimbabwe's iron ore reserves for just US$750 million dollars. The Ministry of Mines and Mining Development refused to transfer the mining rights to Essar, demanding a revision of the deal first. BRICS nations (Brazil, Russia, India, China and South Africa), according to a recent report by the Centre for Natural Resource Governance (CNRG), were taking advantage of Zimbabwe's standoff with Western nations to negotiate lopsided deals in the extractive industry sector that prejudice the country of billions of dollars.[51]

Since the beginnings of diamond mining in 2006, Zimbabwe has signed a number of weak contracts with diamond mining companies which have resulted in the country gaining little from the exploitation of this precious mineral. For instance, the government got into a badly-crafted mining contract with the Anjin Diamond Company mining diamonds in Chiadzwa. The contract in question accorded tax exemptions to the company because it had agreed to build the National Defence College (NDC) for the Zimbabwe government. This agreement, like most mining contracts signed by the Zimbabwe government, is enveloped in extreme secrecy and part of the glaring concessions made was that the company procures certain goods and services from China, its country of origin, in the construction of the NDC.[52]

The unfair contract system explains why the Zimbabwe government has been frantically trying to revise some mining contracts years after they were signed. The Zimbabwe government has been working on plans to repossess unused platinum claims that have been held for speculative purposes as part of strategies to improve mineral production in the country.[53] The government plans to unlock US$1,8 trillion from idle mineral reserves and, in the process, create jobs and solve the country's critical liquidity crisis. It has so far formally seized 28,000 hectares from Zimplats which holds a special mining lease in the country totalling 48,535 hectares in total. According to Minister Chidhakwa, out of the seven companies holding platinum claims, only three (Zimbabwe Platinum Mines Limited - Zimplats, Anglo's Unki and Mimosa) were fully utilising them, while the other four were holding onto them for speculation purposes.

51 BRICS nations make up Zimbabwe's top three investors, with China leading with investments of US$374,8 million approved by the Zimbabwe Investment Authority in 2013, Russia with approvals worth US$40,1 million and South Africa (US$39 million).See 'Investment Deals: Zimbabwe Loses Out', The Standard, 28 March 2014.

52 S. Mtisi, Mining Contracts Monitoring and Review: What to Look Out For in a Mining Contract, Harare, Zimbabwe Environmental Lawyers Association, 2014, p.18.

53 "Govt repossesses unused platinum claims," Daily News, February 25, 2014

Management of Royalties and Taxes

The efficient management of mineral resources, especially management of revenue from mineral mining, is regarded by the AMV as critical to the achievement of the Millennium Development Goals (MDGs) and meeting the challenges of poverty eradication and broad-based socio-economic development in Africa. In the absence of a sustainable policy of beneficiation, the little benefits that have accrued to Zimbabwe's economy from mining have mainly come from limited taxes and royalties received from mining companies. However, the country has not benefitted much from royalties. Government has been complaining that the contribution of the mining sector to the fiscus is minimal, compared to other countries in the region. Gold-mining companies in Zimbabwe pay seven percent in royalties and diamond miners pay 10 percent. Platinum miners also pay 10 percent, and an additional 15 percent levy on unprocessed platinum shipments. Mining companies also pay licence fees pegged between US$100,000 and US$1 million, depending on the mineral being extracted.[54] According to statistics from the Chamber of Mines of Zimbabwe, the mining industry's tax contribution in 2012 was a modest US$445 million.[55] Zimbabwe's mining royalties slumped by 45 percent to $133,7 million against a target of $245 million in the full year to December 2013.[56]

The main challenge around mining royalties is that there is no institutional framework designed to manage, trace and account for the revenue generated from the extractive mining sector into the treasury. There is also a limited institutional framework to determine how to optimally use royalties from minerals. Another key challenge is that the mineral revenue management system in the country is not well organised and coordinated.[57] Under the current mineral revenue management system, at least five Government arms — Ministry of Mines and Mining Development, Zimbabwe Revenue Authority (Zimra), Minerals Marketing Corporation of Zimbabwe (MMCZ), Fidelity Printers and Refiners, Zimbabwe Mining Development Corporation (ZMDC)— are processing mineral revenue for onward transmission to Treasury.

In a bid to monitor income from its minerals, as well as improve accountability and transparency within the mining sector, the government is now working on establishing a centralised mining revenue account. The

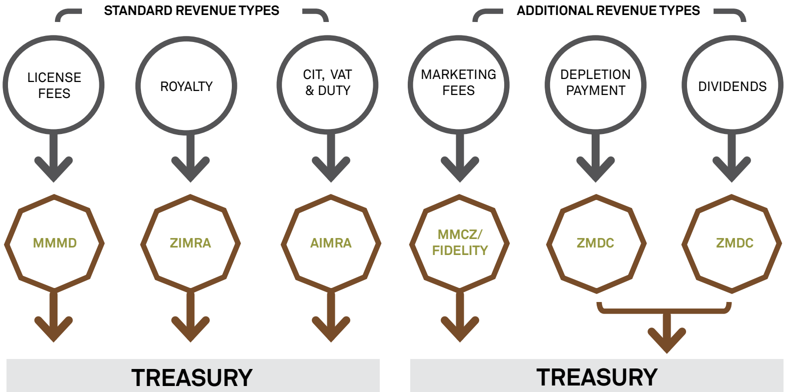
54 'Zim to adopt new exploration techniques', Newsday, 25 December 2013.

55 'Mining sector in 35 per cent growth', The Herald, 26 September 2013.

56 See 'Mining Royalties Deep 45%', Business Day, 29 January 2014. http://businessdaily.co.zw/index-id-Business-zk-34026.html#sthash.aOQrNb4S.dpuf

57 See C. Anderson, 'Creating a legislative framework to govern mining in Zimbabwe', Revenue Watch, July 2011.

CURRENT MINERAL REVENUE COLLECTION SYSTEM



proposed centralised account is aimed at ensuring the country realising more revenue from mineral operations by minimising leakages that are being caused by the involvement of too many players in handling various types of proceeds from the mining sector.[58]

Geological and Mining Information Systems

One of the key action plans of the AMV is to improve countries' geology and mineral information systems in order to develop geosciences knowledge that can help attract exploration and investment into Africa's under-explored and under-exploited minerals. This entails improving geological and geospatial information and its use in mining and broad development processes in Africa through improving exploration rates, upgrading mineral inventories and institutional capacities.[59]

The critical challenge that has continued to negatively affect Zimbabwe's maximum development and utilisation of its mineral wealth is the paucity of knowledge about the country's mineral wealth and its distribution by both government and the local private sector. While the 1990 geological survey showed that the country has more than 66 base and industrial mineral deposits, it did not avail enough details about the level, quality and quantity of mineral resources in the country.[60] The Zim-

58 'Government to Establish Centralised Mining Revenue Account to improve Transparency', Sunday Mail, 2 July 2014.

59 See Action Plan for the Implementation of the African Mining Vision (intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development AGM, Geneva, 16-18 October 2012).

60 "The Persian Gulf of Strategic Minerals", The Sunday Mail, 6 July 2014.

babwe government has not had government-commissioned geological and exploration surveys since independence in 1980.[61] The government consequently has considerably less knowledge as to the true value of its natural assets than do the companies that it seeks to give mining concessions.[62]

Failure to have tangible knowledge about the quality and level of resources potential has been aggravated by the fact that Zimbabwe has, since 1890, been developing as a 'colonial enclave economy' lacking the financial, technical and infrastructural resources to carry out geological explorations and surveys. The government has over the years relied on private companies, including foreign firms, to carry out such explorations for it, thereby further weakening its capacity to effectively plan around its mineral wealth or negotiate contracts with mining companies. In the 1980s the Zimbabwe government, working in partnership with the Canadian International Development Agency (CIDA), which funded the project, tried to broaden its knowledge about the country's mineral wealth by contracting a Canadian firm to conduct aero-magnetic surveys and geological surveys. However, the deal went sour before the completion of the project, and the firm went away with the results without giving the government the preliminary data it had gathered.[63] Since then, the government has continued to have a paucity of data on the extent of mineral resources in the country.

The example of the Chiadzwa diamonds shows the extent to which government ignorance about the extent, quality and level of its mineral resources has cost the country.[64] Although the Zimbabwe government got to know of these diamond deposits in 2006, De Beers company began prospecting for diamonds in the Chiadzwa area in 1963 and began to export diamonds illicitly from 1994 up to 2006 while giving the government the impression that it was still prospecting.[65] During this period, the government treated the area as a wasteland. There has even been speculation that the government does not even know the mineral resource potential in the farms that it had been dishing out since 1980 to the extent

61 ZELA, Zimbabwe Alternative Mining Indaba 2013 Report, 2013, p.11.

62 A.G.O. Mutambara, 'Mining in Zimbabwe: Where to from here?': Deputy Prime Minister Mutambara's Address to the chamber of Mines AGM at Nyanga on Developing and Managing the Mineral Wealth of Zimbabwe for Tomorrow, May 17, 2013).

63 "Foreign Firms hide Zim Mineral Data," The Sunday Mail, 06 July 2014.

64 "Diamonds-When Sovereignty is Forever," The Saturday Herald, 29 May 2010; "Mining: Are We Planning to Fail," The Sunday Mail, 06 July 2014.

65 K. Bwititi, "Government Mulls Suing De Beers," www.zimpapers.co.zw/index.php, extracted on 08 November 2011. "De Beers an International Looter, www.zimpapers.co.zw/index.php, Sunday Mail, 08 October 2011. T. Nyamunda and P. Mukwambo, "The State and the Bloody Diamond Rush in Chiadzwa: Unpacking the Contesting Interests in the development of Illicit Mining and Trading, c.2006–2009," Journal of Southern African Studies, 2012.

that it loses mineral 'resources to any Jack and Jill with a spade.'[66] Government has indeed been working on establishing a geological and exploration company to establish and quantify all minerals in Zimbabwe on behalf of the government – the Mining Promotion Corporation (MPC). The MPC, which has now been constituted, is mandated 'to know all about the deposits of Zimbabwe's mineral wealth so that it can decide on how to take advantage of our resources'.[67] Establishing the MPC is thus critical as it will enable Government to gather geological data on various minerals as well as help to discover new deposits. However, the company is finding it difficult to operationalise its work on the ground because of limited funding from the government which is struggling to get resources to fund even some of its basic services like salaries to civil servants. Government requires between US$5 million and $10 million to establish the long overdue MPC. But, as the Secretary for the Ministry of Mines and Mining Development recently revealed, the Ministry has so far received $1,5 million only from Treasury.[68]

Furthermore, a Mineral Cadastre Information Management System (MCIMS) being developed by the Ministry has not been operationalised, yet.[69] The country has been using 'ancient' data for mineral exploration from old topographical maps which were done before independence in 1980.[70] This lackadaisical approach to doing geological exploration has seen the government being always on the losing end when dealing with platinum and diamond mining companies, because foreign firms negotiating business with the Zimbabwe government have better knowledge about the country's mineral reserves. The government has, in fact, admitted that it is finding it difficult to negotiate mining contracts with foreign companies, especially with regards to securitisation of minerals, because it has limited data on the mineral resources underground.

The handling of the Chiadzwa diamonds deposits further illustrates how much the government does not know about the natural resources endowments of which it is supposed to be the custodian.[71] Chiadzwa di-

66 "Mining: Are We planning to Fail," The Sunday Mail, 06 July 2014. There were also allegations that Roy Bennet, former MDC MP for Chimanimani, used to mine diamonds illicitly for years at his farm without the government knowledge.

67 A.G.O. Mutambara, 'Mining in Zimbabwe: Where to from here?': Deputy Prime Minister Mutambara's Address to the Chamber of Mines AGM at Nyanga on Developing and Managing the Mineral Wealth of Zimbabwe for Tomorrow, May 17, 2013); "Foreign firms hide Zim mineral Data," The Sunday Mail, 6 July 2014

68 'Government forms new Exploration Company', The Herald, 13 May 2014; 'Funding Delays Firm's Exploration Plans', The Herald, 28 April 2014.

69 A.G.O. Mutambara, 'Mining in Zimbabwe: Where to from here?': Deputy Prime Minister Mutambara's Address to the chamber o f Mines AGM at Nyanga on Developing and Managing the Mineral Wealth of Zimbabwe for Tomorrow, May 17, 2013).

70 'Zim to adopt new exploration techniques', Newsday, 25 December 2013.

71 There are companies such as Mbada Mining Private Limited, Marange Resources, Anjin Investment, Diamond Mining Corpo ration (Pure Diamonds), Kusena Diamonds, Jinan, Gye Nyame Resources (Pvt) ltd, and two more companies allegedly owned by Russians and Chinese separately.

amond fields are reportedly one of the largest discoveries in the world, but government has not yet done enough exploration to develop precise data about the extent and nature of the deposits. Zimbabwe's diamond output on the world market has largely been measured in terms of volume and not the quality of carats, meaning that most of its diamonds are reckoned to be of industrial use.[72]

Zimbabwe's incapacity to measure the true value of its mineral resources have also been highlighted by recent reports that the Chiadzwa diamond fields are about to reach their nadir. The Companies that have been allocated claims are now arguing that they had already depleted the claims that were given to them and were applying for more claims.[73] In view of the evidence provided above, the integrity of the information within government circles concerning the level, quantity and quality of diamonds is questionable especially as these details are always at variance with those of the Kimberly Process Certification Scheme (KPCS).[74]

Governance and Participation

Improvement in the governance of mineral resources is critical to maximising sustainable investment and development outcomes in the mining sector.[75] The AMV envisages the setting up of strong resource governance institutions that are underpinned by transparency and accountability and are strong enough to stem illicit financial flows. Governance is seen as, 'the complex set of norms, institutions, and processes that determine how power and responsibilities are exercised, how decisions are taken and how citizens participate in the management of natural resources.'[76] It deals with persons and institutions that have the power, influence, accountability and decision-making powers. The key action plans set out to create a sustainable and well-governed mining sector that is environmentally and socially responsible include measures focused on:

- Strengthening transparency
- Improving public participation
- Strengthening environmental and social management

72 M. Sibanda and Gilbert Makore, 'Tracking the Trends: An Assessment of Diamond Mining Sector Tax Contributions to the Treasury With Particular Reference to Marange Diamond Fields', Harare, Zimbabwe Environmental Lawyers Association, 2013 , p.25.

73 P. Zumnisky, "Marange May not be the World's Largest Diamond Producer for much longer," Mining.Com, 10 February 2014.

74 Sibanda and Makore, 'Tracking the Trends, p.25.

75 See Action Plan for the implementation of the Africa Mining Vision, 2012.

76 ZELA, A Review of Zimbabwe's Draft Mineral Policy: 'Transforming Comparative Advantage to Competitive Advantage', ZELA, Harare, 2014, p.16.

programmes.[77]

Zimbabwe has had a weak mineral governance system which has continued to compromise the country's efforts to realise optimum benefits from its abundant mineral resources. The Mines and Minerals Act (21:05) is the key legal instrument that governs the operations of the extractive mining industry. The Act, having been promulgated in 1961, served colonial and international capitalism and, some 34 years after the attainment of independence, still serves the purpose of maintaining the country's mining industry as an enclave economy of powerful developed economies. It serves the interests of the investor at the expense of national interests and pays no attention to local sustainable development, investment in human capital, research and development and industrial growth. This Act is constitutive of the whole governance problem surrounding the development of the mining industry in Zimbabwe. Attempts to align it with the precepts of the Zimbabwe Draft Mining policy, which is in line with the AMV 2050, have been progressing slowly, thereby introducing a confusing legislative agenda of the Mines Ministry, especially between 2012 and 2013.[78]

The government institutional mechanism designed to manage the governance of mineral resources falls under several other acts of parliament such as the Minerals Marketing Corporation of Zimbabwe Act that accords minerals marketing rights to the government-controlled company – Minerals Marketing Corporation of Zimbabwe (MMCZ). There is also the Precious Stones Act and the Indigenisation and Empowerment Act, which all directly, and at times indirectly, affect the governance of the country's vast mineral resources. For instance, the Indigenisation Act is the instrument for the implementation of local beneficiation, indigenisation of the economy and empowering of locals. However, the Act has been criticised for lacking legal clarity as far as its implementation is concerned. It simply forces directors of mining companies to cede shares to locals without mentioning how the shareholders are to be selected.

The Act gives no room for key stakeholders, like the civil society organisations, community-based organisations and artisanal/small scale miners. In view of this, the Act is counterproductive, obsolete and currently ill-equipped for the governance challenges facing Zimbabwe's

77 Action Plan for the Implementation of the African Mining Vision (intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development AGM, Geneva, 16-18 October 2012).

78 ZELA, Zimbabwe Alternative Mining Indaba 2013 Report, 2013, p.8.

mining industry.[79]

Furthermore, the Mines and Minerals Act gives inordinate powers to the Minister of Mines and Mineral Development, the President and the Mining Boards, who are legally not mandated to divulge information to affected communities thereby hampering transparency and accountability. Until it gets amended or repealed it goes against the spirit of the Draft Mining Policy, which is based on the progressive AMV, and the tenets of the new constitution designed to address some of the most stifling mineral development and governance issues such as principles of good governance (section 3[1]g and 9[2]), of equitable sharing of natural resources (section 3[2][j] and the principle of equitable access by all Zimbabweans to the country's natural resources (section 18). Section 315 of the same constitution requires procurement and government contracts/ leases to be done in a transparent, fair, honest, cost effective and competitive manner.

Due to this institutional incapacity there is limited public knowledge of the extent to which mineral resources contribute to the national treasury. Shortly after diamonds were discovered in the Chiadzwa area statutory corporations such as the Minerals Marketing Corporation of Zimbabwe (MMCZ), the Zimbabwe Mining Development Corporation (ZMDC), the Reserve Bank of Zimbabwe and line ministries struggled to control the diamond deposits or the revenue generated there.[80] The duplication of interests between government statutory boards showed that, during this period, there were institutional scrambles to control the diamond revenue even from government departments/branches etc.[81]

During the period between 2009 and 2013 there has been a lot of confusion among government ministers and officials working in statutory companies such as the ZMDC regarding whether key mining concerns, such as the diamond mining sector, remitted moneys to the national treasury. At the same time, projected levels of revenue expected from the diamond mining sector were not achieved amidst arguments that there were parallel government structures in which parties to the inclusive government hid and diverted resources such as money. During the 2012 budget presentation the Minister of Finance projected that the national fiscus expected revenue to the tune of US$600 million. The Ministry

79 ZELA, A Review of Zimbabwe's Draft Mineral Policy, p.7.

80 Nyamunda, p. 7.

81 O. Katsaura, "Violence and the Political Economy of Informal Diamond Mining in Chiadzwa, Zimbabwe," Journal of Sustainable Development in Africa, volume. 12, No. 6, 2010, p. 4.

of Finance received US$45 million dollars only and there was no explanation as to why there was a shortfall of US$555 million.[82] Due to this unexplained drastic fall in revenue expected from the diamond industry, the Ministry of Finance revised the revenue that it expected from the diamond industry in 2013 to US$61 million. The treasury, however, did not succeed in getting this paltry figure. The failure to remit expected revenue and why it tumbled down in some instances as shown above was difficult to explain, especially if it is considered that it appeared that diamond production had increased by more than 500% in terms of carats between 2009 and 2013.[83]

The Parliamentary Portfolio Committee on Mines and Energy has indeed tried to scrutinise the conduct of statutory Mining Companies in Zimbabwe such as the ZMDC and MMCZ. Section 111B of the constitution of Zimbabwe allows the parliament to approve any convention, treaty or agreement signed by the executive arm of government with foreign states, organisations, and companies. However, the Committee has not been able to enforce its decisions or receive maximum cooperation from government officials and parastatals involved in mining. More importantly, the government has struggled to effectively regulate the operations of mining companies. From as far back as 2006, when the diamond deposits became public knowledge, the government consistently failed to bring the chaotic situation to an end arguing that the proximity of the area to the Mozambique/Zimbabwe border posed governance problems because the area was secluded, desolate, isolated and rugged.[84] The poor governance strategies resulted in a free-for-all situation that attracted an estimated 15,000 artisanal miners, trader, buyers and syndicates. Futile attempts to establish order led to heavy handed operations by the police and military. However, members of the army and police force deployed in the area to make it governable were also alleged to have smuggled large quantities of diamonds, at times also fought, struggled and killed each other over these diamonds. These struggles have persuaded observers to argue that these diamond fields had become a zone of lawlessness, impunity, chaos and desperation that befits describing it as an underworld.[85]

82 M. Sibanda and Gilbert Makore, 'Tracking the Trends: An Assessment of Diamond Mining Sector Tax Contributions to the Treasury With Particular Reference to Marange Diamond Fields', Harare, Zimbabwe Environmental Lawyers Association, 2013 , p. V.

83 M. Sibanda and Gilbert Makore, 'Tracking the Trends: An Assessment of Diamond Mining Sector Tax Contributions to the Treasury With Particular Reference to Marange Diamond Fields', Harare, Zimbabwe Environmental Lawyers Association, 2013 , P.V.

84 "Mpofu: I Have no regrets on Chiadzwa", Sunday Mail, 17 February 2010.

85 L. M. Sachikonye, The Social Impacts of Diamond Extraction in Chiadzwa, Southern Africa Resource Watch, Johannesburg, November 2009, http://www.sarwatch.org/sarwadocs/theStoryArtisanalMinningMarange_OCT26_Final.pdf, retrieved on 02 September 2011.

There are serious transparency challenges in the mining sector, especially in the precious mineral industry where government subsidiaries have been involved, which have compromised national efforts to get maximum returns from mining. In July 2012 a member of the parliamentary portfolio committee on mines and energy commented, in relation to the weak regulatory and institutional governance of the Chiadzwa diamonds that, 'there is bush, jungle management at Chiadzwa.[86] We are poor as a country because we have ZMDC which has no capacity to control its resources.'[87] On 14 July 2010, Zimbabwe's Finance Minister, Tendai Biti, announced during his mid-term budget speech to parliament that the treasury could not account for 30 million US dollars of revenue from unrecorded Marange diamond exports. According to media reports, companies appear to have been engaged in large-scale smuggling and, in the case of Mbada, diamonds originating from Mbada's concession were being airlifted out of Chiadzwa directly to buyers in South Africa. A senior Ministry of Mines official suggested in an interview with Human Rights Watch Zimbabwe (HRW) in April 2010 that as much as 60 per cent of all Marange diamonds were being smuggled. Since November 2006 the fields have been completely sealed off, with access denied even to Zimbabwean members of parliament and international diplomats. The smuggling and illegal auctioning of the diamonds meant that the MMCZ commission and government taxes could be evaded, thereby maximising profits for those involved with the joint ventures.

Artisanal and Small Scale Mining

One of the key goals of the AMV in its attempt to enhance public participation in mining is to create a mining sector that harnesses the potential of artisanal and small scale mining (ASM) in a way that integrates and advances sustainable rural socio-economic development. The immediate action plans set for African countries in order to achieve this objective are:

- improve ASM policies
- promote a viable ASM
- upgrade skills and technologies

Zimbabwe currently has about 25,000 registered small-scale miners

86 M. Dhliwayo, "Zim's Shady Mining Deals: A Case for African Mining Vision," Zimbabwe Independent, 27 July 2012.

87 '$US30 Million Diamond Cash Missing', The Zimbabwean, 15 July 2010.

and around 500,000 unregistered artisanal small-scale miners. Some of these artisanal and small scale miners are engaged in the trade on a full-time basis and some on a part-time basis. According to Zimbabwe Artisanal and Small Scale Miners Council (ZASMC), the majority of these miners are in gold mining and about 75 per cent are based in rural areas.[88] While currently production levels by small scale miners have declined, in 2005 artisanal gold miners contributed 50 per cent of all gold production.

There are a number of challenges that have continued to negatively affect the development of viable artisanal mining in Zimbabwe. These include an unsafe operational environment, lack of funding and supportive infrastructure like markets, tools, geological information, skills and training.[89] Many small-scale miners use rudimentary equipment like chisels, picks, buckets and wheelbarrows when mining and very often have to rely on alluvial mining. Another key challenge hampering the development of sustainable artisanal mining is a hostile legislative environment that restricts the operational space for artisanal miners by putting bottlenecks in their acquisition of mining licences. The current restrictive legislative environment manifests itself in the form of high levies charged by the Ministry of Mines and Mining Development that include pegging fees of US$4,000, milling fees of $8,000, mine registration fees of $1,000 per annum, and even delays in issuance of licences. Levies charged by rural district councils are also too high and range from $200 to $1,000, while charges for environmental impact assessments (EIAs) range from $500 to $1,000. Other levies include Environmental Impact Assessment (EIA) review costing $210 per quarter, prospectus fees pegged at $123 and only valid for 20 days.[90]

Realising that artisanal mining can enhance revenue collection if the minerals they extracted were sold within proper channels, government was working on modalities to formalise activities of artisanal small-scale miners. In his 2014 national budget presentation in December 2013, Finance Minister, Patrick Chinamasa, set up a US$100 million facility for small scale miners in apparent recognition of the vital role they could play towards boosting both the mining sector and the fragile economy.[91] The Reserve Bank of Zimbabwe is working on opening new gold buying

88 See 'Small scale miners formalize operations', The Chronicle, 21 June 2013; 'Artisanal mining must be regulated', Newsday, 14 October 2014; 'Small scale miners' gold production plunges', The Herald, 2 September 2014.

89 'Small scale miners' gold production plunges', The Herald, 2 September 2014.

90 'Artisanal mining must be regulated', Newsday, 14 October 2014; 'Small scale miners hit by high fees', The Standard, 27 July 2014.

91 See 'Small scale miners in sponsorship talks', Zimbabwe Independent, 17 April 2014.

centres to ensure access by the small-scale miners to the market as well as reducing vulnerability of miners. The Chamber of Mines was also initiating programmes to ensure that small-scale miners can increase their gold output and enhance their contribution to the country's gold reserves. It has developed a number of programmes to help small-scale miners in the process of registration, meeting legal mining requirements and training, things that are critical to the growth and development of the small-scale mining sector. In addition, from 2013 ZASMC started registering artisanal and small-scale miners to formalise their operations.

Local participation: Community Ownership Trusts

Zimbabwe has in the past few years tried to put in place policies and measures aimed at ensuring that locals participate and benefit from mining. The Indigenisation policy, for instance, broadly tries to ensure that locals are integrated into major economic activities and initiatives of the country, including mining. This empowerment is mainly through the 51 per cent shareholding requirement for locals in the ownership of foreign companies operating in Zimbabwe. At the same time, foreign companies operating in the country are required by law to procure a percentage of their resources from local companies.

An important strategy, through which government has sought to ensure that communities benefit from and participate in mining, is through the introduction of policy measures forcing companies to contribute financially towards the development of their surrounding communities. Under the Indigenisation and Economic Empowerment Act, mining firms are obliged to cede 10 percent ownership of their companies to local communities. As a result of this statutory requirement, the country has to date established 59 Community Share Ownership Trusts (CSOT) where foreign companies are mandated to contribute to development in the areas in which they operate. However, there have been allegations of abuse of funds in some of the trusts, while some have simply not contributed the money they pledged they would. Mining companies pledged to contribute billions of dollars to fund the 59 trusts but to date only 14 are functional, with notable progress in the operations of these trusts registered in only two of the CSOT – Tongogara in Shurugwi set up by Unki Mine and Mhondoro-Ngezi set up by Zimplants Mine in Mashonland West. Schemes in the diamond mining areas of Zimunya-Marange have failed to take off after mining companies reneged on their promises. Out of US$50 million pledged by the firms operating in the Chiadzwa diamond fields, only US$400,000 has been released to the Trust.[92]

Formation of community share trusts is a noble idea and if implemented adequately has the potential to empower communities. Community trusts provide an opportunity for communities to benefit from the extraction of minerals in their areas.

Investment, Linkages, Diversification and Infrastructure Development

The AMV 2050 is based on the premise that, for resource-based industrialisation to take place in Africa, proper institutional measures have to be put in place in order to side step the resources curse and the Dutch disease[93] which hampers industrial development.[94] The AMV aims, among other things, to turn these extractive industries into industrial processing plants and strengthen the relationship between the infrastructure that is built to support mining and that which serves society. It calls for mining earnings to be invested in roads, rails, ports, energy, water and telecom and that there should be more resource-processing local industries, a knowledge economy and an active service sector. The critical issue raised in the African Mining Vision is thus the side-stream linkages into infrastructure (power, logistics and transport; communications, water) and skills, research and technology development. To create an investment-friendly mining sector that is a key component of a diversified and globally competitive economy, the AMV immediate action plan is to enhance mineral value addition, promote private sector investment and explore sustainable development corridors.

As a measure to promote the growth of the local diamond industry, the Government introduced a quota system where 10% of all locally-produced rough diamonds are reserved for the local cutting and polishing industry. This quota will be reviewed from time to time as the industry grows. In the Platinum Group Metals (PGMs) sub-sector, the Government is pursuing measures and policies that encourage investment in a refinery plant in the country.

92 See 'New guidelines for Community Share Ownership Trusts', The Sunday Mail, 13 July 2014; 'Government probes community share ownership trusts', The Herald, 23 January 2014.

93 A Dutch Disease is a situation where manufacturing efforts suffer or get crowded out due to over-concentration on mining activities following a discovery of mineral resources and a consequent price boom (Kruger, 1987)

94 AU Conference of Ministers Responsible for Mineral Resources Development Second Ordinary Session 12-16 December 2011, Addis Ababa, Ethiopia.

The government has also introduced the formation of joint ventures to ensure that local companies are involved in the extractive industry. The Zimbabwe Mining Development Cooperation (ZMDC), a government owned firm, has a total of 22 joint ventures with mining companies.[95] Some of these ventures include ventures with Chinese companies such as Sino-Zimbabwe and Norinco. They have a 50-50 share in Global Platinum, a 50-50 share in Zimbao (which mines copper), and a minority shareholding of 20 percent in Wambao which mines chrome. Partnerships with Chinese companies exist in copper, chrome and platinum and diamond mining. Chinese companies in 51-49 joint ventures with local indigenous investors were also registered to mine diamonds in 2010. These are Sino-Zim and Anjin China-Zimbabwe. They are a result of joint cooperation agreements (JCAs) signed by the two countries. There have also been JCAs with the Russians since 2005.[96] Under these mining arrangements, the government was entitled to royalties, mining taxes and its 50% dividend.

The formation of joint ventures suggests that the government has taken appropriate measures to ensure that local companies are involved and benefitting from the mining of the country's resources. Joint ventures, especially those involving government companies like ZMDC, increase the mining companies' contribution to the national fiscus. For instance, ZMDC, its subsidiaries, associate companies and Joint Ventures have made important contributions to the fiscus in the form of dividends, corporate tax, royalties and VAT. In March 2014, Mbada Diamond Company, another joint venture, disclosed that it had surpassed the USD$1 billion gross total revenue within four years of operation and that it had contributed USD$424 million (41%) towards taxes, dividends and government advances and USD$33.9 million (3%) towards corporate responsibility.[97]

However, the problem with these joint ventures is that they have not been done transparently and it is therefore difficult to tell the terms of these ventures, whether they are benefitting locals, or the extent to which the nation is broadly involved in these ventures. For example, when diamond mining started in Chiadzwa, the government got into 50-50 joint ventures with numerous foreign companies mining diamonds. The ZMDC was the statutory governing institution husbanding the 50% belonging to the government. However the ZMDC in particular, and indirectly the govern-

95 See Godwills Masimirembwa, Illegal Economic Sanctions: Challenges on Zimbabwe's Mining Industry: The Case of ZMDC, Its Subsidiaries, Associates and Joint Ventures. 2011. Available at www.euromoneyconferences.com/.../ECONOMIC_SANCTIONS_CHAL

96 See Claude Kabemba, 'Chinese Involvement in Zimbabwe', in Win Win Partnership (OSISA: 2012)

97 "Too Little of a good thing: A Reaction to Mbada Diamond's Celebration on Surpassing the USD$ 1 billon Revenue Mark,"

ment, did not follow international best practice such as the Extractive Industries Transparency Initiative and KPSC guidelines. ZMDC, although owning 50% of the diamond stakes in most diamond mining companies in Chiadzwa, failed to capture 50% of total revenue between 2009 and 2014. Such policy choices strengthened suspicions that the shareholding equations grossly undervalued the Marange diamond deposits since no national evaluation was done prior to the parcelling out of mineral ventures. These joint ventures were failing to unlock socio-economic development for the country.[98]

In addition, the joint mining ventures in the diamond mining industry have reportedly benefitted a few politically-connected elites at the expense of the nation. The chief beneficiaries of the diamonds mines of Marange, as many analysts and researchers have argued, are serving and retired members of the Zimbabwean National Army (ZNA), the Zimbabwe Republic Police (ZRP), the Air Force of Zimbabwe (AFZ) and the Central Intelligence Organisation (ZCIO). With the consent and assistance of a number of Zanu (PF) politicians, individuals within these security agencies have profited from a significant proportion of the country's most valuable diamond fields.[99]

Value Addition and Beneficiation

The government has of late tried to introduce policies and measures aimed at encouraging beneficiation. Pushed by the current pressure to kick-start the contracted local economy, the government has aggressively been pursuing a beneficiation programme in the extractive sector, targeted at processing minerals, particularly platinum and diamonds locally. Government has particularly been concerned about the fact that the country is not getting maximum returns from platinum mining and exports. At the beginning of 2014 it introduced a 15 per cent levy on raw platinum export as a measure designed to encourage platinum mining companies to set up platinum refinery facilities in the country.[100] In addition, the government has given these companies an ultimatum (expiring at the end of 2014) to set up platinum refinery facilities in the country or risk a withdrawal of their platinum export permits. The three platinum mining companies operating in the country – Zimplats, Mimosa

98 Parliament of Zimbabwe, Parliamentary Committee on Mines and Energy, Harare, February 8, 2010.

99 David Towriss, 'Buying Loyalty: Zimbabwe's Marange Diamonds', Journal of Southern African Studies, Vol. 39, No. 1, 2013, pp. 99–117.

100 Platinum is currently Zimbabwe's leading export mineral. By 2011, it accounted for 43 per cent of all mineral exports, followed by gold at 28 per cent and diamonds at 20 per cent. 'Platinum miners decry 15 per cent levy', The Herald, 9 July 2014; 'Take Beneficiation Warnings Seriously', BH24, 11 March 2012. Available at http://www.bh24.co.zw/take-beneficiation-warnings-seriously/.

and the Anglo-American unit Unki Mines – all export raw platinum to South Africa for refining. Raw platinum has about 10 minerals such as gold, palladium, nickel, rhodium, indium, cobalt and silver, which means Zimbabwe loses much when these minerals are processed outside the country, apart from the understated platinum revenue.[101] Economic experts argue that the absence of a local refinery has resulted in the loss of revenue and job opportunities for the country. It is estimated that the failure to initiate local beneficiation strategies has resulted in the country losing potential revenue yearly from its diamonds to the tune of US$14 billion.[102]

At a policy level, the government has also been moving towards coming up with policies for mineral beneficiation. The issue of beneficiation in Zimbabwe is now becoming a matter of policy as indicated in the new government macro-economic policy – Zimbabwe Agenda for Sustainable and Social Economic Transformation (ZIMASSET) – and the 2014 National Budget. ZIMASSET is premised on value addition of mineral resources and agricultural products, and acknowledges that, to drive the value addition and beneficiation agenda, skills development and capacity building are imperative. ZIMASSET proposes to have a value addition and beneficiation cluster in the mining industry. More significantly, government's draft Minerals Policy and the newly unveiled Diamond Policy all prioritise beneficiation. However, the Zimbabwe government still has to implement its value addition and beneficiation policies. It is still working on a comprehensive beneficiation and value addition policy of the country's mineral resources, as it seeks to transition from just a resource-based economy to a manufacturing one. The policy will make beneficiation and value addition of the country's mineral resources compulsory, as part of the new mines and mineral policy, in order to fully extract value from minerals.[103] By issuing these laws and regulations, the Zimbabwean Government aims to increase the mining commodities price received by Indonesian mining companies for mineral commodities (by requiring the adding of value through domestic processing or beneficiation); increase Indonesia's tax revenue; and create more jobs through the increase of production capacity in Zimbabwe.

Some stakeholders in the mining industry seem to have embraced the beneficiation policy, while others appear to be yielding to government

101 ZELA, A Review of Zimbabwe's Draft Mineral Policy: 'Transforming Comparative Advantage to Competitive Advantage, ZELA, Harare, 2014, p. 12.

102 "We are losing billions in potential diamond revenue," The Herald, 11 February 2014.

103 'Government to make beneficiation, Value Addition Compulsory', Zimbabwe Mail, 26 May 2014.

pressure on value addition. For instance, the Zimbabwe Diamond Technology Centre, Beneficiation Association of Zimbabwe and the Jewellery Council of Zimbabwe in December 2013 launched a minerals beneficiation programme aimed at engaging government to ensure the country value-adds its resources instead of exporting them in raw form. Platinum mining companies are now planning to jointly build a US$3 billion platinum refinery plant. Chamber of Mines of Zimbabwe president, Mr Alex Mhembere, recently announced that platinum producers had pooled US$100 million to start the process of setting up beneficiation facilities in the country.[104]

However, most mining companies operating in the country have been reluctant to fund beneficiation, maintaining that it is not their core business to do so. Arguing that the mining industry is already suffering from high taxation, the high costs of exploration and bringing the mineral ore to the surface, the companies have maintained that beneficiation is 'a very different industry with its own costs and expertise altogether'.[105]

Furthermore, the government, sensitive to the possibility of disinvestment by some mining companies at a time that it desperately needs investment, has not been aggressive enough in ensuring that the beneficiation policy is implemented. Zimbabwe has continued to sign contracts that are against the dictates of the Africa Mining Vision because they do not take into account value addition. The government negotiators have continued to use provisions in the Mines and Minerals Act which do not have provisions for value addition.[106] The Act does not make it mandatory for value addition to be done before minerals are exported. The country thus continues to derive little benefit from its mineral industry as it continues to export 90% of its minerals in their raw or semi-processed form. For instance, Zimbabwe sells its diamonds in their raw form and this has created jobs in countries that do value addition such as India and Israel.[107] Lack of value addition in diamonds, chrome, platinum and other minerals means Zimbabwe is deprived of potential benefits including revenue, employment and infrastructure development. Export of unprocessed minerals means the country is creating tens of thousands

104 'US$100 million for first Platinum Refinery', The Herald, 24 May 2014;.

105 Mining companies in Zimbabwe have over the past few years been lobbying Government to review charges and levies saying they are making their operations unviable. See 'Editorial: Mining Companies must play ball', The Herald, 10 July 2014; 'Zim to adopt new exploration techniques', Newsday, 25 December 2013; 'No case for Beneficiation-Chitando', Zimbabwe Independent, 31 August 2012.

106 M. Dhliwayo, "Zim's Shady Mining Deals: A Case for African Mining Vision," Zimbabwe Independent, 27 July 2012.

107 Mutambara, 'Mining in Zimbabwe: Where to from here?'; Address to Deputy Prime Minister Prof. Arthur G.O. Mutambara's address to the chamber of Mines AGM at Nyagga on Developing and Managing the Mineral Wealth of Zimbabwe for Tomorrow, May 17, 2013).

of jobs in these export countries at a time when the country needs to create employment opportunities for its unemployed population estimated at 80%.[108] Zimbabwe thus needs to maximize the returns it makes from its resource extraction industry by encouraging downstream processing before exporting.

Linkages

The AMV outlines that, for Africa to realise optimal benefits from mining, it is critical that linkages with other sectors are created, especially manufacturing. However, Zimbabwe's manufacturing sector has been hamstrung over the past 15 years. The various Confederation of Zimbabwe Industries (CZI) Manufacturing Sector Surveys suggest that industrial capacity utilisation declined sharply from 35.8% in 2005 to 18.9% by 2007 and to less than 10.0% by 2008. It increased to 33.0% in 2009, 43.7% in 2010 and 57.2% in 2011, before declining again to 44.2% in 2012 and 39.6% in 2013.[109] Therefore, capacity for manufacturing beneficiation is limited. In general, there has been a considerable degree of deindustrialisation to an extent that it is becoming difficult to establish up-, down- and side-stream industries.

The same policies are being pursued in the diamond mining industry, in which the Zimbabwe government plans to reduce the license fees for diamond cutting and polishing firms in order to support the setting up of diamond refining and beneficiation industries in the country, before they are exported in their raw form. Between 2006 and 2013 the extraction of diamonds had not translated into improved infrastructural development in the community but actually came with restrictions on their freedom of movement and a serious infringement on their community rights. Before this policy change, diamond cutting and polishing firms needed to pay US$100000 yearly as registration fees in addition to other forms of commodity taxes levied on raw mineral products.[110] These moves were done in order to add value to mineral resources, to unlock the country's industrial capacity, create jobs and widen the revenue base.[111] Around

108 The mining sector employed 59 000 people at the peak of its performance in 1995. The decade of recession saw the figure dropping to 33 000 in 2009, before climbing up to 45 000 in 2012. See 'Mining Sector in 35 per cent growth', The Herald, 26 September 2013.

109 African Development Bank (2014), 'Zimbabwe: Economic Outlook' in African Economic Outlook. Available at http://www.afdb.org/en/countries/southern-africa/zimbabwe/zimbabwe-economic-outlook/.

110 Oscar Nkala, "Zim slashes gem cutters, polishers registration fees in bid to boost local beneficiation," www.miningweekly.com, 7th February 2014.

111 Oscar Nkala, "Zim slashes gem cutters, polishers registration fees in bid to boost local beneficiation," www.miningweekly.com, 7th February 2014.

2010 there were more than 70 Zimbabwean diamond cutting and polishing firms that closed down citing viability problems, high license fees, high operating costs and bureaucratic obstacles.

Despite being capable of producing 25% of the global diamond produce, Zimbabwe has not generated employment and significant revenue from it. An example of beneficiation is the Minerals Marketing Corporation of Zimbabwe (Diamond Manufacturers) Regulations under Statutory Instrument 157 of 2010 which requires the MMCZ to set aside not more than 10% of gem quality diamonds and not more than 10% industrial diamonds for sale to local manufacturers. The Zimbabwe Diamond Policy of 2012 also stipulates that the government should set aside a specific quota for local polishing and jewellery manufacturing.[112]

Investment

Zimbabwe's capacity to develop its infrastructure along the lines recommended by the AMV 2050 is greatly shaped by the fact that the country is trying to come out of a decade and a half of crisis which negatively affected its economic and infrastructural development. For instance, transportation infrastructure is critical to the success of large-scale mining operations. However, much of the country's rail network, approximating 3,109 kilometres, requires renovation and upgrading. According to the African Development Bank, two decades ago National Railways of Zimbabwe (NRZ) could convey 14 million tons of freight per year, but is now only able to handle one-fifth of the volume.[113] Due to minimised operational levels of the country's railways, road transportation has increased considerably, impacting negatively upon the condition of the national highways.

Some of the other infrastructural constraints include limited and irregular water supplies in urban areas, intensive siltation of many of Zimbabwe's dams, recurrent operational failure of local authority lighting facilities (also impeding traffic flows and controls, and compounding the extent of road traffic accidents). On top of all this, there has been an increase in power outages because of limited power supply from the country's sole power distributor – the government-owned Zimbabwe Electricity Supply Authority. Zimbabwe is generating an average of 1,300

112 "We are losing billions in potential diamond revenue," The Herald, 11 February 2014.

113 'Infrastructure Upgrading key to Economic Recovery', Zimbabwe Independent, 7 June 2013.

Megawatts (MW) against a peak demand of 2 200MW.[114]

Authoritative assessments suggest a substantial infrastructural recovery requires more than US$15 billion.[115] The government's Infrastructure and Utilities revival plan, as framed in ZIMASSET, is to bring on board roads (700kms new, 500kms rehabilitated, 200kms widened and grading 4,000kms of rural gravel roads), rail (400kms rehabilitated), construction of 10 dams and an additional 450 MW of power (from refurbished existing facilities and new units at Hwange) among others. However, funding for these plans is not available because the country's economy remains in a fragile state, with an unsustainably high external debt of US$10.7 billion and massive deindustrialisation and informalisation. Zimbabwe has experienced difficulties in attracting foreign direct investment to build the infrastructure such as the roads, bridges and dams (politics of water will be more serious than the politics of the state).[116] All this has negatively affected mining which is a capital intensive endeavour that requires specialised technologies and skills.

Indeed, the government has continued to try to introduce various measures to encourage infrastructural development for the mining sector. For instance, it has pushed platinum miners to submit 'concrete plans' for the construction of a platinum refinery within a deadline of two years. The introduction of the 15 per cent levy on unprocessed exports of platinum is also meant to stimulate investment into platinum refineries.[117] In line with the developments, the Platinum Producers Association of Zimbabwe has already completed the feasibility study for a platinum refinery in line with government's demand for the local beneficiation of high-value minerals prior to export. Although Zimplats management has already set aside funds for the construction of a refinery it intimated that a refinery would also require an output of about 500,000 ounces per year to sustain the refinery.[118] The new platinum refinery plant is expected to be operational by 2016 as part of efforts to make the mining sector a key driver of economic growth especially as platinum output in Zimbabwe rose to an all-time record of 430,000 ounces in 2013 up from 340,000 the previous year. Mimosa Platinum mine sees its Zimbabwean operations as vital to its future strategy and has therefore indicated willingness to

114 'US100 million for first platinum refinery', The Herald, 24 May 2014.

115 'Infrastructure Upgrading key to Economic Recovery', Zimbabwe Independent, 7 June 2013.

116 ZELA, Zimbabwe Alternative Mining Indaba 2013 Report, 2013, p.17.

117 Zimbabwe platinum miners appease Mugabe with refinery plans, 19 January 2014; Frik Els, "PGM royalties and fresh blow to Implats add to industry woes," New Zimbabwe, 10 March 2013.

118 "Why Miners won't let Zimbabwe Go," Daily News, www.dailynews.co.zw/articles/2013/09/23/why-miners-wont-let-zim-go, retrieved on the 02/07/2014.

work with the government plan.[119]

There are, however, potential challenges in building a platinum refinery plant estimated to cost US$3 billion. Moreover a major platinum refinery is said to demand a lot of electricity at a time when the country is having erratic supplies, failing to cater for domestic needs, let alone industrial ones and that the power utility company is saddled by choking debts. The estimated cost of the refinery and an associated 600 megawatt power plant is $3,2 billion.[120]

Plans for the setting up of the platinum refinery has stimulated expansion plans in other infrastructural areas like electricity. For the refinery to be fully productive, it requires uninterrupted power supply. ZESA has therefore started working on plans to increase its production capacity to meet the new demands. It is working on the expansion of Kariba South hydro and Hwange thermal power stations which would add 900 megawatts to the national grid. There are also on-going consultations with Nampower of Namibia to co-ordinate the expansion of thermal stations in Harare and Bulawayo, which should bring about 120MW in 18 months. In addition, there are also plans to set up new solar generation facilities with the capacity to generate 300 megawatts.[121]

However, owing to country risk perceptions and unpredictable commodity prices on international markets, a number of mining companies have been reluctant to invest in infrastructural development. Many of the mining companies have sought infrastructure solutions that deliver optimal economic returns over the life of the mine (i.e., in terms of capital and operating costs), while minimising construction and operating risks, providing a secure route to market and preserving flexibility to reduce or expand mine output. For instance, while Government has for a long time underscored the need to beneficiate and value-add minerals, there has been little action by mining firms regarding the establishment of the requisite facilities. Many have, in fact, been scaling down operations and have strictly focused on extracting high-grade ore. Local mines in general have not done enough in terms of infrastructural development in communities. Marange and Chiadzwa are good examples where millions of dollars were being realised from the mining of diamonds but there was no visible development taking place. In cases where mineral companies

119 " Govt repossesses unused platinum claims," Daily News, ww.dailynews.co.zw/articles/.../govt-repossesses-unused-platinum-claim, Feb 25, 2014

120 "Why Miners won't let Zimbabwe Go," Daily News, www.dailynews.co.zw/articles/2013/09/23/why-miners-wont-let-zim-go, retrieved on the 02/07/2014.

121 'US100 million for first platinum refinery', The Herald, 24 May 2014.

were at least investing in infrastructure essential to facilitate their mining activities, the infrastructure development was only found where mining activities were taking place. Development is not taking place in a way that is spread across the country.[122]

In the absence of infrastructure, Zimbabwe's mining sector has remained a prototype 'enclave sector' linked to external markets and not to local markets as was the case during colonialism. The Look East policy, which replaced the traditional pro-West industrial exporting strategy, has not helped to reverse the structure of the mining economy. For instance, the Zimbabwe diamond industry has reportedly created 60,000 jobs in the small India town of Surat.[123] This effectively means Zimbabwe has been exporting employment and revenue because processing unlocks more value out of raw minerals. The link between mining, on the one hand, and employment and industrial development, on the other, has therefore remained very weak. Due to a weak co-relationship between extractive mining and employment creation and industrialisation, the Zimbabwe economy has regressed instead of progressing.

Conclusion

Zimbabwe has since 2009 tried to introduce and implement policies and measures that are in line with the broad objectives of the AMV and the AMV five year action plan. The Ministry of Mines and Mineral Development, for instance, has been working on a new Mineral Policy which is anchored on the vision of the AMV. The Draft Mineral policy aims at a mutually beneficial natural resources exploitation strategy involving TNCs, Government and local communities. The country's economic blue print for the period 2013 and 2018, ZIMASSET, just like the AMV, aims to promote socio-economic transformation and rapid industrialisation through value addition and beneficiation in the mining sector. ZIMASSET also aims at leveraging the country's national resources by encouraging and institutionally forcing TNCs to set up industrial processing plants and supporting infrastructure in the country's mining industry. Pushed by the current pressure to kick-start the contracted local economy, the government has aggressively been pursuing a beneficiation programme in the extractive sector, targeted at processing minerals, particularly platinum and diamonds locally. More critically, a number of provisions

122 'Mines, focus on infrastructure', The Zimbabwean, 24 April 2013.

123 ZELA, Zimbabwe Alternative Mining Indaba 2013 Report, 2013, p.9.

in the new constitution, especially around good governance, access to and sharing of natural resources, if implemented, can help the country realise the goals and objectives of the AMV. At policy level, the government has also been moving towards coming up with policies for mineral beneficiation.

On paper, Zimbabwe appears to be moving in the right direction in implementing the objectives of the AMV. However, the reality on the ground suggests that there are still a number of challenges and contradictions that need to be addressed in order to realise the objectives of the Vision. One of the most critical challenges that have continued to negatively affect Zimbabwe's optimum utilisation of its mineral wealth is the paucity in knowledge about the country's mineral wealth and its distribution by both government and the local private sector. Another critical challenge is the lack of transparency and accountability in the mining sector. Zimbabwe has continued to have a weak mineral governance system which has continued to compromise the country's efforts to realise optimum benefits from its abundant mineral resources. There are serious transparency challenges in the mining sector, especially in the precious mineral industry, where government subsidiaries have been involved, which have compromised national efforts to get maximum returns from mining. The lack of transparency and accountability is particularly experienced in contract negotiations, licencing and mining revenue management, including both revenue collection and utilisation. Contract negotiations, particularly those done with diamond companies, have generally not been broad-based, transparent and in the public interest. Government has also not been able to negotiate beneficial contracts because it usually has limited knowledge about the geology and mineral potential of mines within its domain. In addition, government has been negotiating from a weak position because of the country's weak economy. Since the beginning of Zimbabwe's political and economic crises at the turn of the 21st Century, the national economy has become so weak that government has been desperately seeking for investment and cash loans from international investors. At the same time, the country's weak economy has hampered government efforts to put in place the necessary infrastructure to support a vibrant mining economy.

Conclusion and Recommendations

This study set out to review the progress on the implementation and alignment of the mining policies of four major mineral producing African countries to the African Mining Vision adopted by Mineral Resources and Mining Ministers in 2009. The AMV 2050 is spearheaded by the African Union. The research undertaken and reported above has made several revelations regarding the political will to take localisation of the AMV not only as a policy but also action plan mandating government plans.

On paper, all the four countries appear to be moving in the right direction in aligning their mining policies to the tenets of the AMV. Actual practice, however, suggests that there are still a number of challenges and contradictions that need to be addressed. One of the most critical challenges that have continued to negatively affect Zimbabwe's optimum utilisation of its mineral wealth, for instance, is the paucity of knowledge about the country's mineral wealth and its distribution by both government and the local private sector.

Particularly in DRC and Zimbabwe, it is critical that transparency and accountability in the mining sector be improved. The lack of transparency and accountability is particularly experienced in contract negotiations, licencing and mining revenue management, including both revenue collection and utilisation. For the DRC and Zimbabwe, contract negotiations lack inclusiveness, especially integration of civil society. It remains questionable whether most of the mining contracts are negotiated in the best interest of the public more so that powers for negotiations are vested in individuals occupying offices of authority and power such as that of a minister.

Old, and sometimes absence of, government-blessed geological surveys and mapping, remain a notable challenge to two countries, namely the DRC and Zimbabwe. Botswana swiftly procured the services of a private firm to undertake the geological mapping exercise with ownership and custody of the data solely held by government. South Africa, due to its long mining history and technological know-how, has well-established institutions capable of undertaking the exercise of estimating resource potential.

Further, the adoption and reviews of the Mining Charter, which is congruent to the African Mining Vision, attests to the commitment of the South African government to seriously implement many aspects of the mining vision. In addition, although the action plan is not definitive, there is a clear indication that the many initiatives undertaken by the government of South Africa and its stakeholders in the minerals sector are aimed at transforming all levels of the community through proper health, education, skills development and ownership structures. South Africa and Botswana have responded, many times indirectly, to the aspirations of the Mining Vision by creating the necessary policy and legislative infrastructure.

One therefore concludes that, although many of the initiatives may not be a direct response to the AMV, the proposals, legal and policy frameworks available in the four countries seem to be talking to the aspirations of the vision. A proper localisation of the AMV must be encouraged hence the need to make available the guide book to all government technocrats[124] .

From the foregoing, the following recommendations are made:

1. There is need for a proper monitoring tool. We therefore propose a Mining Industry Transformation Index such as the one suggested by ACET. The tenets and action plan targets would then be measured accordingly. Policy synergies and their impact will be measured better. Currently, adoption of the vision is just on paper for most countries. As a way of soliciting political will towards the AMV, the African Peer Review Mechanism can be adapted especially by adding a few questions measuring the performance of the leadership in their efforts to implement the elements of the AMV. As the results of this analysis would be publicly published, many political leaders would consider it a 'naming and shaming' exercise for those doing badly according to the index.

2. The Civil Society Organisations (CSOs) need incentives in order to be encouraged to exert pressure on their local leadership. The AMV as a development plan must be integrated into the economic and social development agenda of all countries. CSOs must continue to meet and deliberate on the progress of the vision and, where resources are obtainable, they must be funded to enhance their research capacity and activities. Although it has already happened, another workshop targeting major media organisations in each country must be constituted[125] .

124 See African Mining Development Center (20). A Country Mining Vision Guide Book: Domesticating the African Mining Vision.

125 The Continental Mining Reforms and Labour Concerns Workshop held in May, 2014 in Johannesburg drew a good media representation.

3. For South Africa, the Mining Charter must include other issues such as environmental sustainability, percentage to be beneficiated locally and employee ownership schemes.

4. One of the objectives for the Ministry of Mines in DRC particularly should be to provide skills training for their officials permanently.

5. Again, the mission of the Ministry of Mines in the DRC should be to respond positively to the demands of the Africa Mining Vision

6. There is need to increase transparency regarding the amount of output from mining activities. This will ensure that government does not lose out on tax revenue through under-declaration of sales

7. Civil society must be allowed to participate in contract negotiations to control for 'public failure'.

8. Employee shareholding needs to be fully adopted in South Africa to abate long, unproductive and sometimes destructive industrial actions.

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