

**ASSESSMENT OF MINING POLICY IMPLEMENTATION IN MALAWI
STUDY REPORT**



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JULY, 2015

Cover Photo Illustration

The cover photo depicts entrance to Nkhauti Coal Mine, in Karonga, owned by local Malawians.

Photo by Grain Malunga FIMMM

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Acronyms

AIDS	Acquired Immune Deficiency Syndrome
ASM	Artisanal and Small scale Mining
CEPA	Centre for Environmental Policy and Advocacy
COMESA	Common Market for Eastern and Southern Africa
CPL	Cement Products Limited
CSR	Corporate Social Responsibility
DEA	Director of Environmental Affairs
EAD	Department of Environmental Affairs
EIA	Environmental Impact Assessment
EITI	Extractive Industries Transparency Initiative
EMA	Environmental Management Act
EMP	Environmental Management Plan
EPL	Exclusive Prospecting License
EPZ	Export Processing Zones
ESMP	Environmental and Social Management Plan
FDH	First Discount House
GDP	Growth Domestic Product
GoM	Government of Malawi
HIV	Human Immuno Virus
IAEA	International Atomic Energy Agency
MCC	Millennium Challenge Corporation
MERP	Malawi Economic Recovery Plan
MGGPS	Malawi Growth and Governance Support Project
MGDS	Malawi Growth and Development Strategy
MIDCOR	Mining Investment and Development Corporation
MIGA	Multilateral Investment Guarantee Agency
MITC	Malawi Investment and Trade Centre
MRA	Malawi Revenue Authority
NEP	The National Environmental Policy

NSSD	National Strategy for Sustainable Development
PAL	Paladin (Africa) Limited
SADC	Southern African Development Community
TCE	Technical Committee on Environment
USAID	United Nations Agency for International Development

EXECUTIVE SUMMARY

Malawi has rich mineral resources that if sustainably exploited would significantly contribute towards economic growth and development. Government prioritized the mining sector and included it in its priorities as stated in the Malawi Growth and Development Strategy (MGDS II). One of the requisites for the development of the mining sector is a good policy environment. Evidently, Malawi is challenged by weak legal and technical systems to effectively handle the complex social, economic and ecological challenges prevalent associated with mining operations. Frustrating elements in policy implementation within the mining value chain hover around inadequate integration of sustainable development concepts including matters relating to taxation, social responsibility, transparency and accountability and capacity building for Artisanal and Small-scale Miners. Additionally, implementers of the mining policy are faced with technical inadequacies whereas the engagement of local Malawians in mining has generally been minimal due to low financial support.

Notwithstanding, Government of Malawi is collaborating with development partners, civil society organisations and the private sector to address these challenges through the Mining Governance and Growth Support Project (MGSP), which seeks to promote the mining sector through the development of the sector's policy, legal and institutional framework among other key objectives. The observable and promising positive strides include the development of the Mines and Minerals Bill to replace the 1981 Act, improved generation and dissemination of geophysical data on mining potential, active engagement of Civil Society Organisations and Artisanal and Small Scale Miners (ASMs) in policy development and in addressing matters relating to mining operations in the country. Processes are also underway to modernize the mining cadastre, establish a transparent mining revenue management regime and improve the environmental and social monitoring of mining operations in artisanal mining communities.

As Malawi is undertaking steps to boost and facilitate mineral development, it is imperative that prevailing practices and any other proposed measures and strategies should be premised on the principles of sustainable development to effectively address the social, economic and environmental concerns affecting the mining sector. While best practices may be adopted and applied from other countries, the national mining sector regime should very much respond to the needs of Malawians. Specific emphasis should be placed on development of the ASM sector through preferential financial incentives and technical capacity enhancement, and the introduction of a fair and transparent system of mining revenue administration

1 INTRODUCTION

1.1 Background

The Mines and Minerals sector in Malawi is governed by the Mines and Minerals Act of 1981. Reviews done by various institutions including the Centre for Environmental Policy and Advocacy (CEPA) have highlighted numerous shortfalls in the Act that need to be addressed for Malawi to have a robust mining regulatory framework. In 2013, Malawi adopted a Mines and Minerals Policy for which one of the deliverables is the need to enact a new mining legislation to replace the Mines and Minerals Act, 1981. Accordingly, the Ministry of Natural Resources Energy and Mining embarked on revising the Mines and Minerals Act, 1981, and produced a draft Mines and Minerals Bill, 2015. With support from the Tilitonse Fund, CEPA conducted an audit of the draft Mines and Minerals Bill, 2015 and made recommendations for improving the Bill under the Strengthening Mining Governance in Malawi Project. In terms of policy, the audit recommended that the Mines and Minerals Policy should be informed by the principles of stability, consistency, stakeholder dialogue, management of expectations, social obligations, tradability of mineral rights and integrated land use planning and development plans (CEPA). It summarily recommends the integration of the principles of sustainable development across the mining value chain – thus ensuring a balance among social and economic development and environmental sustainability.

As policy and legislative processes are underway, issuance of licenses and mining activities have not been suspended to wait for completion of the processes. It is against this background that CEPA with support from the Tilitonse Fund commissioned a study on mining governance aimed at assessing the extent to which ongoing mining activities comply with the existing regulatory framework. The review is envisioned to generate evidence for policy advocacy towards effective policy development and implementation in the mining sector. This report presents preliminary findings of the study.

1.2 Objective

The objective of the study was to assess the extent to which ongoing mining activities comply with the existing regulatory framework (as governed by the Mines and Minerals Policy (2013), the Mines and Minerals Act, 1981 and associated regulations.

Specifically, the review sought to:

- a) Assess levels of implementation of various policy provisions that relate to the mining sector;
- b) Analyse the extent of compliance by relevant stakeholders with the existing legal framework that governs the mining sector;
- c) Identify best and upcoming practices and approaches in policy implementation from mining regimes of other relevant countries as well as other policy and legal frameworks within Malawi;
- d) Identify opportunities and constraints for effective implementation of the existing mining policy and legal framework in Malawi; and
- e) Document measures that could be taken for ensuring effective policy implementation in the mining sector.

The objective of the study was analyse of issues affecting mining policy implementation in Malawi by drawing insights from the implementation of mining and other policies in Malawi and elsewhere;

and proposes measures and options for improving mining policy implementation in Malawi in light of sustainable development.

Ultimately the study was designed to:

- a) Understand the policy environment of mining in relation to specific expectations and identifying the gaps of the policy framework both in terms of policy document and legal framework; and
- b) Learn from what is currently happening from existing provisions; and
- c) Analyse the provision at each and every value chain of mining.

1.3 Policy Implementation - What it is and what it entails

Policy implementation is broadly defined as “what happens between the establishment of an apparent intention on the part of the government to do something, or to stop doing something, and the ultimate impact in the world of action” (O’Toole, 2000). More specifically, policy implementation is the set of activities and operations undertaken by various stakeholders toward the achievement of goals and objectives defined in an authorized policy (Bhuyan, Jorgensen, & Sharma, 2010). This stage is critical as political and administrative action at the frontline are hardly ever perfectly controllable by objectives, programs, laws, and the like [Hogwood and Gunn 1984 as cited by Fischer, Miller, & Sydney (2007)]. Thus, the decision on a specific course of action and the adoption of a program does not guarantee that the action on the ground will strictly follow policy makers’ aims and objectives. The stage of execution or enforcement of a policy by the responsible institutions and organizations that are often, but not always, part of the public sector, is referred to as implementation. Therefore, policies and their intentions will very often be changed or even distorted; its execution delayed or even blocked altogether (Fischer, Miller, & Sydney, 2007).

1.4 Importance of Assessing Policy Implementation

It is evident, therefore, that having a policy is one thing and implementing it is another, and often the most challenging part. The Mines and Minerals Policy acknowledges two important issues affecting regulation of mining operations in the country: Lack of harmonisation of legislations that affect mining activities; and Inadequate and outdated legal provisions (Ministry of Mining, 2013). It is against this background that Government prioritised the review and harmonisation of the mineral legislation with other related legislations as part of its development strategy. While new approaches and tools are being developed to ensure more sustainable mineral development in the country – it is imperative that the needs, roles and responsibilities of various stakeholders are taken into consideration. Clearly the government is a key stakeholder, affecting nearly all aspects of mineral development and thus impacting many other key stakeholders. With this role comes the need for good governance, building strong institutions and employing laws and policies that honour the broader interests of society (Eftimie & Stanley, 2005). Thus, this follow up to Government’s and stakeholder obligations regarding implementation of policies is in line with the conceptual framework for effective governance of mining and other policies worldwide.

1.5 Critical Elements to Policy Implementation

Several theories and perspectives exist on the key components of policy implementation and the ways in which to judge successful implementation. The Health Policy Initiative has organized themes, influential factors, and components into a practical framework to help policymakers, program

managers, and other stakeholders translate policies into action (Bhuyan, Jorgensen, & Sharma, 2010). The framework outlines seven dimensions that influence policy implementation as follows:

- (a) The policy, its formulation, and dissemination
- (b) Social, political, and economic context
- (c) Leadership for policy implementation
- (d) Stakeholder involvement in policy implementation
- (e) Implementation planning and resource mobilization
- (f) Operations and services
- (g) Feedback on progress and results

1.6 Mining as a Priority Development Area

The Malawi Growth and Development Strategy (2011-2016) (MGDS) and the Malawi Economic Recovery Plan 2012 (MERP) have identified mining as one of the priority sectors with the potential to spur economic growth and improvement in the well-being of Malawians (GoM, 2011; Government of Malawi, 2012). In 2013 Government adopted a Mines and Minerals Policy that highlights the importance of mining to the future growth of the economy and outlines strategies for ensuring the development of the sector (Ministry of Mining, 2013). Over the years, mining has been contributing less than 3 percent to the Growth Domestic Product (GDP) and equally low to export earnings. However, the contribution to the GDP has risen to 10 percent following the opening of the Kayelekera Uranium Mine but is envisaged to double by 2023 if the country's mineral resources are fully exploited (Ministry of Mining, 2013). The other major minerals currently being produced in Malawi include coal, gemstones, dolomite, cement, lime and stone aggregate. The country also has deposits of vermiculite, graphite, pyrite (iron sulphide) that are at feasibility study level, and bauxite whose feasibility study was already done in 1996 by Mining Investment and Development Corporation (MIDCOR).

2 METHODOLOGY

The methodology used in the study included the following systematic review of literature (including policies and legislation from Malawi and elsewhere), key Informant interviews with technical personnel from government (including the Department of Mining and Geological Surveys Department) and mining companies, some members of Multisector Group (MSG) of EITI in Zambia and Malawi. Community consultations were held with local leaders at GVH Sawadi and GVH Biliati at Njereza in Mangochi; and GVH Mwenenguwe in Karonga to know the extent at which communities understand issues of community engagement and social responsibility. Additionally, a questionnaire was administered to the academia, and district level planning and environmental management personnel in Mangochi and Zomba districts, where mining activities are being carried out.

Relevant policies and legislation that were reviewed include the following:

- a) Mines and Minerals Policy (2013) and Mines and Minerals Act, 1981;
- b) National Environmental Policy (NEP) (2004) and Environmental Management Act, 1996;
- c) Forestry Policy (2006) and Forestry Act, 1997;
- d) National Parks and Wildlife Policy (2000) and National Parks and Wildlife Act, 2004;
- e) National Water Policy (2005) and Water Resources Act 2013; and
- f) Land Policy (2002) and Land Act (1965)

3 KEY FINDINGS

3.1 Mineral Development

The Mines and Minerals Policy (2013) lays the foundation for creating an enabling environment generating data and disseminating information on mineral resources to stakeholders including potential investors.

3.1.1 Data Collection and Information Dissemination

Government has done preliminary mineral exploration and geological mapping since 1904. Follow up work has been hampered by inadequate budgetary support. Dissemination of this information to stakeholders has been mainly through enquiries rather than promotion. Due to inadequacy of capacity and in depth skills, government has sometimes seconded their professional staff to exploration companies such as Mitsui Mineral Development Corporation (MINDECO) and Mkango Resources in 1997 and 2010 respectively.

There is very little detailed information on quality and quantity of the minerals available although a variety of industrial mineral deposits/resources suitable for small-scale mining are known to occur in the country (Ministry of Natural Resources and Environmental Affairs, 2004b). In view of this government is in the process of developing a geo-database to manage the national geological information. The database will be located in the Geological Surveys Department library, which will be refurbished under the MGGS Project (World Bank, 2015). Specifically, government has been analysing airborne geophysical data and printing maps related with magnetism, electromagnetism and gravity. This data will be launched end of August and made public for government and private sector ground follow-up initiatives. The process may also lead to strengthening and capacity building in sample collection and analysis. ...

3.1.2 Marketing of the Mineral Sector

Since the launch of the Mines and Minerals policy 2013, Government has been involved in promoting the mineral potential of Malawi and various workshops for small scale miners have been held in conjunction with the private sector such as FDH Bank and Nedbank.

Government's attendance of annual Mining Indaba and Annual "Down Under" events in Australia have been aimed at marketing the mineral resources potential of Malawi. These activities have been attended by the Ministry of Natural Resources, Energy and Mines and the private sector mainly comprising Mkango Resources, Paladin Africa Limited, Mota-Engil and Small Scale Gemstone Miners who participated this year's Mining Indaba 2015 in South Africa. In a related development, the government organised the 2015 Malawi Investment Forum that attracted over 400 potential investors from 31 countries (Jere, 2015). At the Forum, government hinted on the establishment of a One-Stop Service Centre at Malawi Investment and Trade Centre (MITC) which will assist investors with registration of companies, land for investment identification, employment permits and issuing of business licences. The centre will also provide information and advice to prospective investors on available investment opportunities (Jere, 2015).

One of the policy strategy is to create a department to promote investment in mining. This seems to have fallen off as the role will be played by MITC. Government is now thinking of establishing a Mining Negotiating Unit and the new Mining and Minerals Bill provides for the restructuring of the

Department of Mines to have an office of the Commissioner of Mines and Minerals where mineral rights issues and a cadastral system will be handled.

Promotion of geo-tourism has been mentioned in the policy too. This is possible in future because currently, operating mines follow strict mine security and safety measures and attending to geotourism can disrupt mine operations leading to decrease in production through loss of man-hours. Geo-tourism operates well where there are abandoned mines that can be used for historical purposes.

Tertiary learning institutions including the Malawi University of Science and Technology and the Polytechnic of Malawi have introduced Geology and Mining Courses as a way of increasing local knowledge and skills in mining. Additionally, there has been an increase in discourse on mining through daily press and public debates organised by the Civil Society (e.g. by the Catholic Commission for Justice and Peace and ActionAid).

3.1.3 Local Participation Encouragement

The government encourages local investment in its mineral resource base through joint ventures or local subsidiaries. In the past, the Mining Investment and Development Corporation was the governmental holding company responsible for promotion and development of the mining sector. This entity ceased functioning in 1997 in response to structural Adjustment Program.

Government organised the 2015 Malawi Investment Forum that which attracted over 400 potential investors from 31 countries (Jere, 2015). Such forums act as a platform for bringing together local and foreign investors to explore ways of venturing into joint businesses including mineral development. Key informants from the Ministry of Natural Resources, Energy and Mining reported that government is also holding meetings with banking institutions such as the FDH Bank, Nedbank and Standard Bank to provide business loans to prospective local business persons in the mining sector considering that mining is a capital intensive venture.

Local Malawians have limited resources to venture into mining since mining is a multi-million dollar investment and the capital risks associated with the business are high. Presently, there is no vehicle to foster economic empowerment and local participation since the Malawi Development Corporation, which was established for this specific function was abolished. It is recommended that this type of entity be re-established.

3.1.4 Infrastructure Development

The World Bank's 2009 Mineral Sector Review reported a potential output from Malawi's mineral sector of US \$250 billion annually, assuming planned investments and infrastructure development were to be undertaken. Presently, the general observation is that the available infrastructure is not conducive enough to attract mining investment considering that most of the potential mineral sites are out of reach where investors are required to find own means of access, which is often a challenge.

Notwithstanding, government has had ambitious plans to improve rail, road and water transport, energy generation and supply and telecommunication, among other investments. So far, commendable improvements have been observed in telecommunication courtesy of Malawi Telecommunications Limited and private companies mainly Airtel and Telecom Networks Malawi (TNM). With support from development partners, government is revitalising the power (hydro

electricity supply) sector by increasing the capacity and stability of the national electricity grid and bolstering the efficiency and sustainability of hydropower generation through the development of additional hydro power plants. Additional power plants will be installed in places such as Mpatamanga on Shire River, Mbongozi on Bua River, Lower Fufu, Songwe river basin, Chizuma and Chingonda (GoM, 2011). The \$350.7 million Millennium Challenge Corporation compact is a good example of Malawi's energy sector programs that responds to Malawi's vision of increasing incomes and reducing poverty by revitalizing Malawi's power sector and improving the availability, reliability and quality of the power supply (MCC, 2014). Additionally, government is in the process of negotiating power (electricity) interconnection with neighbouring countries such as Mozambique and Zambia where viable interconnection grids have been identified.

3.1.5 Research and Development

Currently, the general observation is that very little support is given to research institutions for the advancement of mineral development knowledge and skills. While geology and mining courses have been introduced, government still relies on old infrastructure available in training institutions responsible for the promotion of the sector without necessary updates to cater for current needs and challenges.

Several bilateral and multilateral initiatives have been undertaken in exploration and evaluation of known mineral resources. For example UNDP, in the 70s, supported first ever country wide geophysical exploration programme which became the basis for unveiling mineral potential of Malawi. The British Government, the German Government, the French Government and the Japanese Government, through their Geological Survey Departments, were involved in cooperative mineral exploration programs in industrial minerals and rare earths between 1980 and 2000.

3.1.6 Support to ASM

According to a report by USAID (n.d) as of 2002, approximately 40,000 Malawians, 10% of whom were women, were engaged in artisanal mining. Despite their large numbers in the sector, small scale miners in the country are poor as they experience three unsurmountable challenges: lack of initial capital for appropriate mining equipment; very little detailed information on quality and quantity of the minerals available (although a variety of mineral deposits/resources suitable for small-scale mining are known to occur in the country); and inadequate knowledge on the international quality and standards of the mineral products (Ministry of Natural Resources and Environmental Affairs, 2004b).

To address these challenges, government has taken some steps in the past. Malawian government has encouraged small-scale mining operators to be licensed in order that they may operate legally and easily access financial assistance. This has helped the government to monitor the SSM sector. It also helps government to provide the operators with proper mining techniques (Dreschler, 2002). Formalized and supported artisanal and small-scale mining (ASM) sector could alleviate significant poverty in rural Malawi since thousands of rural Malawians have already begun "branching out" into the mineral development sector (Kamlongera et. al, 2011). However, Kamlongera and Hilsona (2011) note that that the biggest barrier to supporting this movement is at the policy level, where there may be some reluctance to side-line conventional "farm first" poverty alleviation strategies in favour of what may be perceived to be more radical, untested approaches. This is particularly significant for ASM, since Malawi has never been considered to be a "mining country" or to have any meaningful mineral potential.

In terms of financing for operators, the government did try to create a revolving fund for the sector. Efforts in this direction came to nothing, however, with the principles of trade liberalization. Under a liberalized economy, the mining sector has to find funding for itself (Dreschler, 2002). As an alternative way of facilitating funding for the sector, the government encourages operators to form associations under which their operations would be streamlined. Under such associations, lime-making groups in Malawi have become quite successful (Dreschler, 2002). Despite these initiatives, there is still lack of initial capital for appropriate mining equipment and working knowledge for most small-scale mining prospectors in Malawi (Ministry of Natural Resources and Environmental Affairs, 2004b). Additionally, Artisanal and Small Scale miners face challenges to market their products as they often fail to meet international product standards and requirements.

Technically, improvement was observed in lime production and remuneration through improved processing techniques following the establishment of associations (Dreschler, 2002). Now due to lack of fuel wood and appropriate technology to use coal as fuel for lime burning, the sector has slowed down and very few lime makers have survived as individuals not cooperatives.

In gemstone mining, there have been efforts in forming associations and cooperatives. Gemstone Association of Malawi (GAM), Chichiri Mining Association and Malawi Women in Mining (MAWIMA) are in place. In terms of cooperatives, there is Mzimba Gemstone Cooperative operating under assistance from One Village One Product (OVOP) initiative.

In 2004, Malawi developed ambitious strategies for boosting small scale mining in the country as articulated in the National Sustainable Development Strategy. It gave thrust to the Departments of Mines and Geological Surveys to provide technical support on mineral exploration, extraction and value-adding to artisanal miners through district-based training programmes to address constraints such as inadequate technical support on sustainable mining and use of inappropriate equipment by small-scale miners as they rely on traditional tools such as hoes, picks and shovels thereby limiting their production output. It also hinted on improving the processing and laboratory infrastructure and pledged to curb adverse environmental and social impacts of small-scale mining operations. However, in a decade down the line, little has been achieved in that direction.

Recent efforts have seen government focus on artisanal and small scale mining. This is due to its contribution to poverty alleviation and the negative effect it has in frustrating sustainable development, for example through environmental degradation and threats to occupational health and safety.

This sector supports families and creates local employment although it faces poor market outlets and use of basic equipment and tools. Environmental issues include abandoned pits and deforestation. Lack of formalisation and short licensing periods of one year bring insecurity to financial lenders or banks. Government has lost revenue due to lack of legislative support to the sector.

Having recognised the economic potential that this sector has, government has put measures in place to bring security of tenure, devolving issuance of mineral rights to district councils and encouraging local finance institutions and cooperating partners to support ASMs. This is also embedded in the new Mines and Minerals Bill. There is now increasing intent for financial institutions such as National Bank of Malawi, FDH Bank, Standard Bank and NedBank to support the sector.

3.1.7 Summary

Mineral development requires robust data collection, information dissemination and information on availability and quality of mineral resources, and marketing. It also requires good and reliable infrastructure such roads, energy supply and telecommunication. While commendable improvements have been made and observed in telecommunication and in energy supply, a lot more needs to be done in the transportation sector. Notwithstanding, there has been increased engagement of the private sector in mineral development over the past two years. Generally the discourse on mineral development has increased with the active participation of the civil society that has engaged local communities – raising awareness on and advocating for matters relating to mineral rights and sustainable development. The participation of local Malawians in mineral development is still limited as there is no effective vehicle (implementation strategy) for their engagement and support. Most local Malawians do not have the requisite technical and financial capacity to venture into mining business, which is capital intensive and the investment risks are high. Very little support (if any) is being given to boost ASM in the country. Also, there has been little initiative and support towards mineral development research.

3.2 Investment Climate

3.2.1 Tax Regime

Most countries tax mineral enterprises somewhat differently than other industries, and tax policy makers often consider two concepts that will, in part, determine the extent to which mine taxation differs from taxes levied on other types of private enterprises. These two concepts are “uniqueness” and “ownership” (World Bank, 2008).

For Malawi, specific fiscal and investment incentives are being revised. The current incentives have been deemed to be unattractive and have been subject for negotiations leading to Development Agreements and Ministerial discretions which have been unpopular among stakeholders. However, consultations with mining companies show that the taxes imposed on mining entities are overburdening the investors.

The mineral sector has no specific sector investment incentives. This has led to use of discretion, guess work and good will in terms of grant of investment incentives. There are cases whereby application for duty exemption get acknowledged after six months of persuasion. This delays mining operations and usually force investors to look elsewhere.

Efforts are now being made to give the sector some non-discretionary fiscal incentives. For example, in 2006 government offered 30% taxable income to companies incorporated in Malawi and further offered 10% resource rent tax on profits after tax if the company’s rate of return exceeds 20 percent (Malawi Government Gazette, 23rd June 2006). It however did not specify the type rate of return e.g. on investment or equity. This year government has zero rated Value Added Tax and Customs Duty on most machinery used in manufacturing and construction (Minister of Finance, Budget Statement 2008). There is need to draw up specific guidelines and schedule of mining equipment and machinery that qualifies under this tariff exemption (Malunga, 2008).

Other mining companies operating in Malawi feel that the tax system should take into consideration the type of minerals being extracted as other minerals are not as lucrative (e.g. industrial minerals versus precious minerals and metals). Concerns have also been raised especially by cement manufacturing industries over Malawi's porous borders that allow illegal importation of products that out-compete home grown products mainly due to price charged following evasion of Value Added Tax (VAT) and other import taxes into these illegally imported products. An analysis by The World Bank (2008) argues that the mining industry is fundamentally different from most other types of business and because of its unique nature it should be accorded special, preferential treatment. Nations accord preferential treatment in many ways but most approaches derive from government recognition of the following mining industry attributes:

- a) A lengthy and costly exploration program will precede the start-up of a mine. Exploration expenses are incurred before taxable income is available and thus governments provide special provision for how pre-production (pre-income) exploration expenses are handled for future income tax purposes;
- b) Mine development is exceptionally capital intensive and an operation will initially need to import large quantities of diverse equipment from specialized suppliers. Many governments recognize the capital intensity of the industry and provide various means to accelerate recovery of capital costs once production commences;
- c) With regard to equipment import dependency, governments often provide a mechanism where equipment imported during mine construction is effectively free of duty (zero-rated or exempt). Likewise, most countries provide some or complete relief from value added tax on equipment and technical service purchases, particularly if the mine product is destined for export;
- d) Mine products are often destined for highly competitive export markets. Most governments effectively impose no export duties on minerals and provide a means whereby VAT or GST on export sales is either not applied or applied in a way that allows for a refund or tax credit;
- e) Mines produce raw materials that are prone to substantial price changes on a periodic, business cycle related basis. Provision is often provided to allow a project to carry forward losses from unprofitable years to reduce taxes in profitable years.
- f) After mining ceases and there is no income, a mine will incur significant costs relating to closure and reclamation of the site. There is a trend for governments to require a set-aside of funds for closure and reclamation in advance of closure and to provide some sort of deduction for this set-aside against current income tax liability.
- g) Many mining projects will have a long life span, and companies will attempt to minimize their tax risk exposure by stabilizing some or all of the relevant taxes for at least part of that lifespan. Governments provide tax stability through a number of different legislated and negotiated approaches.
- h) Where the level of investment is particularly large, a government may enter into a standard or negotiated agreement, including tax provisions, with the mine that has the effect of supplementing or supplanting general laws, including laws that address tax matters.
- i) In instances where negotiated or stabilized agreements are in force, income from an operation governed by an agreement may be "ring fenced" even though the general tax law does not impose ring-fencing restrictions.

Recent trends to harmonize fiscal systems across economic sectors have been the subject of debate in many countries, but almost all nations with a substantial mining sector still provide some sort of preferential tax treatment to the mining sector. While this preferential treatment tends to lower some sorts of taxes in comparison with other sectors, this is balanced by the imposition of special taxes arising from another aspect of the mineral endowment--national ownership.

In most nations, minerals belong to the state or to the people of the state as a common good. When a company extracts or sells the mineral, ownership of that mineral will transfer from the state, or its people, to the extracting company or purchaser. In most nations, a transfer of minerals from the public to the private sector is politically sensitive (World Bank, 2008). According to World Bank (2008) tax policy makers generally provide that a payment must be made for the transfer regardless of whether or not any profit is generated. The most common form of a tax that seeks to compensate for the loss of national ownership is a form of unit- or value-based royalty. The concept of a royalty type tax, a “public to private sector property transfer tax” not based on income or profit, is, generally speaking, unique to the natural resources sectors. While many nations impose a royalty “type” tax on mineral producers, the trend has been to move toward lower royalty taxes and to rely increasingly on income-based type taxes.

3.2.2 Mining Revenue Stream

In Malawi taxation revenue stream consists of Royalties (5 to 10 percent), Value Added Tax (VAT, 16.5 percent), Corporate Tax (30%), Ground Rents (up to MK10, 000 per Km²), Withholding Tax (WHT, 10 to 20 percent), Non Residence Tax (NRT, 15 percent), Pay As You Earn (PAYE; 15 to 38 percent); Dividend (10 percent) and Fringe Benefit Tax (FBT, 30 percent). The current global trend shows an increase in the overall taxation and royalties on mining companies, because governments view them as quite profitable in light of increased mineral prices. However, the extent to which royalty collection and expenditure are decentralized from the general budget varies widely as presented in Table 1:

Table 1. Examples of Decentralized Distribution of Royalties

Madagascar:	42 percent to communities of extraction, 21 percent to region; 7 percent to province
Peru:	20 percent to district of exploitation; 20 percent to province; 40 percent to other districts and provinces in the region; 20 percent to the region, including 5 percent to universities
Indonesia:	80 percent to the region (split into 64 percent to the regencies and 16 percent to the provincial government)

Source: Adapted from World Bank (2014)

Malawi’s royalties go straight to “Account Number 1” and are not distributed preferentially to districts or communities where mining activities are taking place.

Investment incentives in Malawi are predominantly fiscal: government revenue foregone through tax breaks and concessions (Nsiku, 2013), industrial rebates, special exemptions and deductions. Tax-based incentives are enshrined in the main tax legislation including the Taxation Act, the Customs and Excise Act, the Income Act and the Export Processing Zones (EPZ) Act. The Malawi Revenue Authority (MRA) is the key tax policy implementation agency.

General tax incentives granted in Malawi are:

- a) 100 per cent investment allowance, which allows capital costs to be deducted from taxable income, on qualifying expenditures for new buildings and machinery;
- b) Investment allowance of up to 40 per cent for used buildings and machinery;
- c) 50 per cent investment allowance for qualifying training costs;
- d) 100 per cent investment allowance for manufacturing companies, allowing a deduction of all operating expenses, during the initial 25 months of operations;
- e) Loss carry forward of up to seven years, enabling companies to take advantage of allowances; and
- f) Additional 15 per cent investment allowance for investments in designated areas of the country, such as industrial sites.

Firms that invest in machinery, plant and equipment enjoy waivers on customs duty, excise and VAT. However, this incentive has lately not been applicable leaving room for discretionary incentives often out of negotiations between government and the investor (Nsiku, 2013).

In terms of revenue, the general concern is that government does not want to disclose the concessions agreed with the investors to the public so as to prevent other investors to take it as a reference point for future deals. On the same people think that officials have pocketed money but the real sense is that the government is trying to protect the future investment. In other countries, governments are seeking greater transparency through affiliation with the Extractive Industries Transparency Initiative (EITI) so as to strengthen revenue management in line with international good practices and to further strengthen sector governance (World Bank, 2013)

3.2.3 Summary

Mining operations require good and stable investment climate (investment incentives) including strong accountability systems, and economic and political stability. This in turn is beneficial for business, since investments are capital intensive and dependent on long-term stability to generate returns. In the same vein, most countries provide some preferential tax treatment to the mining sector because of its uniqueness including high investment, slow returns and high risk. At the same time, the state and its people need a clear and transparent system for granting of mineral rights and sharing of benefits from investments. However, the investment incentives in Malawi are deemed to be unattractive and have been subject for negotiations leading to Development Agreements and Ministerial discretions which have been unpopular among stakeholders. This, in part, has been the case because Malawi has no regulatory law for prescribing (including disclosure of) the yield from certain taxes such as fines imposed on offenders, property taxes levied on the mining companies, and licences issued to mining cooperatives.

While other countries are decentralising royalty collection and expenditure, Malawi has neither decentralised mining operations nor developed clear and transparent schemes for sharing of mining-related revenue with districts or mining communities.

3.3 Governance

3.3.1 Policy Development and Review

It is generally accepted that the mining industry is complex and has to be developed within a comprehensive and well-articulated framework of mineral policy (Otto, 1997). Over the past three decades both developed and developing nations have been working on new or major revisions to legislation pertinent to the mining industry. It was during this time that Malawi also developed its mining regulations including the Mines and Minerals Act, 1981 (currently under review), the 1981 Mines and Minerals Regulations, and the Petroleum (Exploration and Production) Act, 1983. Other legislation in the environment and natural resources management sector including the Environmental Management Act, 1996, the Forestry Act, 1997 and the National Parks and Wildlife Act, 2004 were also developed over this period. However, the general observation is that most of the legislations in the natural resources sector are outdated and are undergoing a sluggish review process (Otto, 1997). For Malawi, the general observation is that most statutes developed before 1996 are sector specific and do not adequately address the holistic principles of sustainable development as propagated since 1992. Relevant policies, statutes and provisions that guide mineral development are briefly discussed hereafter.

3.3.1.1 Mines and Minerals Policy (2013); and Mines and Minerals Act, 1981 and Petroleum (Production and Exploration Act, 1983)

Exploration and exploitation of the mineral resources in Malawi are governed by the Mines and Minerals Policy (2013), the Mines and Minerals Act, 1981 and the Petroleum (Exploration and Production) Act, 1983. The Mines and Minerals Act, 1981 makes provision with respect to searching for and mining minerals, to repeal the mining Act and certain other Acts and to provide for matters related to mining in the country. The Petroleum (Exploration and Production Act) makes similar provisions with the Mines and Minerals Act save that it makes provision with respect to searching for and producing petroleum and to addressing matters thereto. These legislations vest all mineral rights in the President on behalf of the people of Malawi. Under the current mining law, mineral licenses may be awarded under three categories:

- a Reconnaissance License is issued for one year for an agreed program over an area not exceeding 100,000 square kilometres;
- (b) an Exclusive Prospecting License (EPL) confers exclusive rights to carry out prospecting operations for specified minerals over a specified area; and
- (c) a Mining License may be issued to holders of an EPL or non-holders

The Mining Licence grants the exclusive right to prospect, mine, produce and sell specific mineral resources from the designated area. The Act does not give legal mandate to the establishment of the Office of the Commissioner for Mines and Minerals. As such, its administrative arrangement and its decision can be legally questioned.

The other shortfall with the Act of 1981 are that it does not give powers outside the executive to be involved in negotiating mining deals; this is because the act vests the mineral resources in the President (CEPA). In most nations, minerals belong to the state or to the people of the state as a common good (World Bank (2008). Additionally, the Act is outdated, not aligned with its corresponding policy and does not comprehensively cover issues of sustainable development in all spheres of social and economic development and environmental sustainability. Additionally, it does not prescribe operational requirements including timeframes on decision-making for specific transactions by the administrators of the Policy. In other countries such as Ghana, the mining law stipulates definite periods within which the Minerals Commission and the Minister responsible for Mines must act in the grant or otherwise of applications in respect of mineral rights (Government of Ghana, 2010). Additionally, the Minister is required to give written reasons for not acting within the stipulated period. Similarly, the Minister's discretion is limited under the law. Minister is required to provide written reasons for refusing applications. Dispute resolution mechanisms are also provided by the law to applicants or holders in respect of any dispute that arises under the law.

3.3.1.2 National Environmental Policy (2004) and Environmental Management Act, 1996

The National Environmental Policy (NEP) is the framework policy mean to guide and coordinate cross-sectoral environmental management in the country. Its aspirations are articulated and enforced through the Environmental Management Act, 1996. The Policy and Act make provision for the need to ensure that development of the country's mineral resources takes place within a framework of sustainable utilization of natural resources and management of the environment whilst contributing to the country's aspirations of economic growth and poverty reduction (Ministry of Natural Resources and Environmental Affairs, 2004a). The NEP calls for review of the Mines and Minerals Act, 1983 and implementation of environmentally sustainable mining operations including the adoption of the polluter pays and the precautionary principles in the design, implementation and monitoring of mining projects. It also calls for environmental protection measures including safe waste disposal, safe and healthy operating environment and use of environmentally friendly and energy saving mining technologies.

These principles are enforced through the Environmental Management Act, 1996 which makes Environmental Impact Assessment mandatory before subsequent approvals for proceeding with implementation of mining operations as mining operations are likely to have significant impacts on the environment as illustrated under List A of the *Guide to Environmental Impact Assessment in Malawi* of 1997. Based on these guidelines, EIA is mandatory to all mining of minerals, expansions to mines, mining exploration activity, minerals prospecting activity, quarries, gravel pits and removal of sand or gravel from shore lines unless otherwise exempted by the DEA [in liaison with the director responsible for mines and minerals] as provided for under subsection 26 (3) of the Environment Management Act, 1996. EIA is also mandatory for explosives manufacturing and extraction of top soil or the expansion of such an operation, when the operation or the expansion is greater than 0.5 ha or when the depth of a pit to burn bricks from the top soil is deeper than 3 m. Additionally, the following mining or mining related activities may be subjected to EIA depending on the size and location of the proposed development: mineral prospecting, mineral mining, ore processing and concentrating, quarrying and brick-making (Environmental Affairs Department, 1997).

Despite these legal provisions, enforcement of sustainable environmental management practices in the mining industry has often been challenging in Malawi as illustrated in section 3.4.

3.3.1.3 Forest Policy, 1996 and Forestry Act, 1997

The Forestry Policy and Act seems to be subservient to other legislations, including the legislation relating to mining, under which certain activities that adversely affect forests and growing trees can be undertaken. This implies that trees can be cut down, without consultation with Forestry Department, in order to give way to mining operations although it has been argued that such operations are done in consultation with the Director of Forestry.

It is against this backdrop that efforts are underway to update the Forestry Act in order to define to more adequately the legal framework for the sustained utilization of customary land forest resources with particular emphasis on the formation and operation, of Village Natural Resources Committees, and to allow usufruct of trees by rightful customary land, and ensuring that the Act makes adequate provision for the conservation and management of forests and trees on private land and supervisory powers by the Forestry Department for the conservation and management of forests and trees on private land. In this regard, the Forestry Department seeks to harmonise the Forestry Act with the Mines and Minerals Act and other forestry-related acts such as the Land Act, Registered Land Act, Customary Land (Development) Act, Water Resources Boards Act, Land Acquisition Act, Deeds Registration Act Water Resources Act and related legislation, Electricity Act, Railways Act Public Roads Act Telegraphs Act, Fisheries Act, National Parks Act, Town and Country Planning Act, any other legislation that has a bearing on forests and trees (GoM, 1996).

The Forestry Act provides a statement restricting mining activities. Section 46 of the Act states, “Unless under a licence, no person shall prospect for and extract minerals in a forest reserve and protected forest area” (GoM, 1997). On the other hand, Section 83 of the Mines and Minerals Act, 1981 proscribes the undertaking of mining operations in protected areas including forest and parks and wildlife reserves (GoM, 1981). However, there has been exploration of minerals recently in forest reserves through sectoral agreements between the Commissioner for Mines and Minerals and the Director of Forestry, which is the authorising institution for mining operations in forest reserves. For example, Zimkore Mining Group is mining gemstones at Puye and Kacheure within Perekezi Forest Reserve in Mzimba. Mining operations are also being undertaken in Matandwe Forest Reserve in Nsanje but most such operations are being undertaken in the northern region of the country. It is conceded, however, that with or without a license, monitoring of operations has always been a challenge in mining operations often resulting in environmentally destructive practices. Forest Reserve in Nsanje, but mostly up north. The variations in granting of powers for specific operations across legislation is a manifestation of irregularities requiring harmonisation.

3.3.1.4 Wildlife Policy (2000) and National Parks and Wildlife Act, 2004

The goal of the national wildlife policy is to ensure proper conservation and management of the wildlife resources in order to provide for sustainable utilisation and equitable access to the resources and fair sharing of the benefits from the resources for both present and future generations of Malawians (Ministry of Tourism and National Parks, 2000). It strongly objects to prospecting and mining activities in national parks and wildlife reserves describing such practices as incompatible with the management of national parks and wildlife reserves. Hence, the right to prospect or mine within these areas shall only be granted in very exceptional cases based on advice from the Wildlife Research and Management Board and subject to the approval of the Minister. In considering such projects, it shall be required that satisfactory evidence is made available to support that such an activity is in the national interest, economically justifiable and takes into consideration all environmental costs. Effectively, Section 35 of the National Parks and Wildlife Act, 2004 prohibits

the prospecting for minerals or mining in a National Park or Wildlife Reserve unless authorised by the Director of National Parks and Wildlife (GoM, 2004).

3.3.1.5 National Strategy for Sustainable Development (2004)

The NSSD (2004) makes provision for ensuring that mining and geological activities are undertaken in a sustainable manner (Ministry of Natural Resources and Environmental Affairs, 2004b). Key recommendations for the mining sector include:

- a) Assess the global mining and minerals sector in terms of the transition to sustainable development.
- b) Establish the services provided by the minerals system can be delivered in accordance with future sustainable development.
- c) Propose key elements for improving the minerals system as regards economic, social and environmental spheres.
- d) Build platforms of analysis and engagement for ongoing cooperation and networking among all stakeholders.
- e) Enhance the participation of stakeholders, including local and indigenous communities and women, to play an active role in minerals, metals and mining development throughout the life cycles of mining operations, including after closure.

3.3.1.6 National Water Policy (2005) and Water Resources Act 2013;

The National Water Policy (2005) says: Although the country is endowed with relatively vast amount of water resources, it is currently encountering a number of growing competing demands and challenges. Some of these demands and challenges include the following: high population growth resulting in increase for demand for water for domestic, industrial and municipal uses, agriculture/irrigation, tourism, mining, manufacturing, water transport/navigation, energy/hydropower, and ecological sustenance (Ministry of Irrigation and Water Development, 2005). It specifically acknowledges that surface and ground water quality has been negatively affected by environmental degradation, agriculture (land husbandry practices and agro-chemicals), industrial and mining practices and poor sanitation services (Ministry of Irrigation and Water Development, 2005).

3.3.1.7 Land Policy (2002) and Land Act 1965 (Amended)

All customary land in Malawi is legal property of the people of Malawi and is vested in perpetuity in the President. The Land Act, 1965 (and Land Amendment Act, 2004) delegates such powers to the Minister responsible for lands to administer and control all customary land and all minerals in, under or upon any customary land, for the use or common benefit of the inhabitants of Malawi.

The Land Policy (2002) acknowledges that frequently, licenses or rights and claims such as mining rights, water rights, hunting rights/leases and timber harvesting licenses which usually co-exist with other land use rights are issued without coordination with public authorities and or land owners. For example, the government's right to mining, even on private land, have caused serious land use conflicts (GoM, 2002). Section 120 of the Mines and Minerals Act stipulates that "Where the President consider that any land is required to secure the development or utilization of the mineral resources of Malawi he may direct the land be compulsorily acquired under the Lands Acquisition Act". A report by CCJP (2014) on land displacement, involuntary resettlement and compensation practice in the mining Sector has revealed significant gaps in the Malawian governance framework including government's absolute control over land rights; lack of clear and transparent procedures

for acquisition of land and associated assets; weak and or absence of liability clauses for investors and mining companies; lack of resettlement regulations for extractive industries and insufficient monitoring and compliance requirements for displacement, resettlement and compensation of affected persons.

3.3.1.8 Mine Safety Enforcement Provisions

Mine safety regulations revised have been inserted at the end of the current Mines and Minerals Act but are not sufficient enough in the absence of other Acts such as the Occupational Health and Safety Act and Explosives Act. In the present state, there is no specific regulations on occupational health and safety regulations for mining. The same regulations used in the manufacturing industries are the ones that are used in mining. These cover protective clothing, clear signage and proper disposal of industrial effluent. Worth noting also is that ASM operators often operate illegally and receive little supervision or support from the local or central government authorities. ASM cause significant damage to public health and the environment by destroying the landscape and spreading pollutants (GoM, 2011).

3.3.1.9 ASM Policy

Estimates show that Malawi has about 20 000 Artisanal and Small-scale Miners although it is generally difficult to get the actual numbers since most of these operate unregulated in remote areas and are scattered country wide (Manda, 2010). Their actual production statistics also remain uncertain. Currently, Malawi has no Artisanal and Small-scale Mining policy. However, pilot programs to improve productivity and organization in artisanal mining communities have started under the MGGSP. Specifically, efforts are being made to improve the administration of small scale mining through formalising them and supporting them financially and technologically so that they are sustainable. Efforts are also underway to develop a policy for the ASM policy for which a draft has been produced and initial consultations have been held with various stakeholders including ASMs, government institutions and local investors with support from development partners under the MGGSP.

3.3.2 Institutional Capacity Development

Positive impacts in the mining sector occur through institutions that are effective, accountable, and transparent. When there are questions about the effectiveness or accountability of institutions, perceptions of injustice arise that can erode support for the best initiatives. When institutions are not effective or accountable, the benefits of mining do not result in development and can instead create a great deal of social problems, including inequality, social tensions, alienation of some people from land and property, a reduced legitimacy of government, and negative environmental impacts (World Bank, 2013).

The general observation for Malawi is that the institutions responsible for mineral development experience a multitude of administrative and technical challenges including limited infrastructure, human and financial resources. Most mining operations are still centralised as there are no district-based personnel responsible for mainstream mining operations. Additionally, government does not adequately engage district-based technical personnel on matters relating to mining operations taking place in their districts.

To address shortfalls in human resources, Government has recruited technical personnel in the Ministry of Mines that are being trained in Australia, United Kingdom, Botswana, South Africa, and

Middle East. Increasing institutional capacity by increasing the scope of activities of the officers responsible for recording mining statistics, and providing effective, adapted computer software at their disposal and at the disposal of the private sector, would enable a better assessment of the levels of production, the flow of moneys and the levels of taxes (World Bank, 2008).

3.3.3 Relevant Institutions (Roles and Responsibilities)

3.3.3.1 *Ministry of Natural Resources Energy and Mining*

Mineral resources in Malawi are vested in the President on behalf of the people of Malawi. In most nations, minerals belong to the state or to the people of the state as a common good. When a company extracts or sells the mineral, ownership of that mineral will transfer from the state, or its people, to the extracting company or purchaser (World Bank, 2008). Mining operations are administered by the Ministry of Natural Resources Energy and Mining, which is authorized to negotiate incentives and benefits with investors. The Government has created a Mineral Licensing Committee, which includes professionals in mining, geology, environmental issues, physical planning, and police and customs departments. The committee is responsible for reviewing applications for mineral rights and mining concessions and recommending to the mining minister for approval. However, this system is paper-based and has been found to be too slow as in some cases, prospective miners are kept waiting for up to eleven months to get a one year licence, which leaves them with only one month of operation (Etter, 2015). Through the MGGSP, the Ministry of Mines has received technical advice from the international consultant on options for implementing the updated Mining Cadastre (World Bank, 2015).

3.3.3.2 *Departments of Mines and Geological Surveys*

The Department of Mines aims at promoting small-scale mining, providing technical and financial support to encourage the development of the mining sector. The Department of Geological Surveys provides a number of core services including geological mapping, mineral exploration and mineral evaluation (Ministry of Natural Resources and Environmental Affairs, 2004b).

The main thrust of the Departments of Mines and Geological Surveys is through the provision of technical support on mineral exploration, extraction and value-adding. This is done through district-based training programmes to address constraints such as inadequate technical support on sustainable mining and use of inappropriate equipment by small-scale miners as they rely on traditional tools such as hoes, picks and shovels thereby limiting their production output. The processing and laboratory infrastructure will be improved to provide the support. The negative environmental and social impacts of small-scale mining as well as adverse impacts on human health should be avoided or reduced (Ministry of Natural Resources and Environmental Affairs, 2004b).

3.3.3.3 *Department of Environmental Affairs*

The Department of Environmental Affairs is responsible for overall coordination of policy implementation for policies relating to the protection and management of the environment and the conservation and sustainable utilization of natural resources. With regard to mining policy implementation, the DEA has the following responsibilities:

- a) Receive project briefs on all mining operations, cause the undertaking of EIA, where required, facilitate review of EIA reports and approval (of projects), certification (of approval) for all projects for which EIA is mandatory,

- b) In consultation with relevant agencies, carry out or cause to be carried out environmental audits
- c) and audits in line with applicable legislation and guidelines, publicise EIA reports for public scrutiny,
- d) Monitoring of projects considered likely to have significant impacts on the environment
- e) The Director shall have power to issue environmental protection orders against any Person whose acts or omissions have or are likely to have adverse effects on the protection and management of the environment and the conservation and sustainable utilization of natural resources, and the environmental protection orders shall be in the prescribed form and, if no such form is prescribed, in such form as the Director may determine (section 33)
- f) Inspect premises for purposes of determining whether an activity harmful to the environment or the conservation of natural resources is being undertaken or whether to make an environmental protection order

The DEA receives technical advice from the Technical Committee on Environment (TCE). The TCE members are appointed by the Minister responsible for environment and natural resources management on the recommendation of the council and serves in personal capacity. Among other responsibilities, the TCE recommends to the Council the criteria, standards and guidelines for environmental control and regulation, including the form and content of environmental impact assessments.

The National Council for the Environment (NCE) consisting of Principal Secretaries, General Managers, representatives from the academia and NGOs dealing in matters relating environmental protection and natural resources management is responsible for advising the Minister on all matters and issues affecting the protection and management of the environment and the conservation and sustainable utilization of natural resources including recommendations on the necessary measures for the integration of environmental considerations in all aspects of economics planning and development and harmonization of activities, plans and policies of lead agencies and non-governmental Organizations concerned with the protection and management of the environment and the conservation and sustainable utilization of natural resources (GoM, 1996).

3.3.3.4 Local Level Institutions

While most mining activities take place within districts, thus, within the jurisdiction of district councils, the Mines and Minerals Policy (2013), associated legislation (Mines and Minerals Act, 1981) and institutional arrangement pays little attention to the engagement of district councils in mineral development. Generally, there has been engaged limited engagement of local level governance institutions such as District Councils by the Mines Department and Mining Companies (engagement only done at initial states but thereafter, the Councils are cut-out in the communication. In most cases, some companies have opted to deal with individual officers (e.g. those responsible for lands and environmental affairs. The major challenge is that councils are not being furnished with comprehensive progress reports and feedback on mining operations in their respective districts.

According to World Bank (2013) governments should aim to ensure that the mining sector contributes to local development planning more broadly. Local development planning should happen at the local government level, where local officials can gather the priorities of citizens, receive budgets from the government, and decide how best to use their resources, including those coming from mining activities, to benefit mining communities. Mining companies can choose to

support these local development plans in ways that can improve their relationships with local governments and communities. This kind of activity goes far beyond CSR, focusing on the longer-term needs of a community and how best to fund community development.

Notwithstanding, no amount of local governance is sufficient if not accompanied by legal and fiscal frameworks designed to meet development objectives and which are implemented in the context of good international policies and rules (Campbell, 2003).

2.3.4 Civil Society Organisations

There has been an increase in the presence of CSOs in the mining sector. They have been key in instilling a culture of openness in mining operations. The mining sector in particular has been under a lot of scrutiny and pressure from non-governmental organizations and civil society. With the historic and present-day lack of transparency, inadequate information sharing, there are growing concerns that for any future development in mining, the associated environmental and social impacts may not be properly assessed or evaluated (World Bank, 2013). The participation of a broad base of constituencies in the oversight of mining revenue management strengthens its implementation and enforcement. Equally important is transparency regarding the sources, amounts, and use of mineral funds and with respect to the contracting processes. Without this, government officials, oversight committees, and the public will simply not have the basic information necessary to ensure responsible use of state resources (Bell & Maurea, 2007). According to Bell and Maurea (2007), transparency can help make up for the deficits of weak institutions, as civil society, the press, and responsible elements of government can use such information to demand accountability and to press for reform.

In Malawi, there has been an unprecedented increase in the number of foreign companies searching for investment opportunities in the mining sector. However, in a country where mining sector regulations are woefully inadequate but where the government seems determined to attract overseas investors, it is important to adopt approaches which ensure that the benefits of mining are maximized and that its adverse community-level impacts are minimized. Given the inadequacies of mining regulations, greater participation from civil society actors and the communities themselves in decisions pertaining to mine development is a key to effective community development in emerging mineral economies such as Malawi (Kamlongera, *The mining boom in Malawi: implications for community development*, 2013). In this regard, civil society has proved to be an active force in enforcing obligations for environmental impact assessments and plans to rehabilitate mining sites (USAID, n.d).

2.3.5 Governance Challenges

Malawi is experiencing governance challenges especially within the environment and social sectors and this is not particular to Malawi. The populations of countries that possess significant natural resources often suffer when these resources are extracted and exported. The key challenges that Malawi needs to address before scaling up development of mines concern sector governance with regard to environmental and social impacts, with a focus on strategic planning of the sector with sustainability concerns in this process, as well as reforming the legal oversight practice, transparency, and enforcement mechanisms to ensure all mining operators conduct their operations in line with the best globally available mining practices.

However, the recent history of Peru poses major questions about the effectiveness of this new policy agenda. The government has adopted both conservative fiscal policies and the new policy agenda. Over the last five years the mineral price boom has increased mining revenues markedly, but it has had little impact on poverty. More important, local level conflicts around mining operations have increased, and appear to threaten political instability even more. The problem is that, in a context of weak central state and even weaker local governments, the 'new natural resource policy agenda' has partially re-located the resource curse to sub-national levels. Local governments, mining companies and a variety of activist movements are locked into complex relationships that are not easy to negotiate and into conflicts that are not easily resolved. Like its predecessors, this very contemporary manifestation of the resource curse results in poor quality public expenditure and the waste of much of the new resource revenue (Arellano-Yanguas, 2008).

2.3.6 Opportunities

The mining sector in Malawi is receiving technical and financial boost from international organisations including EU and the World Bank. The World Bank's US \$12.5 million Mining Growth and Governance Support Project (MGGSP) has been under implementation since August, 2012 with the objective to improve the efficiency, transparency and sustainability of mining sector management (World Bank, 2015). The project is providing technical assistance to the GoM in:

- a) finalizing and implementing a new mining policy and law;
- b) developing regulations to give effect to the new mining law;
- c) conducting a Strategic Environmental and Social Sector Assessment to identify and design appropriate environmental, social and resettlement policies and measures for mining and associated infrastructure-development (including regional and community development planning and agreements); and
- d) developing a framework for public-private partnerships.

The project is offering a policy framework for mineral revenue-generation and management, and provides training and equipment to the Ministry of Mines to develop a modern mining cadastre system, conduct field work, review and monitor contractual obligations, develop a social and environmental data registry, and acquire geological data. The project includes programs for the development of civil society organizations and local communities' capacity to engage in environmental and social management and stakeholder dialogue on mining sector development issues (World Bank 2015).

3.3.4 Summary

The mining sector is complex and requires comprehensive and well-articulated institutional framework (including legal framework and institutional arrangements). Exploration and exploitation of the mineral resources in Malawi are governed by the Mines and Minerals Policy (2013), the Mines and Minerals Act, 1981 and several other pieces of legislation that have not been harmonised, which may create irregularities in the administration of specific legal provisions. However, the mining law is outdated and does not effectively address emerging issues in the sector including matters relating to sustainable development, taxation, social responsibility, transparency and accountability and capacity building for Artisanal and Small-scale Miners.

Institutions responsible for mining related issues face numerous administrative and operational challenges, which adversely affect governance within the mining sector. Specifically, most

government departments responsible for mining-related operations have limited human, material and financial resources. Such institutional challenges also affect the implementation of other policy related issues such as generation and dissemination of relevant data and information and monitoring of miners' compliance with relevant legal provisions. Despite this, Civil Society Organisations have played an active role in instilling a culture of openness in mining operations. However, in some cases the CSOs have done their work with little knowledge and research of the critical issues thereby creating unnecessary conflicts in the sector. Evidently, there has been positive support from development partners to strengthen the entire institutional framework for mining in Malawi, and to improve the participation of concerned and affected parties for sustainability of mining operations in the country.

3.4 Environmental Management

Environmental Sustainability, which is one of the three cornerstones of sustainable development is one of the most critical and contentious areas in the mining sector. Agenda 21 specifically calls for protection of forests, and marine environments from the devastating effects of mining. It calls for exploration of environmentally sound mining as an alternative livelihood (UNSD, 1992). According to World Bank (2014), environmental management in the mining Sector should achieve four objectives:

- a) Promote responsible stewardship of natural resources and the environment, including remediation of past damage;
- b) Minimize waste and environmental damage throughout the whole supply chain;
- c) Exercise prudence where impacts are unknown or uncertain; and
- d) Operate within ecological limits and protect critical natural capital.

Generally, environmental and social concerns are everywhere. A study of mining operations in Armenia shows that mismanagement or lack of consideration of social and environmental concerns can lead to limited benefits and large costs, including costs of long-term environmental degradation, inequality in benefit distribution, and poor governance. Many citizens and civil society organizations as well as some government institutions have in fact already expressed concerns about lack of attention to social and environmental concerns in Armenia (World Bank, 2013). The major challenge is that although legal and practical provisions are in place for environmental management, these are only related to some companies and partial areas of impact from the mining industries.

Studies have shown that the environmental deterioration caused by mining occurs mainly as a result of inappropriate and wasteful working practices and rehabilitation measures (Kitula, 2006). The National Land Policy identifies the significant environmental consequences of unregulated mining operations, and calls for enforcement of requirements for environmental impact assessments, conservation method (including the establishment of funds to compensate those adversely affected by mining activities), and requirements that mining and quarrying operators pay the cost of reclaiming land (GoM, 2002). Specifically, the Land Policy acknowledges that quarrying and mining operations in many instances result into environmental pollution or land degradation. "For example, sand quarries increase soil erosion in riverbanks and valleys. Stone quarries lead to noise and dust pollution from stone and may result in earth movements. Small-scale brick making operations create open pits and breeding grounds for mosquitoes and relies on fuel wood for curing. Mining of gemstone and precious stones of any kind are prohibited, except under license by the government.

However, unregulated mines can be found throughout the countryside, leaving dangerous gullies and open pits everywhere” (GoM, 2002).

The Land Policy makes the following recommendations for the mining sector:

- (a) A mining operator will not be granted a mining right or claim without an environmental impact assessment to verify the impact of the activity on the physical environment and health of the surroundings communities.
- (b) Mining rights will include conditions for practicing conservation methods including setting aside funds for compensation to those adversely affected by the activity.
- (c) Mining and quarrying operators will be required to meet the costs of reclaiming land.

The mining sector is abiding by point (a) and (b). Point C has proved difficult to abide by as most quarries belong to government and continue to be used.

3.4.1 Enforcement of Sustainable Mining Practices

Policy guidance for enforcement of environmental management practices in the mining sector is provided by the National Environmental Policy (2004), whereas regulation is done through the Environment Management Act, 1996. In addition, various tools are used to identify impacts and develop remedial measures. These include Strategic Environmental and Social Assessment for Mining Sector, Environmental Impact Assessment Guidelines, Sector-specific Environmental Impact Assessment Guidelines for mining and Environmental Enforcement Manual. The Department of Environmental Affairs (EAD) works hand in hand with the Department of Mines through the Technical Committee on Environment (TCE) to review EIA and environmental audit reports on mining. In addition, the EAD is a member of the Mining Licensing Committee that reviews applications for mineral rights and mining concessions (section 2.3).

Any proposals for the prospecting of minerals are accompanied by a statement of intent to undertake environmental mitigation during prospecting. A full EIA is required with approval from EAD before a mining licence is issued.

Strategic environmental management is key to sustaining mining operations: Sustainability of the mining sector (thus, for the mining sector to have positive, long-term impacts in Armenia, it is necessary to take into consideration the short- and long-term environmental and social impacts of the sector and to promote strategic planning and efficient management of natural resources (World Bank, 2013). Sustainable development in the corporate mining context entails improved planning, implementation of sound environmental management tools and cleaner technologies, extended social responsibility to stakeholder groups, the formation of sustainability partnerships, and improved training, which can improve performance in both the environmental and socioeconomic arenas, and thus contribute enormously to sustainable development at the mine level (Hilson & Murck, 2000).

3.4.2 Compliance with Mining Law on Environmental Management

Compliance of mining companies with the prevailing environmental law varies from one mine to another but the general observation is that compliance is better in large companies than in small companies, and worse among artisanal miners. Consultations with government show that so far, PAL Kayelekera, which is the only large-scale mine in the country, has demonstrated acceptable levels of

compliance with environmental law and applicable standards due, in part, to the fact that its operations commenced at a time when most of the legal requirements were in place except for Atomic Energy Act and that government has closely monitored its operations through the Departments responsible for water development and environmental affairs. Additionally, the civil society has kept a watchful eye on the company's operations in support of anti-nuclear developments in accordance with the requirements of the International Atomic Energy Agency. This has made it easy for government to ensure that the critical legal requirements pertaining to environmental management are adhered to before operations. In pursuit of best practice, PAL Kayelekera mine has introduced an environmental bond, which implies that it is legally committed to undertake full range of its activities in an environmentally sound and sustainable manner. However, most of the small scale mines started without an EIA hence it was not easy to ensure compliance.

Previous studies (Dreschler, 2002) and experience have shown that small-scale mining operations have been detrimental to the environment. According to Dreschler (2002), a major negative aspect about SSM operations in Malawi has been the damage the operations have caused to the environment. Following the abandonment of vertical shaft kilns for lime-making, allegedly because of their high capital cost, operators opted for using firewood. As a result there has been extensive deforestation and land degradation in almost all lime-making areas in Malawi (Dreschler, 2002). The most contentious environmental management issues are Solid waste management, wastewater management, establishment of internal monitoring systems, conduction of environmental audits and Stakeholder engagement.

Adopting the values of sustainable development implies an increase in the mining industry's environmental and social costs and for an industry already offering poor returns on capital this is potentially a problem (Humphreys, 2001). According to Humphreys (2001) an examination of the historical record, however, reveals that past increases in environmental and social costs have been more than offset by developments in industry productivity. He observes that the emergence of information and communication technologies seems likely to extend this trend into the future.

To address compliance challenges, other countries such as Armenia have introduced mining codes that contain specific provisions that would guarantee sustainable development. For example, it strictly prohibits mining activities unless a positive conclusion of the state expertise on environmental, geological, and technological safety is issued (World Bank, 2013). According to World Bank (2013), the code ensures that the environmental management plan, a mine closure program, and a social program with a timetable of implementation and specific measures are all part of the contract with the extractive company and that the initial environmental assessment and environmental programs are part of the exploration program and contracts with exploration companies (World Bank, 2013).

Although mining licences are issued after compliance and certification from Environmental Affairs there seem to be a challenge in enforcing environmental management programs and audits to all mining companies due to lack of human and financial resources by government agencies related with environment, occupation safety and health issues. There is need to speed up legislation of a new Environmental Management Act that calls the establishment of an environmental protection agency, which would be an independent entity capable of monitoring operations and enforcing legislation in mineral resource development better than is currently the case.

3.4.3 Summary

Mineral development activities have both positive and negative environmental, economic and social impacts on communities. They can provide employment and business opportunities to local communities and may provide the opportunity to remediate legacy sites. However, improperly managed activities can adversely impact the environment, affect the local population, and, in the worst cases, result in severe or catastrophic social and/or environmental impacts as evidenced by many legacy sites still awaiting remediation (IAEA, 2010).

Best practice, as a minimum, must be grounded on a set of clearly defined, rigorous and monitorable environmental principles and standards with which industry must comply, and it is the role of government to set those standards and monitor performance against them. Self-regulation and beyond-compliance initiatives by industry will in themselves not guarantee best practice environmental protection if the regulatory base is weak (Environment Australia, 2002).

In Malawi, the major challenges affecting integration of environmental management in mining operations are weak regulatory framework (inadequate legal requirements in the policy including matters relating to decommissioning (closure and reclamation)) and low technical capacity. In its present state, the law is silent on this and investors are most likely to leave the site without rehabilitation as there is no more income coming from the site while the decommissioning itself will incur significant costs. Inadequacies associated with low technical capacity include failure to effectively manage the EIA processes including validation of EIA findings and monitoring implementation of the Environmental Management Plan (EMP) until closure and rehabilitation. For example, mine closure certificate has not yet been issued for Chungalume (Lafarge) Limestone Quarry and Clinker Factory that ceased operations in 2003.

3.5 Social issues

3.5.1 Key Social Issues in Mining Sector

In Malawi, low participation of indigenous populations, male domination and child labour are identified as the three critical issues affecting mining operations (Ministry of Mining, 2013). Evidently, several authors and stakeholders have raised similar and other potentially-adverse impacts of mining, which include displacement of local people from ancestral lands, marginalization, and oppression of people belonging to lower economic classes (Kitula, 2006; CCJP, 2014). The bulk of land related social issues in Malawi has been discussed under section 3.3. The extent to which women are positively or negatively impacted by artisanal mining largely depends on issues of equity. As inequities are challenged, gender roles will inevitably evolve, and artisanal mining will be better equipped to support sustainability in the communities where it takes place. As such, any work undertaken in artisanal mining must adopt a community-centric approach and women have a demonstrated capacity to drive positive change (Hinton, Veiga, & Beinhoff, 2003).

Significant barriers exist that prevent women from fully benefiting from the mining sector. In order to respond to inequities in political power, access to resources (capital, information, education and training, etc.), mobility and basic human rights, combined with the presence of legal, socio-cultural, and financial constraints, the following are recommended (Hinton, Veiga, & Beinhoff, 2003):

- a) Commitment to gender mainstreaming in government agencies, and appropriate recognition of women in policy frameworks, particularly in relation to mining issues.

- b) Formal incorporation of gender issues, and the adoption of holistic approaches to artisanal mining communities through technical assistance and community development programmes.
- c) Promotion of micro-credit and other programmes that provide financing for women to be engaged in local content issues.
- d) Execution of educational campaigns that target women in order to mitigate specific health risks, and which provide the means for them to access other resources;
- e) Implementation of programs to train women in various aspects of mining, as well as in marketing, management and bookkeeping.
- f) In-depth research on women's involvement in artisanal mining communities, and the differential impact of current practices and technical change on the lives of both women and men.

3.5.2 Corporate Social Responsibility (CSR)

There is often confusion about activities that contribute to local development and activities that companies carry out as part of their corporate social responsibility, (CSR). CSR can be defined as “[initiatives] to assess and take responsibility for the company's effects on the environment and impact on social welfare. The term generally applies to company efforts that go beyond what may be required by regulators or environmental protection groups” (Investopedia). Although some CSR can fit in with local development, CSR is by definition, company led. In many cases companies themselves decide what activities to support, often without coordinating with local government and without gathering information on local priorities and plans. Companies may also take into account how certain activities will impact their reputation and local community support, and not only whether an activity will have the best impact on a community (World Bank, 2013).

Neither the Mines and Minerals Policy nor the Mines and Minerals Act has provisions to facilitate corporate social responsibility nor the need for a mining company to care for the social welfare of surrounding communities. However, it is argued that sustainable development in the corporate mining context includes extended social responsibility to stakeholder groups, the formation of sustainability partnerships, and improved training, which can improve performance in both the environmental and socioeconomic arenas, and thus contribute enormously to sustainable development at the mine level (Hilson & Murck, 2000). Over the years, companies' social and environmental responsibilities have increased, due in part to global changes in the way the role of business is perceived, policy developments, as well as a strong 'business case' for companies to actively support sustainable development - beyond philanthropy and impact mitigation (Hilson & Murck, 2000; Burke, 2010). Partnerships between companies, the government and civil society are introduced as a potentially effective and efficient strategy for CSR. However, they are not fault-proof and require a commitment to local communities' rights to informed prior consent and authentic participation (Hilson & Murck, 2000).

Despite its perceived benefits, CSR presents mining companies with significant challenges and it is essential to acknowledge that the commons and the private sector are driven by fundamentally different propositions of sustainability versus growth orientation (Burke, 2010). However, with committed leadership and the right approach, it can entail important opportunities for both government, the private sector, local communities and the civil society. Particular attention will need to be given to potential tensions between the international companies' responses to perceived determined CSR (Hamann, 2003).

Some mining companies in Malawi have embraced CSR as a good practice in conducting business, as it is not an obligation. So far, mining companies have supported communities with projects in agriculture, health, education and environmental conservation. Good CSR examples have been exhibited by PAL Kayekera for Karonga Water Project and support to education infrastructure around mining communities, GVH Sawadi who benefited from two school blocks, one borehole and maize mill at Njereza by Cement Products Limited and Shayona Cement who donated a school block and support health services in Kasungu. Other medium companies including Mkango Resources, Optichem, Shayona Cement and Cement Products Ltd have also supported communities with micro projects and relief items as deemed necessary. Nevertheless, CSR continues to be a contentious issue mainly because government has not adequately informed and engaged stakeholders including local governments, the civil society and beneficiary communities on what they should expect from prospecting and/or mining rights granted.

3.5.3 Measures taken to Address Social Issues

Some mining companies have already taken initiatives to engage communities and offer corporate social responsibilities. PAL has played a crucial role in providing community engagement and social development projects. PAL has provided modern water supply system to Karonga Township, assisted with provision of school blocks and teaching and learning materials, training community groups with modern methods of farming to provide food supplies to the mine, maintenance of boreholes and community health service outreach. Despite these services, some civil groups still think that it is not enough. In this scenario it is important to find ways of managing community expectations such as through engagement and outreach. Interaction with GVH Kayekera and Juma has confirmed social projects that have been undertaken by PAL. The outstanding healthy centre is being initiated and is at procurement of materials stage. PAL undertakes sensitisation programs. Kayekera Uranium has special programmes on HIV/AIDS at the work place and local communities

CPL has built two school blocks at Njereza Primary School, donated maize mill to GVH Sawadi for community use and using free electricity, distribution of teaching and learning materials to school and donation of a borehole. GVH Biliati has acknowledged the cordial relationship that exist between the company and local communities.

Mkango Resources has maintained boreholes and painted schools around their Songwe prospect. They have gone to the extent of providing improved variety of seeds in response to flood disasters. Some other social development activities have been undertaken by Shayona Cement Corporation through education and health services and Crown Minerals who support orphans and the aged at Tengani in Nsanje.

3.5.4 Summary

Low participation of indigenous populations, male domination and child labour are the three critical issues affecting mining operations in Malawi. Recently, concerns over inadequate implementation of corporate social responsibility has taken centre stage. The current Mines and Minerals Act, 1981, empowers the executive arm of government to conclude mining agreements. Following outcry from the civil society and parliament, the current Mines and Minerals Bill has addressed these issues through inclusion of community development agreements, community engagement and corporate social responsibility that will have to be adhered to during the mine life of the project. Relevant civil society groups will be engaged right from the inception of the projects.

3.6 Regional and International Cooperation

3.6.1 Promoting Regional and International Cooperation

The mining sector in Malawi has benefited from experiences of SADC countries in promoting and formulating the Mines and Minerals Act 1981 and the current Mines and Minerals Policy including the Statement of Development Policies launched in early 1990s. The Act was drafted in comparison with the Botswana and Namibia Mine Acts. The Mines and Minerals policy was drafted with the SADC Mining Policy in Mind. These have been efforts to harmonise our legislative and policy framework with the SADC ones.

International recognition of Malawi's mining sector is acknowledged through use or adoption of international standards where Malawi standards are lacking or insufficient. As far back as 1996, MIDCOR used the World Bank and Canadian Environmental Management standards in undertaking environment impact assessment of undertaking Bwanje Valley limestone mining and Mulanje Mountain bauxite mining. Australian and South African standards were also adopted in undertaking uranium mining environmental impact assessments at Kayelekera. Globe Metals also used the 1996 Environmental Management Act in combination of World Bank standards. Paladin (Africa) Limited and Globe Metals complied with internal standards to enable them register on the Stock Exchange in Australia and Canada.

3.6.1.1 Malawi is signatory to SADC Protocol on Mining

Malawi is a signatory to the Protocol on Mining under the SADC. The purpose of the Protocol is to harmonize national and regional policies and strategies related to the development and exploitation of mineral resources. The Protocol promotes interdependence and integration of national mining policies for accelerated development and growth of the mining sector in Southern Africa. The protocol mandates member states to harmonise their policies, strategies and programmes related to development and exploitation of mineral resources (SADC, 2006).

Member States in the SADC region recognise that a thriving mining sector can contribute to economic development, alleviation of poverty and improvement of the standard and quality of life throughout the region. SADC countries make commitments aimed at mining and minerals development in the region, among them include:

- a) Facilitate development of human capacity and technological development;
- b) Transfer, development and mastery of science and technology throughout the region;
- c) Encourage private sector participation in the exploitation of mineral resources;
- d) Promote economic empowerment of the historically disadvantaged in the mining sector;
- e) Improve the availability of public information to the private sector, member states and other countries; and
- f) Jointly develop and observe internationally accepted standards of health, mining safety and environmental protection.

The above commitments are being achieved through Joint Committees of Cooperation signed between member states. For example Malawi has signed cross-border natural resources conservation commitments with Zimbabwe, Mozambique and Zambia.

3.6.2 Transparency and data availability in the mining sector

The Mines and Minerals Policy identifies the need for Malawi to take part in regional and international initiatives such as the Kimberly Process, MIGA and EITI that address mineral issues and concerns. In particular, the Mines and Minerals Policy mentions the need to share geological information with member states of COMESA and SADC (CEPA). The EITI is an international standard that ensures transparency in governance of mining sector, including revenues from oil, gas, and mineral resources. It is developed and overseen by a multi-stakeholder coalition of governments, companies, investors, and civil society organizations (World Bank, 2013). Benefits for implementing the EITI include improved investment climate, strengthened accountability, and greater economic and political stability. This in turn is beneficial for business, since investments are capital intensive and dependent on long-term stability to generate returns (World Bank, 2013).

3.6.3 Summary

Malawi is striving to integrate its mineral development policy and operational systems with those of the SADC and the international market. The Mines and Minerals Policy (2013) has adopted the mining principles articulated in the SADC Mining Protocol. Malawi also conforms to World Bank guidelines on Social Environmental and Social Impact Assessment, and is in the process of securing accreditation with EITI, an international transparency entity on mining revenue and operations.

4 CONCLUSION AND RECOMMENDATIONS

4.1 Conclusion

Malawi in its infancy towards the development of the minerals sector, which is poised to boom if a favourable climate is developed and nurtured by all. However, creating such an enabling environment requires an effective institutional framework that is capable of prescribing and propagating preferred practices while proscribing unwanted behaviour. Evidently, the legal and technical systems for the mining sector in Malawi are wanting in various aspects that frustrate both the mining investors and the owners of the land as they fail to reap the benefits accruing from both large-scale and artisanal and small-scale mining operations. Summarily, the implementation of the mining policy in Malawi has a mixture of positive and negative outcomes.

Frustrating elements in policy implementation within the mining value chain hover around inadequate integration of sustainable development concepts including matters relating to taxation, social responsibility, transparency and accountability, capacity building for Artisanal and Small-scale Miners and power imbalances between government and communities of exploitation over the acquisition and control over basic assets of production especially land. Additionally, implementers of the mining policy are faced with technical inadequacies to effectively provide the necessary administrative support towards sustainable mining operations including monitoring compliance with application of recommended environmental measures and standards. Additionally, the engagement of local Malawians in gainful mining has generally been minimal due to low financial and technical support.

Notwithstanding, Government of Malawi is collaborating with development partners, civil society organisations and the private sector to address these challenges through the Mining Governance and Growth Support Project (MGSP), which seeks to promote the mining sector through the development of the sector's policy, legal and institutional framework among other key objectives. The observable and promising positive strides include the development of the Mines and Minerals

Bill to replace the 1981 Act, improved generation and dissemination of geophysical data on mining potential, active engagement of Civil Society Organisations and Artisanal and Small Scale Miners (ASMs) in policy development and in addressing matters relating to mining operations in the country. Through the Mines and Minerals Policy 2013, the country has articulated and endorsed mineral development and facilitation through integration of regional and international development policies and guidelines on mineral resources development and strategic environmental assessment (SEA). If effectively applied, the SADC, EITI and World Bank policies and guidelines adopted in mineral resource development will obviously enhance transparency and accountability in mineral resources development transactions to avoid the “resource curse” scenario. Processes are also underway to modernize the mining cadastre, establish a transparent mining revenue management regime and improve the environmental and social impact assessment and monitoring of mining operations in both large scale and artisanal and small-scale mining operations. It is anticipated that the restructuring of government institutions to create the Office of the Commissioner of Minerals and Minerals and the ASM Department (or Section) will improve administration and support to ASM, and will bridge the technical gaps experienced in the supervision of mineral resources development in Malawi.

4.2 Recommendations

4.2.1 Mineral Development

Effective development of the mining sector will require a improvements in infrastructure especially road network and energy supply to rural areas where mining operations usually occur. Additionally, the sector should embrace the principles of sustainable development in the mining sector including the following specific measures:

- a) Ensure transparency by providing all stakeholders with access to relevant and accurate information;
- b) Ensure accountability for decisions and actions (especially within the executive);
- c) Encourage cooperation among various stakeholders in order to build trust and shared goals and values;
- (d) Ensure that decisions are made at the appropriate level as close as possible to and with the people and communities most directly affected.

The measures listed above will be fulfilled through subscription to EITI and enactment of the current Minerals and Minerals Bill. Strengthening of the Department of Mines and establishment of the office of the Commissioner are aimed at improving governance of the minerals sector.

4.2.2 Investment Climate

Measures aimed at improving the investment climate should include:

- a) Increasing institutional capacity e.g. by increasing the scope of activities of the officers responsible for recording mining statistics, and providing effective, adapted computer software at their disposal and at the disposal of the private sector, would enable a better assessment of the levels of production, the flow of moneys and the levels of taxes;

- b) Linking infrastructure development programmes with areas that have economic mining potential and ensuring that such areas have essential energy, transport and telecommunication infrastructure and services
- c) Offer competitive, predictable and stable fiscal regime that will get rid of the need to go into development agreements that are often flawed and susceptible to abuse.
- d) Strengthen consultative channels from grass-root exploration to mine development and closure to avoid clashes with the civil society and other interested stakeholders. This entails building capacity for local level mineral resource administration and governance at district council, ADC and VDC levels.

4.2.3 Governance

Improved governance in the mining sector calls for expedited review and development of policies and legislation associated mineral development in the country. The following actions could be prioritised:

- a) Revision of the Mines and Minerals Act to harmonize it with the NEP, and other relevant sector policies and legislation to make it investor friendly whilst addressing the needs of Malawians in achieving sustainable development.
- b) Provide access to information and facilitate public participation in ESIA processes and mining operations.
- c) Facilitate and promote small-scale mining through expedited completion of the ASM policy that is currently under development and provision of the necessary technical and financial support.
- d) Adopt product quality and standards that conform to environmental protection in order to enhance competitiveness in international markets.
- e) Provide incentives to encourage the adoption of environmentally friendly technologies in mining, incorporating energy saving, reduction of health hazards, pollution control and safe disposal of waste.
- f) Promote use of environmental guidelines and ESIA's before industrial sites are developed and ensure application of a monitoring and auditing system for operating industries.
- g) Build capacity in the mining sector through implementation of a sector specific development strategy.

4.2.4 Environmental Management

It is imperative that environmental sustainability is not compromised through degrading mining practices. To achieve this, the following measures should be prioritised:

- a) Government should strengthen internal controls in approval processes for mining rights and compliance monitoring of mining processes (e.g. through Intensification of inspections). Effort should be made to monitor implementation of ESMPs through the entire life cycle of mining operations i.e. from prospecting to decommissioning;
- b) Raise awareness on environmental matters and share information with the public on matters relating to the impacts of mining operations on social and ecological systems.
- c) Strengthen the role of CSOs in providing checks and balances on matters relating to environmental management in the mining sector.

- d) Prescribe conditions for enhancing self-compliant practices e.g. putting a condition on the mining license/EIA certificate requiring the operator to employ qualified personnel in environmental issues, periodic reporting and adherence to specific standards;
- e) Revising legislation i.e. EMA, Mines and Minerals Act (both already in draft form) to take care of emerging legal requirements in mineral development and environmental management. The revised legislation should make Environmental Management System mandatory for all mining operations and include stringent penalties in to offenders as current fines are not prohibitive enough.

4.2.5 Social Issues

The mining sector in Malawi should strive adopt the principles of sustainable development through integration of the following measures and/or strategies that maximise social and economic benefits without compromising environmental sustainability for the benefit of present and future generations. For Malawi, the following actions should be prioritised:

- a) Encourage participation of locals especially women through economic boost and technical arrangements e.g. through administration of preferential incentives and finance to local Malawians to participate in mining joint ventures. This can be through establishment of a Development Finance Institution or provision of financial resources in form of soft loan agreements with local banks.
- b) Expedite the development of legislation aimed at addressing matters relating to ownership, control and acquisition of customary land and relocation and resettlement in line with internationally agreed standards and best practice.
- c) Devolve ASM administration to district councils and establish District Mining Offices in districts where sound ASM activities are taking place. This entails capacity building for district and local level governance structures.

4.2.6 Regional Integration

Through the Mines and Minerals Policy 2013, Malawi has articulated and endorsed mineral development and facilitation through integration of regional and international development policies and guidelines on mineral resources development and strategic environmental assessment (SEA). It is imperative, therefore, that the country should expedite development of the mines and mineral development legislation that should legalise measures and actions adopted from regional statutes and entities. Additionally, Malawi should continue to support the regional integration initiative for it to benefit from the already established mining sectors of Southern Africa. The benefits could accrue in form of lessons and mining best practices including technology transfer, minerals education, community engagement and flow of investment capital.

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