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Studies on employment and extractive industry-dominated African countries

Chijioke J. Evoh

Employment and Labour Market Policies Branch

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Preface

The primary goal of the ILO is to work with member States towards achieving full and productive employment and decent work for all. This goal is elaborated in the ILO Declaration 2008 on *Social Justice for a Fair Globalization*,[1] which has been widely adopted by the international community. Comprehensive and integrated perspectives to achieve this goal are embedded in the Employment Policy Convention of 1964 (No. 122), the *Global Employment Agenda* (2003) and – in response to the 2008 global economic crisis – the *Global Jobs Pact* (2009) and the conclusions of the *Recurrent Discussion Reports on Employment* (2010 and 2014).

The Employment Policy Department (EMPLOYMENT) is engaged in global advocacy and in supporting member States in placing more and better jobs at the center of economic and social policies and growth and development strategies. Policy research and knowledge generation and dissemination are essential components of the Employment Policy Department's activities. The resulting publications include books, country policy reviews, policy and research briefs, and working papers.[2]

The *Employment Policy Working Paper* series is designed to disseminate the main findings of research on a broad range of topics undertaken by the branches of the Department. The working papers are intended to encourage the exchange of ideas and to stimulate debate. The views expressed within them are the responsibility of the authors and do not necessarily represent those of the ILO.

Azita Berar Awad
Director
Employment Policy Department

[1] See http://www.ilo.org/global/about-the-ilo/mission-and-objectives/WCMS_099766/lang--en/index.htm

[2] See http://www.ilo.org/employment

Foreword

Promoting productive employment is a major challenge for emerging and developing economies and a key component of their socio-economic development agenda. Yet, many resource rich countries find it challenging to translate their wealth into instruments to support inclusive growth and sustainable development. In such cases, a broad set of pro-employment policies is critical for exploiting the resource potential to create productive and sustainable jobs, and thereby support structural transformation and contribute to achieving the Sustainable Development Goals (SDGs), especially Goal 8 "to promote inclusive and sustainable economic growth, employment and decent work for all".

The International Labour Organization (ILO) has been conducting research on pro-employment policy frameworks and providing technical support to member States for a number of years. It has also acquired a knowledge base in sectoral analysis to assess the job-creation potential of specific policies, as called for by the 2014 International Labour Conference resolution to support member States devise comprehensive employment frameworks to "promote employment, enhance productivity and facilitate structural transformation processes." (ILO, 2014: 7(b)).

This paper analyses the challenges faced by a number of resource dependent countries in Sub-Saharan Africa to provide recommendations on how to design a set of policies to encourage productive employment growth. It examines the policy framework relating to extractive industry in a number of African, Asian and American countries to identify productive uses of the revenues for inclusive growth in other sectors of the economy, diversification away from the extractive industries through industrial and sectoral policies, as well as investment in social protection and infrastructure. The paper underlines the importance of strong institutions for governance, transparency, effective policy design and implementation. It advocates for a comprehensive approach to development relying on social protection, labour legislation and investment in social infrastructure (healthcare and education), along with cooperation with social partners and civil society through social dialogue.

This paper was authored by Chijioke J. Evoh, fellow at the Economic and Urban Policy Analysts (ECONUPA) in Yonkers, United States.

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Executive Summary

This study focuses on the policy and regulatory frameworks of the extractive industries in five African countries: the Democratic Republic of Congo (DRC), Ghana, Mozambique, Sierra Leone and Zambia. The project is based on the premise that inclusive economic growth, decent job creation and poverty reduction are dependent on the effective management and utilization of wealth from Africa's extractive industries (EIs), particularly hard minerals and hydrocarbons. The purpose of this study is to see to what extent the extractive industries have contributed to the stimulation of inclusive growth and social transformation in resource-dependent African countries. Despite the recent drop in global commodity prices, low and middle-income African countries can still use revenues from extractive sectors as a catalyst for reaching the goals of poverty reduction, job creation and inclusive economic growth. This can be accomplished by linking the resources from the extractive sector to other sectors of the real economy. However, we argue that these objectives can only be realized through major policy reforms and inputs.

For a comparative analysis, this study examines how middle- and high-income countries such as Bolivia, Chile, Indonesia and Malaysia have utilized wealth from the EIs to pursue the goals of inclusive growth, job creation and poverty reduction. By drawing policy lesson and good practices from emerging countries that have successfully used such resources to purse broader social goals, the study puts forward a set of policy recommendations for extractive industry-dependent African countries:

The study makes the following policy recommendations. First, it is crucial to ensure that adequate revenue and receipts are received from the extractive industries to enable the expansion of fiscal space and investment in critical infrastructure and social protection. Against this backdrop, wealth from the extractive sector should serve as a basis for industrialization and broad-based job creation in the economy. It will equally facilitate backward and forward linkage of the extractive sector with other sectors in the economy. This will ensure downstream linkages into mineral and hydrocarbon beneficiation and manufacturing; upstream linkages into consumables and services industries; and linkages into the development of physical infrastructure (i.e., electric power, transportation, communication, water and sanitation).

The study informs policymaking by further recommending prudent macroeconomic management, aimed at capturing and translating resource revenues into sustainable economic growth; increase in social protection measures and human capital development investments; improvement in fiscal regimes, revenue management and administration; direct distribution of resource revenues to its citizens, and investment in agricultural productivity to generate additional job opportunities for the increasing youth population in resource-dependent African countries. Other necessary policy steps include the promotion of economic diversification through investments in non-extractive sectors; creation of stabilization funds; improvement of labour conditions in the EIs; regulation of artisanal mining activities; and the strengthening of the institutional capacity of ministries of labour, mines and minerals development. Prudent investment of wealth from the extractive industries for inclusive and job- rich growth in Africa will equally require other institutional strengthening such as the enforcement of accountability and transparency policies; investment in physical infrastructures; cooperation of extractive companies beyond the cardinal principles of corporate social responsibility; and partnership with international development agencies such the African Development Bank, ILO, UNDP, UNIDO and the World Bank.

Considering the integrative nature of these policy actions, effective implementation will require an inclusive policy approach, which underscores the cooperation and the goodwill of all stakeholders. Moreover, the experience of other middle- and high-income countries in Asia and Latin America has shown that the sequence wherein policy reforms and resources from the extractive sector created the needed revenues and stable environment for the

diversification of the real economy. The case studies of these economies demonstrate that endowment of mineral resources does not constitute a 'curse'. Rather, as natural capital stocks, revenues from extractives can be used to promote investments in other sectors, create additional jobs and establish social protection measures for the vulnerable members of the society.

Key Words: extractive industry, employment multipliers, forward/backward linkages, inclusive growth, productive investment, social protection, Africa

Abbreviations

AfDB	African Development Bank
ASM	artisanal and small-scale mining
BOB	Bolivian boliviano
CODELCO	Corporación Nacional del Cobre de Chile (National Copper Corporation of Chile)
DRC	Democratic Republic of Congo
E&E	electrical and electronic
EI	extractive industry
EITI	Extractive Industries Transparency Initiative
EPZ	export-processing zone
FDI	foreign direct investment
GDP	gross domestic product
GH₵	Ghanaian cedi
GPRSP 2	*Second Growth and Poverty Reduction Strategy Paper* (DRC)
GRA	Ghana Revenue Authority
HDI	Human Development Index (UN)
IFC	International Financial Corporation
ILO	International Labour Organization
IMF	International Monetary Fund
IPC	integrated petrochemical complex
LCMS	Living Conditions and Monitoring Survey (Zambia)
LCP	Local Content Policy (Sierra Leone)
LNG	liquefied natural gas
MAS	*Movimiento al Socialismo* (Bolivia)
MRDP	Mineral Resources Development Policy (Zambia)
MSME	micro-, small- and medium-sized enterprise
MYR	Malaysian ringgit
MWI	Malaysian Wellbeing Index

OECD	Organisation for Economic Co-operation and Development
PNDC	Provisional National Defence Council (Ghana)
UNDP	United Nations Development Programme
VAT	Value-added tax
YPFB	Yacimientos Petróliferos Fiscales de Bolivia
ZMW	Zambian kwacha

1. Introduction

1.1. Background and motivation

This report provides a platform and guide for extractive industry (EI)-dependent African countries to harness the dividends of their natural resources for a long-term and inclusive transformation of the economy through job creation and poverty reduction. Such an inclusive transformation in resource-rich African countries depends on the availability of the right institutions and political process, as well as the cooperation of corporate interests in the EIs. The International labour Organization (ILO) strongly believes that the resources generated by EI, if invested in employment intensive sectors or social development, would have the greatest impact in making growth more inclusive and pro-poor. Besides, creating the necessary fiscal space from resource revenues could support social protection measures, such as cash transfers. To this effect, this paper is a response to the request of ILO constituents in Africa for specific and evidence-based policy advice on how to make better use of their extractive sectors in order to reduce poverty and stimulate job creation.

This has become imperative given the inability of many countries to translate their resource wealth, including the recent commodity windfall, into inclusive socio-economic development. This trend has exacerbated inequality in certain countries thereby giving credence to the 'resource curse' hypothesis[3]. Against this background, this study argues that low and middle-income African countries can optimize revenues from extractive sectors as a catalyst for the reaching the goals of poverty reduction, job- rich and inclusive economic growth.

Development economics is awash with empirical studies on the contribution of natural resources to wealth and sustainable development. With commodity exports constituting about 30 per cent of Africa's export (Collier, 2010), extraction of natural resources remains a huge sector in the macroeconomic landscape of the Region. Due to recent innovations in exploration technology coupled with robust global demand for hard minerals and hydrocarbons (i.e. oil and gas), more countries in Africa are becoming exporters of extractive resources.

Against this backdrop, the objective of this paper is to provide research-based policy advice to countries with a high share of EIs in the Region. This is informed by the analysis of the best practices and policy mix employed to promote more jobs for inclusive growth[4]. The study focuses in particular on the following countries: the Democratic Republic of the Congo (DRC), Ghana, Mozambique, Sierra Leone and Zambia.

The study outlines the mechanisms by which some resource-rich middle- and high-income countries such as Bolivia, Chile, Indonesia and Malaysia, have successfully turned their resource wealth into a broader economic opportunity. The case studies of this group of

[3] The idea behind this proposition is that mineral abundance in extractive and developing economies generates negative growth and development primarily due to high degrees of rent seeking, corruption and ineffective governance. Such economies, it is argued deemed grow more less of a than 'curse' resource-poor than 'blessing'.

[4] The International Development Research Centre's (IDRC, 2010) working definition presents inclusive growth as, "growth, which improves the poor's access to expanding economic opportunities and reduces inequality".

economies demonstrate that endowment of mineral resources does not constitute a 'curse'. Rather, as natural capital stocks, revenues from extractives can be used to promote investments in other sectors, create additional jobs and establish social protection measures for the vulnerable members of the society.

1.2. Guiding questions

This study is driven by the following research questions:

- First, what policy and regulatory frameworks influence the activities of EIs in African economies?

- Second, what factors have prevented countries that depend on EIs in sub-Saharan Africa from making the most out of their resource wealth for inclusive growth and job creation in the larger economy?

- Third, what institutional weaknesses have restricted the linkage potential and the diversification of EIs for the benefit of other sectors in resource-dependent economies in Africa? Many resource-rich countries, some of which were at the same level of development as African countries at independence, have been more successful in using the wealth from their extractive resources to achieve a reduction in poverty on a sustainable basis. How were these countries able to utilize wealth from their extractive resources to achieve sustained social and economic development?

- Fourth, what policy and resource management lessons can resource-dependent countries in Africa draw from low and middle-income countries like Bolivia, Chile, Malaysia and Indonesia, who have attained a good level of success in the use of wealth from the EIs for economic diversification, inclusive growth, job creation and poverty reduction?

1.3. Research methods

To address the guiding questions above, this study relies on quantitative and qualitative data. First, a desk review was conducted of policy documents on EIs and the recent macroeconomic developments in many resource-dependent countries, especially the DRC, Ghana, Mozambique, Sierra Leone and Zambia. Besides, grey literature was reviewed covering theories and conceptual frameworks on the political economy of EIs, commodity rents, economic linkages and diversification, as well as inclusive and job-rich growth. As part of the review, the study examined policy regimes and regulatory frameworks aimed at overall job creation in the economy in place in EI-dominated African countries. Information from documentary sources[5] was supplemented with semi-structured phone interviews and questionnaires responses. These interviews helped in the validation of the desk research and

[5] Such secondary data includes outputs and publications from national and international institutions on economic and social development. This includes, the Bank of Ghana, Bank of Sierra Leone, Bank of Zambia, Central Bank of Mozambique (Banco De Moçambique), Central Bank of Chile (Banco de Chile), Bank Indonesia, and Malaysia Central Bank (Bank Negara Malaysia). Other national institutions whose outputs were utilized include National institute of Statistics of Mozambique, Ghana Statistical Service, and Statistics Sierra Leone. The study also relied on publications by international development institutions such as the International Labour Organization (ILO), the World Bank, International Monetary Fund (IMF), African Development Bank (AfDB) and the Organisation for Economic Co-operation and Development (OECD).

contributed additional insights relevant to EI policies and regulations in resource-dependent African countries.

Data from these sources was analysed in two parts: within-case analysis and cross-case comparisons. The analysis involved detailed case write-ups of the relationship between the EI and the overall economy for each of the cases. The study employed the ILO's Key Indicators of the Labour Market (KILM) in the analysis of the labour market trends in the EI-dependent African countries. These indicators are related to the labour force, employment, unemployment, educational attainment, wages and compensation costs, employment by sector, youth unemployment, productivity and poverty (ILO, 2014). The goal was to identify patterns through which wealth and revenues from the EIs were linked to other economic sectors through job creation and social development in the society. Additional analysis was also carried out through the use of structured and diverse lenses on data. Cross-case comparisons searched for patterns across different cases of EI-dependent countries such as Bolivia, Chile, Malaysia, and Indonesia on the one hand, and African countries on the other.

1.3 Outline

Following the Introduction, the report is presented in six major sections. Section 2 is a brief summary of extant literature on natural resource curse and institutional challenges facing prudent management of extractive rents in Africa. Section 3 presents the conceptual frameworks of linkages and economic diversification essential for inclusive growth and job creation in EI-dependent countries in Africa. Section 4 presents the dynamics of EIs in five African countries, including the regulatory frameworks and policy regimes guiding the activities of industry in the. The regulatory frameworks guiding the EIs in Africa are evaluated in Section 5. Section 6 presents the case of four non-African countries, whose economies have utilized extractive rents to promote economic diversification, inclusive growth and poverty reduction. Section 7 puts forward basic policy recommendations, which can enable African countries to use their resource rents to promote inclusive growth and job creation.

2. Natural resource curse or institutional challenge?

Why have countries enriched in natural resources continued to experience such a high level of poverty and deprivation, even when such resources are in high demand around the world? What factors explain the inability of many natural resource-abundant economies to utilize their resource wealth in an economically inclusive manner for the benefit of their citizens? Two schools of thoughts have emerged within development economics in an effort to answer these questions. The first is the 'Resource Curse' school of thought, and the second is the 'Institutionalism' school of thought. The resource curse[6] proposition (Auty, 1993; John, 2011; Sachs and Warner, 2001) or the "paradox of plenty" (Karl, 1997) argument has been used to explain the unfortunate development trajectory in the extractive economies in sub-

[6] The idea behind this proposition is that mineral abundance in extractive and developing economies generates negative growth and development primarily due to high degrees of rent seeking, corruption and ineffective governance. Such economies, it is argued deemed grow less than resource-poor economies. Hence, mineral resources for most poor countries like those in Africa are deemed more of a 'curse' resource-poor than 'blessing'

Saharan Africa[7]. As many scholars have noted, the resource curse is neither inevitable nor avoidable. Contrary to the resource curse school of thought, Lederman and Maloney (2007) have identified institutional quality as the main conduit through which natural resource abundance affects economic growth in an inclusive fashion. Thus, the absence of good institutional capacity makes it difficult for African countries to use their resource wealth to create prosperity for all.

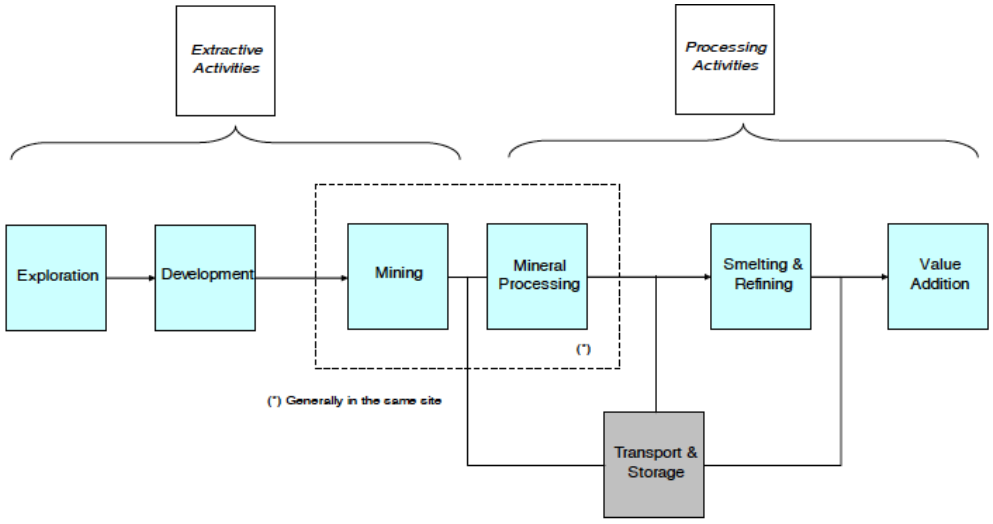
3. Extractive industries, linkages and economic diversification: A conceptual framework

This section explores the conceptual frameworks that inform the analysis in this study. These frameworks are a set of idea and principles drawn from subfields in economics and used to structure our inquiry on the relationship among the extractive industries (EIs) and inclusive job-rich growth in Africa.

3.1 Extractive industries: From an enclave to a linkages mindset

The relationship between the extractive intensity of activities in the economy and the level of social and economic development has been a subject of debate among economists. In the 1950s, Singer criticized what he perceived as the "enclave" nature of production in the commodities sector (Singer, 1950). In his analysis, Singer observed that, as a general rule, "the extraction of these hard commodities occurred in isolation from the local economies in which the mines were based" (Morris, 2012: p. 9). In effect, hard commodity sectors create little or no linkages to other sectors of the economy. The potential economic activities in the EIs can be grouped into *extractive activities* and *processing activities* (see Figure 1). Each group of activities entails other job-generating processes through linkages. Singer pointed out the undeveloped structure of the EIs in low-income countries in the 1950s, hence their inability to provoke and catalyze linkages to other sectors.

Figure 1. Structure of the mining industry



Source: Sigam and Garcia (2012).

[7] The resource curse hypothesis explains the relationship between economic growth and natural resource dependence. Proponents of the resource curse hypothesis more (Auty, 1993; Sachs and Warner, 2001) argue that countries with abundant natural seem to grow more slowly than countries with limited resources.

Due to its low multiplier effect, activities of mineral and hydrocarbon (oil and gas) extraction have limited economic impact on host communities. For this reason, EIs are said to have an "enclave character." This limitation implies that EIs are not substantially linked to other sectors of the economy, as do other sectors such as agriculture and industries. This is partly because extractive projects, which operate with unusually strong economies of scale, are capital intensive, demand skilled workforce, and involve large investments with limited job creation. Most technical skills needed in mining activities or oil and gas exploration are usually imported from developed countries that have comparative advantage in the production of such innovative technologies.

The extraction and processing of mineral ores or crude oil passes through different stages. After the mineral is extracted, it passes through downstream processing (represented in the processing segment on the diagram), which entails a higher value added to the extracted ore or crude oil. This is the stage that involves activities such as oil refining and metal fabrication. For the most part, this stage is also performed abroad in developed countries. The result is that few citizens are recruited from host communities. Although the EI employees are paid well, they are few and make an insignificant impact in the labour market. The effect of this linkage deficiency is that revenue from the EIs in African countries is heavily skewed toward the return on capital and the tax revenues from such returns (Auty, 2006). The implication is that other domestic economic linkages through the local purchase of inputs, value-addition to minerals, and expenditure by workers, are insignificant in economic growth in many host countries.

The inability of the EI to generate a significant amount of direct jobs and stimulate the economy has resulted in jobless growth, extreme poverty, inequality and social exclusion in many extractive economies in Africa. Thus, the enclave character of the extractive sector has resulted in the development of the mining sector without allowing for backward and forward production linkages in the extractive sector. This has limited the multiplier effect of the industry through job creation and inclusive economic growth.

3.2 The linkage factor and inclusive growth in EI-dependent economies

One major preoccupation of development economics is the extent to which wealth from natural resources can be used to generate broad-based macroeconomic growth and human development. With sound long-term development policy, natural resources can serve as a base for inclusive economic growth through the process of diversification. However, fostering such economic structure requires solid institutions, which are essential for productive economic activities in a free market economic system. Institutions are creations of the state; hence, they are functions of a stable political system. Many empirical studies have been conducted on how the natural resource sector can stimulate growth and productive activities in other sectors of the economy. One idea, which has become part of development economics is the "linkage" concept put forward by Hirshman (1981). Designed for a better understanding of the industrialization process, Hirshman's linkage effect provides an analytical framework of how resources can serve as a springboard for economic diversification. Building on Innis' "staples" thesis[8], the approach demonstrates the growth experience of resource-dependent countries in the developing world.

The linkage approach highlights three types of economic linkages between natural resources and other economic activities. According to Hirshman (1981: p. 65), the "linkage effect is the investment-generating forces that are set in motion, through input-output

[8] The "staples" thesis, suggested by Innis, posits that Canada developed as a result of interlinkages between the production of different staples, such as cod, furs and wheat. See, e.g., Easterbrook and Watkins (1984) for more detail.

relations, when the productive facilities that supply inputs to that line or utilizes its outputs are inadequate or nonexistent." The four linkage frameworks are: (i) fiscal linkages, (ii) consumption linkages, (iii) forward linkages and (iv) backward linkages. In literature, the fiscal and consumption linkages are also known as *horizontal linkages*, while the backward and forward linkages are collectively known as *production linkages.*

Fiscal linkages refer to resource rents, which the government collects from the extractives sector in the form of corporate taxes, royalties and income tax on the employees (Auty, 2006; Hirshman, 1981; Kaplinsky, 2011). Consumption, or final demand, linkages refer to the demand for the output of other sectors made possible by incomes earned in the EIs sector. Backward linkages lead to new investment in input-supplying facilities (Hirshman, 1981). This involves the formation of businesses to provide supplies to the EIs. Good examples are contractors that supply extractive companies with inputs used in resource extraction and production processes. Forward linkages refer to investments in output-using facilities. This involves the establishment of production firms to process outputs from the EIs into other products through value addition before export (Kaplinsky, 2011). The linkage framework forms the basis for the diversification of the economy out of the resource sectors. As Hirshman argues, economic diversification is the story of how the growth of one economic sector (in this case EI) leads to the development and growth of other sectors of the economy. These activities focus on certain characteristics inherent in productive activities. The linkage framework allows for a more detailed analysis of the multiplier effect of the wealth generated from the EIs in other sectors of the economy.

3.3 Extractive industries and economic diversification

Excessive dependence on natural resources exposes the economy to volatility and, in many occasions, discourages investment in potentially fast-growing sectors. This phenomenon is called the "Dutch Disease." Above all, this negative externality from the resource sector limits the job creation and inclusive growth potential of the larger economy. This is the key argument of the proponents of the "resource curse" thesis (Sachs and Warner, 2001). The inability of many resource-rich countries, particularly those in Africa, to correct this anomaly through the process of economic diversification remains a major challenge in development economics. Historically, most resource-based economies that have successfully industrialized did so by diversifying away from the natural resource sectors. This necessitates the following questions. First, how is economic diversification measured? Second, what are the motivating factors for the diversification of resource-dependent economies? What policies and institutions are essential for successful diversification?

Economists define production diversification as strategies aimed at promoting a diverse production base across all sectors of the economy with the aim of reducing the concentration of economic production in one sector. From the export perspective, diversification entails policies aiming to reduce the dependence on a limited number of export commodities that may be subject to price and volume fluctuations or secular declines (Hvidt, 2013; Niggle, 2001). In general terms, the premise behind economic diversification is that a more balanced economy, characterized by different industries in different sectors, is better than one dominated by a single sector. Therefore, the inability to diversify away from resource-based sectors is a source of economic and political pressures on resource-dependent countries.

Diversification creates opportunities for backward and forward linkages to domestic production. Niggle (2001) identifies two forms of diversification. The first is horizontal diversification: efforts and policies aimed at creating opportunities for the production of new products within the same sector. The second is vertical or diagonal diversification, which focuses on adding more domestic stages of processing inputs.

This section examines the unique nature of the EIs, and highlights the need to maximize the wealth from the sector to stimulate inclusive growth of the overall economy. Thus, using

rent from the EIs in a more inclusive fashion is a delicate balance, which is yet to be mastered by most extractive-dependent countries in Africa. However, when the right institutions are in place, EIs can create a good multiplier effect in the overall economy through linkages. Resource revenues have the potential to promote economic diversification and the provision of physical infrastructures. All of these conditions help to make growth more inclusive, create jobs and reduce poverty.

4. Policy frameworks and economic developments in extractive industry-dependent economies in Africa

This section of the report presents the economic outlook and policy framework of five extractive industry (EI)-dependent countries in sub-Saharan Africa: the Democratic Republic of Congo (DRC), Ghana, Mozambique, Sierra Leone and Zambia. This section examines the nature of institutional strategies and legal frameworks put in place in these countries to govern the activities of various actors in the EIs. The section also looks at the policy challenges of natural resource extraction and the political economy under which such policies were formulated.

4.1 Extractive industries in the Democratic Republic of Congo (DRC)

4.1.1 Extractive industries in the DRC

The Democratic Republic of Congo (DRC) (formerly known as Zaire) is endowed with some of the world's richest mineral resources. The main minerals in the country are copper, cobalt, zinc, diamonds and columbo-tantalite (coltan). Cadmium, cassiterite (tin ore), gold, silver, and wolframite are mined on a smaller scale. The country produces about 60 per cent of the global supply of uranium (EITI, 2012). The extractive sector contributes immensely to economic growth in the DRC. Most mining of base metals takes place in the former Katanga Province[9], which is relatively more peaceful than other regions. Diamonds are mined in East and West Kasai[10]. Smaller-scale production occurs in Equateur[11] and Orientale[12] provinces. Coltan and cassiterite have become important exports in Maniema, North and South Kivu. Orientale Province and South Kivu have large gold.

The DRC also produces oil in small quantities. Oil production is located both onshore and offshore in the locality of the Congo River estuary (ibid). The country accounts for 47 per cent of the world's cobalt reserves and produced 51 per cent of the world's supply of cobalt in 2010. In the same year, it produced 25 per cent of industrial diamonds, 14 per cent of tantalum, 5 per cent of gem-quality diamonds, and 3 per cent of copper and tin (Arieff, 2014; Mazalto, 2009). Obviously, no other African country possesses such enormous wealth of natural resources on the one hand, and such a high rate of instability and armed uprising on the other. Hence, the country has been characterized as nothing but a 'geological scandal.'

[9] Split into the Tanganyika, Haut-Lomami, Lualaba and Haut-Katanga provinces in 2015.

[10] Split into Central Kasai and Kasai provinces in 2015.

[11] Split into the smaller Équateur as well as the Tshuapa, Mongala, Nord-Ubangi and Sud-Ubangi provinces in 2015.

[12] Split into the Bas-Uele, Haut-Uele, Tshopo and Ituri provinces in 2015.

The mining industries sustained the Belgian colonial power and later, the regime of Mobutu Sese-Seko. In the 1980s, the industry accounted for about 60 per cent of the state tax receipts.

The civil war ended in 2002, but the DRC remains politically unstable. Notwithstanding the security situation, the economy had experienced a significant inflow of foreign direct investment (FDI) in the EI sectors, especially from China. Consequently, from 2002 to 2012, the annual gross domestic product (GDP) of the country increased by 5-6 per cent, while the EI accounted for 5 per cent of total GDP in 2010 (EITI, 2012; Oxford Policy Management, 2013). Despite the apparent lack of data, anecdotal evidence shows that, economically, this sector has provided the means of livelihood to many marginal groups, such as ex- combatants, war orphans and internally displaced people (ibid).

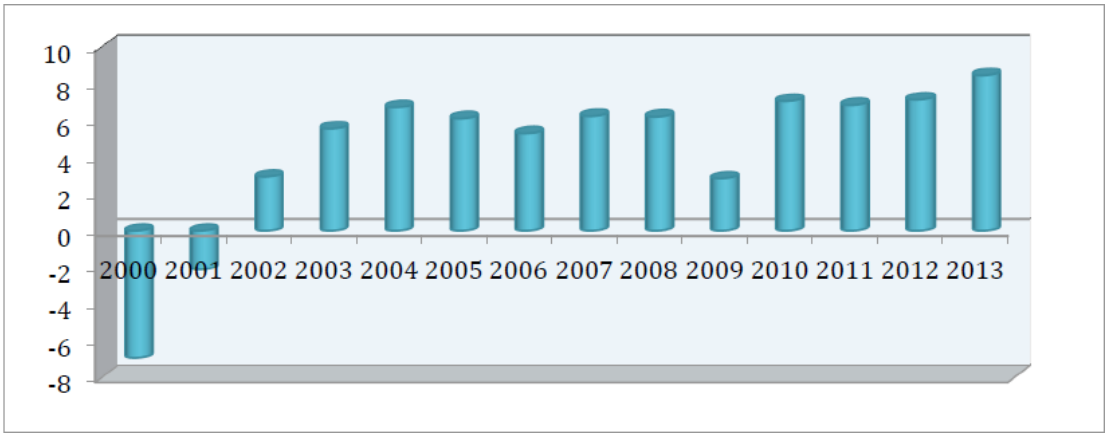
In addition to large-scale-mining (LSM) operations, artisanal and small-scale mining (ASM) activities are important economic sectors in the DRC. It is estimated that about 12.5 million people are dependent on it for their livelihood (Garrett, 2007). Revenues from this sector are lost through informal channels, which bypass the State's fiscal apparatus. Due to the paucity of data, it is difficult to determine the extent of ASM in DRC. However, estimates of people working in the ASM sector range between 500,000 and 2 million (ibid).

Although the EI may be major contributors to GDP growth in the country, it does not translate to broad economic benefit for the people of the country. For instance, a report by the Extractive Industries Transparency Initiatives (EITI, 2012) reveals that extractive companies operating the DRC paid the government a total of US$ 876 million in taxes, fees and royalties in the year 2010. On per capita basis, this implies that the DRC government received about US$ 13 per citizen. On the other hand, exports of the mining sector in 2010 amounted to US$ 5 billion, and 43 extractive companies in the country accounted for 95.76 per cent of these exports (ibid). When broken down, the Extractive Industry Transparency Initiative (EITI, 2012) report reveals that 63 per cent of taxes, fees and royalties paid in 2010 to the government of the DRC came from 37 companies in the oil sector. The disaggregated tax payment structure for the year shows that, despite the fact that 500 companies hold exploration and production licenses in the country, five companies made 97 per cent of the tax payments in the oil sector, and another eight companies made 73 per cent of all payments in the mining sector (ibid). Studies have suggested different reasons for the gap between output in the EIs and tax receipts. These reasons include fraudulent practices on the part of companies and government services and tax assessment and collection agencies, unfair contract terms, under-valuation of mineral product, clandestine exports and smuggling (Feeney, 2010).

4.1.2 Recent macroeconomic developments

Despite prolonged armed conflict, the DRC has experienced measurable level of economic recovery over the past decade. The average real growth stood at 6 per cent per year from 2002 to 2012 (WFP, 2014). The country has a small market size with an estimated GDP of US$ 17.2 billion, and per capita GDP of US$ 230 in 2012 (PWC, 2013). The GDP growth during the year 2013 was 8.4 per cent (see Figure 2). In real terms, this is an increase on the 7.2 per cent and 6.9 per cent growth rates recorded in 2012 and 2011 respectively (IMF, 2014a; KPMG, 2013). Other sectors, such as the commercial and construction, have also contributed significantly. With a 52 per cent increase in the production of copper, the economy is projected to grow at 8.7 per cent in 2014 and on average 7.5 per cent during 2015–18 (IMF, 2014a).

Figure 2. GDP growth in the DRC (2000-2013)



Source: Author's calculations (2014).

Inflation in the DRC dropped to a historic low and the exchange rate remained stable. However, the International Monetary Fund (IMF, 2014a) reports that the foreign reserves coverage stagnated. Inflation fell further in 2013 to 1.0 per cent at the end of December 2013. This is a direct effect of the restrictive fiscal policy, control of the monetary aggregates, and the absence of major import price shocks in the economy (ibid). The above factors contributed to maintaining a stable exchange rate in 2013. There was a decrease in government revenue in 2013 by 1.9 per cent of GDP. This was mainly due to the reduction in bonus and license payments in the mining and telecommunication sectors, as well as the reduction in value added tax (VAT) collection (ibid). The country maintained a surplus of US$ 65 million (0.2 per cent of GDP) in its current account in 2013. However, as the IMF explains, the DRC's current account is still having a deficit balance due to the higher mining related imports and higher profits repatriation (ibid).

4.1.3 Labour market, poverty and the extractive industries in the DRC

Due to armed conflict and poor infrastructure among other factors, the vast mineral wealth of the DRC has yet to translate into sustainable socio-economic development and poverty reduction among the people. As the World Food Programme (WFP, 2014) observed, between 2002 and 2012, per capita income and the real gross national income per capita only increased by an average of 3.3 per cent, and remained 58 per cent lower in 2012 than in 1961. The DRC's Human Development Index (HDI) value for 2013 was 0.338 – which is in the low human development category. This ranking positioned the country at 186 out of 187 countries and territories (UNDP, 2014). The country's 2013 HDI of 0.338 is below the average of 0.493 for countries in the low human development group and below the average of 0.502 for countries in Sub-Saharan Africa (ibid). Approximately 50 million people in the DRC live on less than US$ 1.25 a day (World Bank, 2013a). The country has a labour force of about 25 million and the unemployment rate is about 73 per cent, while about 80 per cent of the population operates in the informal economy (KPMG, 2013; KPMG Global Mining Institute, 2014). About 9,000 students graduate from tertiary institutions in the country every year and only about 100 of them are able to secure wage employment (KPMG Global Mining Institute, 2014). Therefore, it is not surprising that the country has a youth unemployment rate of 70 per cent.

Gender inequalities in DRC are profound. The country ranks 148 of the 157 countries in the Gender Related Development Index. An estimated 28 per cent of women in the country have never been to school; hence, women's participation in the workforce is low at 55 per cent compared to 85 per cent for men (World Bank, 2014a). As a result of the social and economic situation in the country, child labour has become rampant in different parts of the DRC. It is estimated that 3,327,806 children, or 16.9 per cent of the population, are affected

by child labour, particularly in the artisanal mining sector (IMF, 2014a) (see Table 1). Despite some progress, 71 per cent of the population still lives in poverty, wage inequalities are very high (65.3 per cent), and human development indicators in the country are substantially lower than the average for -Saharan Africa (IMF, 2014a; Oxford Policy Management, 2013).

Table 1. Child labour and school attendance in the DRC

Category	Percentage (%)
Working children, ages 5 to 14	16.9
School attendance, ages 5 to 14	67.1
Children combing work and school, ages 7 to 14	16.2
Primary completion rate	72.8

Source: US Department of Labor (2013).

4.1.4 Regulatory frameworks of the extractive industries in the DRC

The regulatory and legal frameworks for the EIs in the DRC are comprised of the Mining Code, enacted by Law No. 007/2002 of July 2002 (the Mining Code). Others are the Mining Regulation enacted by Decree No. 038/2003 of March 2003, and the Mining Plan provides the strategies for the implementation of the Mining Code. Part of this legislation, which includes environmental policies, is applicable to mining activities (André-Dumont; 2013; EITI, 2012).

According to this law any entity or legal persons may own unrestricted mining rights as long as they elect domicile with a mining and quarrying agent (*mandataire en mines et carrières* – a government-registered notary), through whom the foreign investor is obliged to act (KPMG, 2013). As KPMG (2013) reports, the mining code in the DRC favours some foreign operators, who due to historical and political reasons receive preferential treatment by the Government at all levels.

These frameworks were crafted and released in 2002, 2003 and 2006 respectively by the DRC Ministry of Mines and Hydrocarbons with the help of the World Bank. The main objective of these regulatory regimes is to establish the foundations of a transparent and effective regime in the EIs through the private sector. However, much still needs to be done in terms of enforcement of the policies. Natural resource management transparency, particularly through the EITI, needs to be fully enforced. In general terms, the regulation of EI in the DRC has improved considerably. In addition to overt forms of resource regulation, it is now required under the law to publish all mining contracts within 60 days of their approval; and the regular publication of reports on revenue from the exploitation of natural resources is now mandatory. However, these regulations are faced with the governance challenge of poor enforcement.

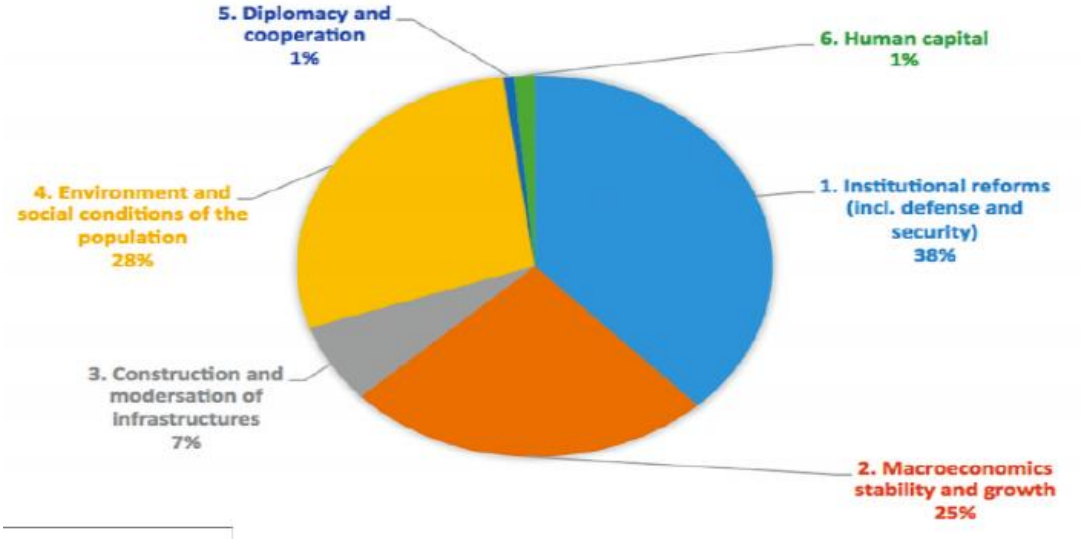
Despite various challenges, there are a number of legal frameworks that are aimed at protecting minors from child labour and other forms of labour abuse. For instance, the 2008 Ministerial Order for the Establishment of Working Conditions for Children outlines the minimum age for hazardous work as 18, and lists prohibited hazardous activities (Hahn et al., 2013). Another labour-related regulation is Article 8 of the 2008 ministerial order, which prohibits the most hazardous forms of labour, including works that risk the health of children, security and dignity (ibid).

In the second *Growth and Poverty Reduction Strategy Paper* (GPRSP 2), the DRC outlined a vision for employment generation, human capital development and poverty

reduction by 2015 (DRC, 2011). This is based on the long-term development vision (26/25). Among the major pillars of GPRSP 2 are: (i) Pillar 2, which focuses on diversifying the economy, accelerating growth and promoting employment; and (ii) Pillar 3, which focuses on improving access to basic social services and strengthening human capital (DRC, 2011). Pillar 2 outlines the policy of developing the support infrastructure for production activities and those related to the revitalization of these activities (ibid). This development strategy also proposes employment promotion policies. The Government of the DRC (2011) explains that the Pillar 3 is built around four main priorities: (i) strengthening human capital, (ii) combating HIV/AIDS, (iii) reducing inequalities and (iv) improving the living conditions of both women and men. The GPRSP 2 is implemented through a five-year rolling programme tool called the Priority Action Program (PAP). In view of the institutional challenge of policy implementation and evaluation facing the DRC, the success of the GPRSP 2 will be measured by how well the PAP works.

From the foregoing, it is clear that economic growth in the DRC in recent years has not been inclusive and has failed to reduce poverty. This is due to the concentration of growth in the EI, governance challenges, mismanagement of revenues from the EI, and political instability stemming from decades of armed conflict in the eastern part of the country. Above all, there is low investment in social protection and human capital development in the country (see Figure 3). As the WFP (2014) observes, the Government gives priority to the strengthening of institutions and the consolidation of macroeconomic stability, while social spending and human capital development receive less attention. One reason for this imbalance in public spending is the limited or low mobilization of domestic resources. This illustrates the weaknesses of the regulatory framework in the country. However, as shown in the preceding section, the GPRSP 2 promises to address this weakness in public spending.

Figure 3. Allocation of DRC Government budget by main policy objective (2013)



Source: DRC Ministry of Budget cited in WFP (2014).

4.2 Extractive industries in Ghana

4.2.1 Extractive industries in Ghana

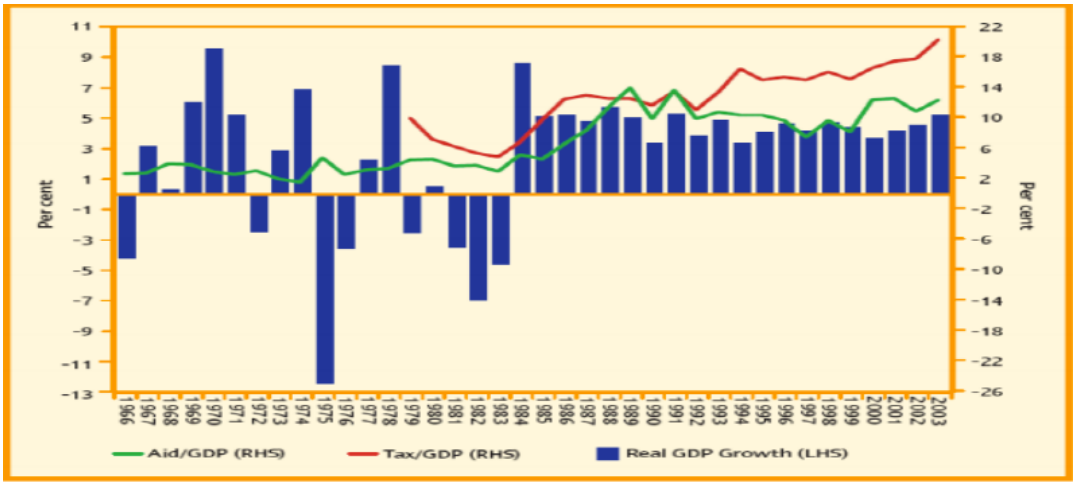
The Republic of Ghana is one of the fastest growing countries in Africa in socio-economic and political terms. With a population of 25 million people, which has a yearly growth rate of 2 per cent, Ghana is the second largest economy in West Africa after Nigeria, and sub-Saharan Africa's 12th largest (AfDB, 2012). From the pre-colonial era, the extraction

of hard minerals, particularly gold, has been a major component of the Ghanaian economy. The country is rich in natural resources, prominent among which are gold, timber, cocoa, diamond, bauxite and manganese. However, gold production dominates mineral extraction in the country. Although there are a number of other mineral resources in Ghana produced in commercial quantities such as manganese, salt, and silver, the main focus of the extractive industry (EI) in the country is gold. Ghana is Africa's 2nd largest gold producer, after South Africa, producing 97.8 tonnes in 2013, which represents a 3 per cent share of global gold output and the 9th leading gold producer in the world (Ghana Chamber of Mines, 2013). In addition to its wealth of mineral deposits, Ghana began oil production at the country's offshore Jubilee Field in mid-December 2010.

From independence in 1957 to the launching of the Economic Recovery Programme (ERP) in 1983, the extractive industry in Ghana was essentially stagnant: Figures 4 shows the economic performance of Ghana pre and post 1983. The resurgence of the EI, which has given a tremendous boost to Ghana's economy beginning from 1984, can be traced back to institutional and policy changes made between 1984 and 1995 (Akabzaa and Ayamdoo, 2009). For instance, the establishment of the Minerals Commission in 1984, the introduction of the Minerals and Mining Code in 1986, the promulgation of the Small-Scale Mining Law in 1989 and the establishment of the Environmental Protection Agency in 1994, collectively made significant improvements to the contribution of the EI sector to the larger economy (Akabzaa and Darimani, 2001; Reisenberger, 2010).

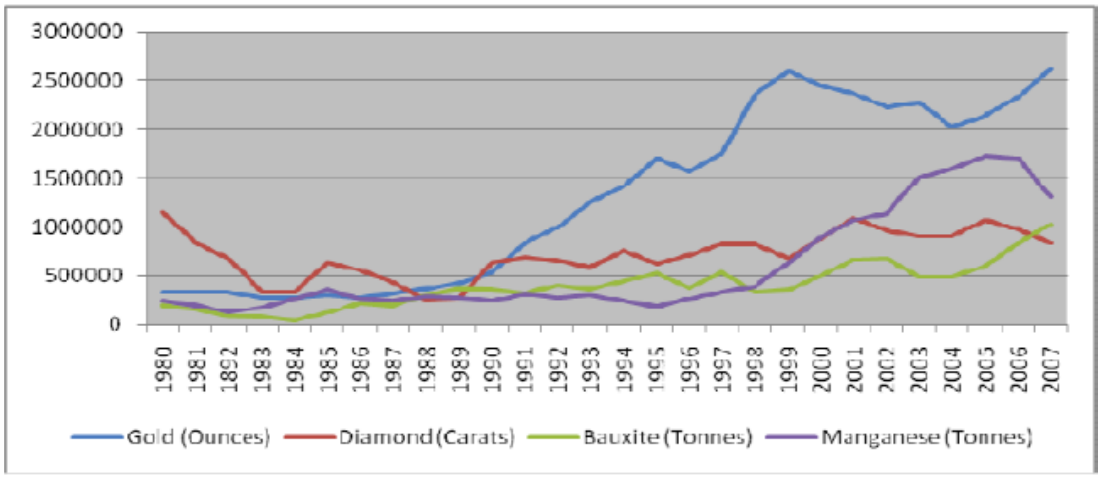
Figure 4. Ghana: Economic performance in two different eras (1966-2003)

Source: Roe and Samuel (2007).



EI regulatory regimes in Ghana seem to favour corporate interests. Generous incentives were given by the Government to boost FDI in the mining sector. For instance, the corporate income tax on the mineral production of private companies in Ghana was reduced from 50-55 per cent in 1975 to 45 per cent in 1986 and 35 per cent in 1994 (ibid). In addition, companies received breaks on import duties on the equipment and accessories necessary for mining production (Akabzaa and Darimani 2001; Amponsah-Tawiah and Dartey-Baah, 2011). Institutional changes are credited to have made the mining sector the leading recipient of FDI in the country, accounting for over 60 per cent of such flows (i.e. US$ 6 billion) in 2007 (Akabzaa and Ayamdoo, 2009). As Figure 5 shows, these institutional changes resulted in an increase in the mining output in the country.

Figure 5. Trends in mineral production in Ghana (1980-2007)

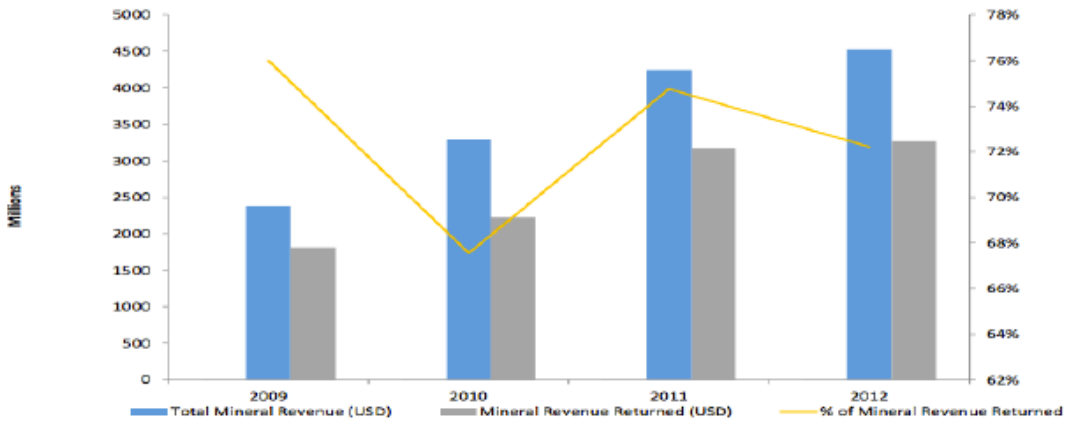


Source: Akabzaa and Ayamdoo (2009).

There are 23 large-scale mining companies producing gold, diamonds, bauxite and manganese, while there are also over 300 registered small scale mining groups and 90 mine support service companies in Ghana (Aryee, 2014). The mining and quarrying subsector contributed 9.8 per cent of the country's GDP in 2013, up from 9.5 per cent in 2012 (ibid). This increase was largely due to the increased production in the downstream oil sector. Generally, growth in the extractive sector slowed down from 16.4 per cent in 2012 to 11.7 per cent in 2013 (ibid). The EI is a leading export earner in Ghana. The mineral sector contributed 43 per cent in 2012 and 37.6 per cent of total merchandize exports in 2013 (Ghana Chambers of Mines, 2013).

In fiscal terms, the EI is a dominant contributor to Government revenue in Ghana and this has been on the rise, especially between 2009 and 2012 (see Figure 6). For instance, the Ghana Revenue Authority (GRA) reports that in 2013, the sector contributed a total of 1.1 billion Ghanaian cedis (GH₵) to Government coffers. This constituted 18.7 per cent of direct tax and 14.3 per cent of total domestic revenue collected by the GRA in 2013 (ibid). The Ghana Chamber of Mines (2013) reports that in 2013, the share of mineral revenue returned to Ghana was 68 per cent, which was above the statutory floor of 25 per cent valued at US$ 3.1 billion. From another perspective, the GRA reveals that pay-as-you-earn (PAYE) company tax and royalty receipts added GH₵ 220 million, GH₵ 518 million and GH₵ 364 million respectively to the national account in 2013. In addition to fiscal contributions to the economy, the EI have equally added to other aspects of the larger economy in Ghana.

Figure 6. Total mineral revenues and amounts returned to Ghana (2009-2012)

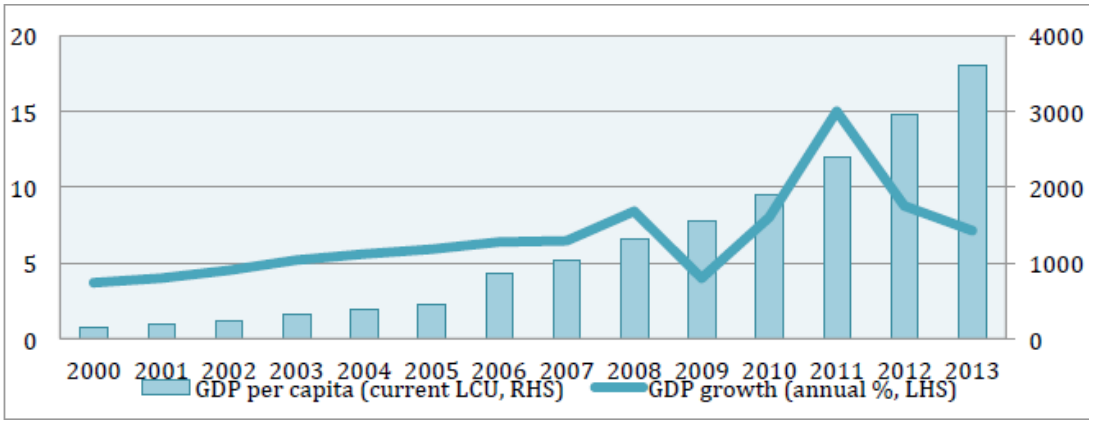


Source: Aubynn (2013)

4.2.2 *Recent macroeconomic trends in Ghana*

In the past few years, Ghana has maintained a robust economic growth. The country has experienced a measurable growth trajectory with an average annual growth rate of 6 per cent (Okudzeto et al., 2014). Ghana's GDP per capita grew year-on-year from US$ 1,100 in 2009 to US$ 1,668 in 2013, at an average of 11 per cent per annum. In 2013, Ghana's real GDP grew by 7.1 per cent, which is a deceleration from 8.8 per cent in 2012 (See Figure 7).

Figure 7. GDP growth in Ghana (2000-2013)



Source: Author's compilation (2015).

A disaggregation of GDP in 2013 shows that the services sector of the economy recorded the highest growth rate at 8.9 per cent, followed by industry at 7.0 per cent, and agriculture at 5.2 per cent (Bank of Ghana, 2014). Despite the fact that crop production contributes the highest share of the GDP (16.9 per cent), the Bank of Ghana (2014) observed that, in real terms, the contributions of the agricultural sector to overall economic growth declined (See Table 2). However, it remains to be seen if this decline in the agricultural sector is due to the movement of labour and capital to the manufacturing sector, or just a sheer decrease in production. Non-oil GDP grew by 6.5 per cent in 2013, compared with 8.1 per cent in 2012 (ibid). Recent growth in the economy has been fuelled by the upsurge in the service-oriented sectors and industry, which on average have been growing at a rate of 9.0 per cent over the past five years (AfDB, 2014).

Table 2. GDP growth by sector (%) in Ghana (2010-2013)

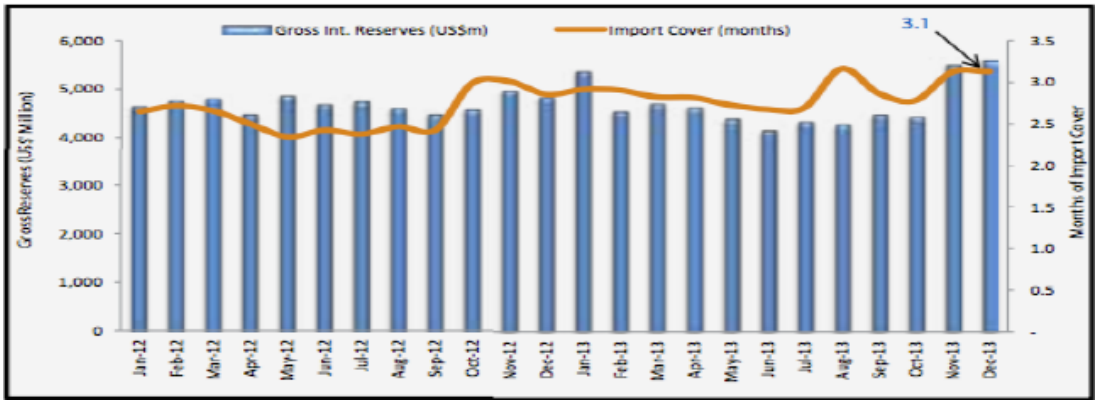
Sector	2010	2011	2012	2013
Agriculture	5.3	0.8	2.3	5.2
Industry	6.9	41.6	11.0	7.0
Services	9.8	15.5	8.8	8.9
GDP growth	8.0	15.0	8.8	7.1

Source: Bank of Ghana (2014).

Generally, the economy is expected to maintain a positive outlook with more private sector investment, increased production in the oil and gas sector, additional investment in public infrastructure, coupled with continued political stability. Headline inflation in Ghana increased from 8.8 per cent in December 2012 to 13.5 per cent in December 2013 (Bank of Ghana, 2014). This represents a 4 per cent increase above the end-year inflation target of 9.5

per cent[13]. Recent inflationary pressure has been attributed to a series of upward adjustments in the prices of petroleum products and utility tariffs, coupled with the depreciation of the GH₵ against the major trading currencies (ibid). In the same vein, the Monetary Policy Rate (MPR) – the interest rate – ended the year 2013 at 16.5 per cent (ibid). This brought the real interest rate in 2013 to 3 per cent. A reduction in Government revenue and an increase in expenditure caused a budget deficit of 10.1 per cent of the GDP (ibid). On the external front, Ghana's balance of payments reduced its deficit from US$ 210.9 in 2012 to US$ 1,166 in 2013 (ibid) (see Figure 8).

Figure 8. Gross international reserves in Ghana (US$ million)



Source: Bank of Ghana (2014).

4.2.3 Extractive industries, job creation and social conditions in Ghana

In terms of job generation, the extractive sector in Ghana is limited in its collective job generating capacity when compared with other sectors of the economy. It is estimated that about 220,000 new mining jobs were created in Ghana between 1987 and 2002, and the mining sector spent millions each year on goods and services from local businesses around areas of operations (Opoku-Dapaah and Boko, 2010). In 2013, the EI had a workforce of 17,103 people, which was broken down into 16,819 Ghanaians and 284 expatriates. Collectively, wages and salaries to personnel in the mining industry amounted to US$ 670 million (Ghana Chamber of Mines, 2013). It is imperative to note that the average real wage in the EIs in Ghana tends to be higher than the national average. However, wage statistics in the mining sector tends to be bloated by the very high salaries of the expatriate staff in the sector (Akabzaa et al., 2007). This record of job creation is impressive but does not reflect recent trends in the sector. The recent number of jobs created by the sector is not commensurate with the investments in the sector. The paucity of jobs in the mining sector in Ghana has been attributed to the fact that mining companies in the country have surface mining operations, which are capital-intensive with relatively low labour requirements (Amponsah-Tawiah and Dartey-Baah, 2011).

In addition to the enclave nature of the mining industry, the inability of the sector to create more direct jobs has equally been attributed to the operating practices of extractive companies and the activities of unregulated artisanal mining popularly known as "galamsey" in Ghana (Akabzaa, et al., 2007; Roe and Samuel, 2007). Besides direct jobs, the mining sector in Ghana is said to have created indirect jobs by attracting a number of service companies such as security services, transport companies, and explosive manufacturers (Roe

[13] The Bank of Ghana has been operating under an official inflation-targeting regime since 2007.

and Samuel, 2007). However, in the absence of reliable data, it is difficult to estimate the indirect employment created by Ghana's extractive sector.

Apart from some positive economic effects of the EIs in Ghana, the sector has equally caused some notable socio-economic and environmental challenges in the mining communities across the country. To this effect, many have questioned the net benefit of the huge investment in the EIs. Increased mining activities in Ghana have had negative impacts such as physical degradation, chemical contamination, mining-related sicknesses and cultural disruption of mining communities (Akabzaa et al., 2007). Copper mining operations have generated waste and caused heavy metal pollution and river contamination in local communities. Akabzaa et al. (ibid) estimate that the Obuasi goldmine has crushed 150 million tons of ore rock and generated an estimated 600 million tons of waste. Such waste, coupled with sites of frequent, but unreported cyanide spillages and leakages from containment ponds, have had considerable effects on water resources in the mining communities like Dokyiwo (ibid). In addition, the lack of enforcement of existing mining regulations has encouraged the problem of child labour in the artisanal mining sector in Ghana. Thus, child labour constitutes a major social ill of the mining industry in the country.

The paradox of mining activities, especially surface (open-pit) mining introduced in 1989, is that few direct jobs are created for the people, and the same communities are also denied their agricultural lands. Akabzaa et al. (2007) observe that by the late 1990s, more than 70 per cent of the land surface in the Tarkwa-Prestea-Bogoso-Abosso-Nsuta axis in Ghana was under concessional licenses (mostly exploration) to mining companies operating in the area. Poverty has been marginally reduced in some parts of Ghana. However, as the United Nations Development Programme (UNDP) (2012) observed, poverty has remained endemic in the three northern regions to the extent that it would be a difficult hurdle for these regions to reduce extreme poverty. Ghana's national statistics on poverty estimates is that about 40 per cent of the national population has incomes below the upper poverty line; whilst about 27 per cent of the population has incomes below the extreme poverty line.

As Akabzaa and Ayamdoo (2009: p. 26) observed that, while "Ghana's mineral wealth is not in dispute, its impact on national economy is." In general terms, large-scale EI in Ghana have weak backward and forward linkages, thus leading to little impact on the wider national economy. Despite the recent increase in Ghana's GDP, part of which was contributed by gold mining activities, many scholars have argued that most returns on capital investment and entrepreneurship in the EI in Ghana flow out of the economy while the Government retains only a fraction of the mineral wealth (Akabzaa et al., 2007). This outflow is mainly due to the high capital allowance and incentives, many years of tax holidays, tariff concessions, and unregulated repatriation of profits, debt servicing and other foreign costs. With respect to job creation, mining creates few jobs as most ores are exported in raw forms, thereby depriving the economy of jobs that could have been created through value addition. Thus, recent economic growth in the country can hardly be characterized as "inclusive" due to the above factors.

4.2.4 Mining policy and legislation in Ghana

The EI in Ghana is regulated under a number of policy regimes. The first is the Provisional National Defence Council (PNDC) Law 153, which was enacted in 1986 under military rule, as part of the Structural Adjustment Program (SAP) and the Economic Recovery Program (ERP). The mining legislation sought to provide a stable policy environment plus significant financial incentives to attract private investment. This includes generous capital and investment allowances, exemption from customs duties for certain mining equipment, tax-free remittances for expatriate staff and a 3-12 per cent royalty. As Rutherford and Ofori-Mensah (2011) observed, many resource-rich African countries followed the footsteps of Ghana by enacting similar mining codes with rich incentives for mining companies. Although, the 1986 law was replaced by the Minerals and Mining Act in

2006 developed with technical assistance from the World Bank, the new policy continued to maintain a focus on investment promotion, and ended up keeping the structure of the 1986 PNDC law (Rutherford and Ofori-Mensah, 2011).

Partly due to the shortcomings of the 1986 PNDC Law 153, a legislative amendment was passed in 2006 under the Mineral's Mining Act, 2006 (Act 703). This policy amendment maintained a lot of incentives and exceptions for the mining companies. Obviously, the 5 per cent return to the state from mining proceeds stipulated in the past law was not commensurate with the social and environmental costs associated with mining operations. This fiscal reality resulted in the subsequent amendment of the Mining Act, under the Minerals and Mining (Amendment) Act, 2010 (Act 794), which provided for a 5 per cent tax rate on the total revenue earned from minerals across the board. The Amended Act is a clear departure from the previous mining policy regimes in the country. The new policy provides a flat rate, which is independent of profitability. The new policy framework also consolidates various policies in the mining the sector in Ghana. According to the policy document, the goal is to ensure the continued development of a thriving mining industry that will contribute to sustainable economic development. Mining policy in Ghana also makes provision for extractive companies to give preference to materials and goods made in Ghana.

From another policy perspective, the National Development Planning Commission of Ghana established a medium-term National Development Policy Framework in 2010, which aims at laying the foundation for structural transformation of the economy within the decade ending in 2020 (Government of Ghana, 2010). This policy framework focuses on the implementation of growth-inducing policies, viewed as catalysts to wealth creation and sustainable poverty reduction (ibid). The medium-term development strategy is an integral part of macroeconomic prudence, and for the sustainable exploitation of the country's extractive resources. The policy's goal is to support strategic investments in human capital, infrastructure, human settlements, science, technology and innovation to drive industrialization – in particular, manufacturing (ibid). To accomplish these goals, the Government plans to increase public expenditure for policies, programmes and projects in agriculture, infrastructure (including energy, oil and gas), water, sanitation, health and education (including information communication technology, science, technology and innovation) (ibid). The framework plans to address the challenge of unemployment in the country by converting opportunities from the nascent oil and gas industry into job creation, especially for the youth. Thus, the policy recognizes the need to utilize revenues from oil and gas industries to facilitate higher value addition in other sectors such as agriculture.

Another policy measure is the National Plan of Action for the Elimination of the Worst Forms of Child Labour in Ghana (2009-2015). This policy framework outlines the commitment of the Government to support the elimination of child labour in the country. To this effect, a National Plan of Action (NPA) was put in place through the Ministry of Employment and Social Welfare (MESW) with support from the International Programme on the Elimination of Child Labour (Government of Ghana, 2009). It is important to note that the Newmont Mining Corporation in Ghana has implemented the principles of corporate social responsibility in its extractive activities in the country. The Newmont Corporation has contributed to the development of the Ahufo mining community in Ghana (see Appendix 1).

4.3 Extractive industries in Mozambique

4.3.1 Extractive industries in Mozambique

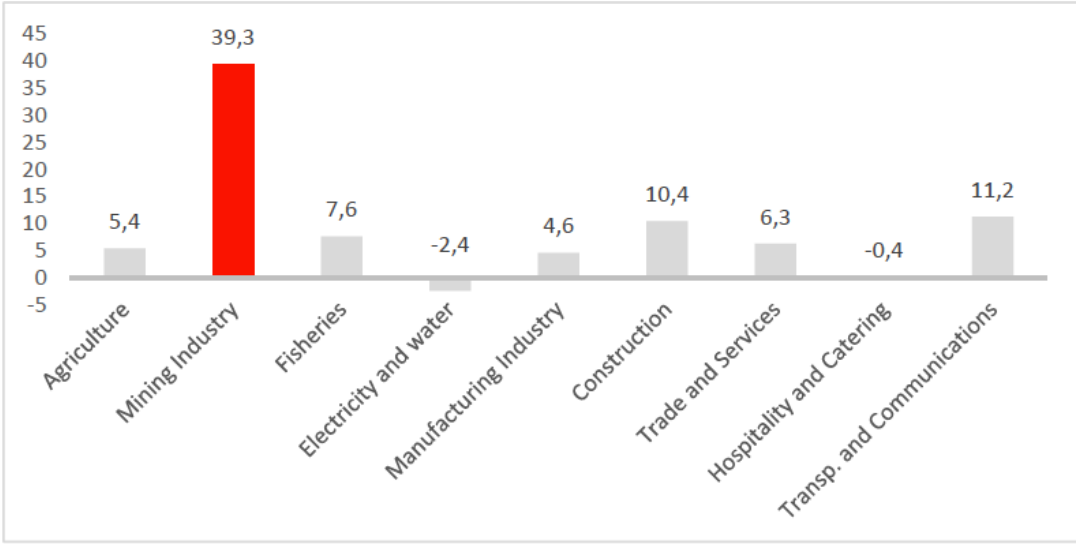
Mozambique has a population of 25 million people, and is endowed with many mineral resources. Some of the country's hard minerals include iron ore, vanadium, niobium, tantalum, titanium and zirconium. For instance, in 2012 the country produced 6 per cent of the world production of limonite, 3 per cent of zircon, and 1 per cent of aluminum. The

country also produces a significant percentage of the global output of tantalum and rubies (AfDB et al., 2014; Yager, 2014). Other significant sectors in the extractive industry (EI) in the country are cement and natural gas. The EI, especially coal and aluminium mining, have contributed enormously to economic growth since the end of armed conflict in Mozambique. In 2012, national exports were valued at US$ 3.47 billion, of which aluminium accounted for 31.5 per cent; coal 12.5 per cent; limonite, rutile, and zircon 7.3 per cent; and natural gas 4.9 per cent (Banco de Moçambique, 2013). It is estimated that Mozambique's offshore fields hold a combined 150 trillion cubic feet of liquefied natural gas (LNG), estimated to be enough to meet world consumption for more than two years (AfDB et al., 2014).

Recent growth in the economy was mainly boosted by expansion in the EI, particularly with the launch of aluminium production in 2011 in Beluluane District of Boane (Maputo Province) by Mozal. Others include the launch of mineral coal production in Moatize and Benga (Tete Province) in 2011 by Vale and in 2012 by Rio Tinto, natural gas production in Pande and Temane (Inhambane Province) in 2004 by Sasol (EITI, 2014a). As demonstrated in Figure 9, the robust growth of the EI was approximately 40 per cent in 2012.

Major operations in the EI in Mozambique such as coal mining and aluminium smelting began not too long ago. Resenfeld (2012) reports that extractive companies are required to pay royalties of 3 per cent on all extracted coal, and a corporate tax of 32 per cent on profits. The mining sector is reported to have contributed US$ 57 million – or 700 billion Mozambican Meticais (MZN) – to Government revenue in 2013 (Levy, 2014). As the Figure 10 indicates, Government revenue from the extractive sector has risen recently. However, the Government is still contemplating reviewing the country's mining tax code.

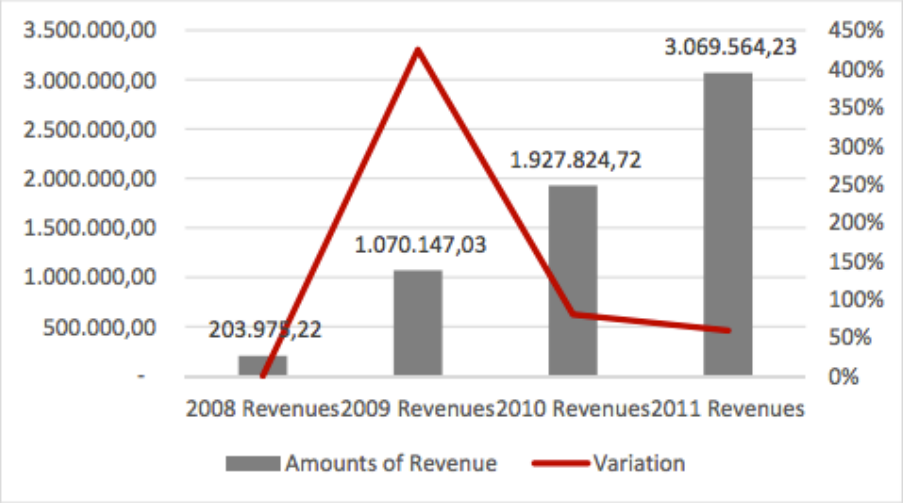
Figure 9. Annual growth by sector of activity in Mozambique (2012) (%)



Source: EITI (2014a).

Coal companies in Mozambique adopt the open-pit form of mining. Given the capital-intensive nature of this approach, the potential of job creation is slim when compared with the size of investments in the sector. The implication is that few citizens of Mozambique benefits directly from EI projects. Using data from the Ministry of Mineral Resources and some companies, Resenfeld (2012) estimates long-term direct employment of Mozambicans in the extractive sector at about 7,500, while the IMF estimates it at about 7,000 jobs.

Figure 10. Government benchmark revenue reported in Mozambique (MZN thousands) (2008-2011)

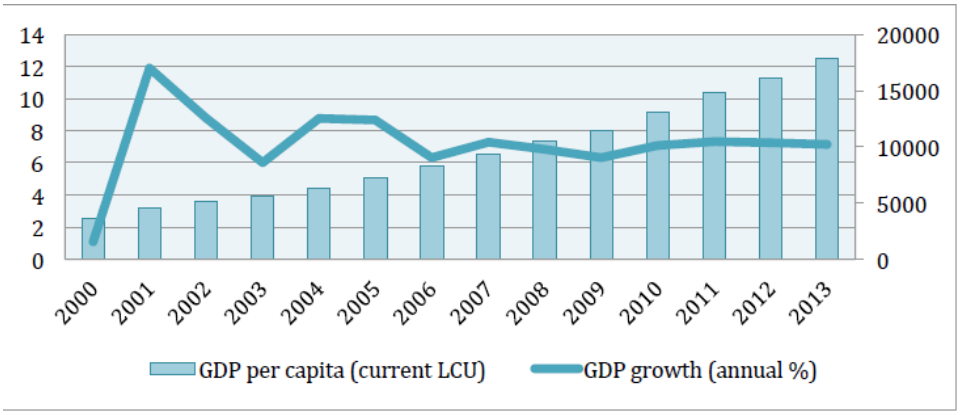


Source: EITI (2014a).

4.3.2 *Recent macroeconomic trends in Mozambique*

Mozambique's economy has made some improvements following the end of major conflict in the country. The economy is was growing at the rate of 7 per cent of the GDP each year, making it one of Africa's strongest economies (Jackson, 2013). In 2012, the economy grew in real terms by 7.4 per cent (Banco de Moçambique, 2013). This represents an acceleration in the economy of 10 basis points over the 2011 growth rate of 7.3 per cent (see Figure 11). The upsurge in economic growth is mainly driven by the contributions of the EI, manufacturing, financial services, agriculture, transportation and communication (ibid). The economy grew 7 per cent in 2013 mainly due to mega-projects, predominantly funded by inflow of FDI in EI, especially the aluminium and energy sectors (AfDB et al., 2014). Propelled by the increase in coal exports, the extractive sector grew the most in 2013 at 22 per cent (ibid). Available data from the Central Bank of Mozambique (Banco de Moçambique, 2013) shows a slowdown of annual inflation from 5.46 per cent in 2011 to 2.18 per cent in 2012. The continuous increase in coal production, amidst large infrastructure projects, is expected to keep the economy in the current growth trajectory at a projected 8.5 per cent in 2014 and 8.2 per cent in 2015 (ibid). The stock of the country's net international reserves increased from US$ 323 million in 2011 to US$ 366 million in 2012, or the equivalent of five months imports (ibid).

Figure 11. Real DGP growth in Mozambique (2000-2013)



Source: Author's compilation (2015).

4.3.3 The labour market and poverty rate in Mozambique

Despite robust economic growth in recent years, the Mozambican economy remains structurally untransformed and predominantly dependent on natural resources, especially in rural areas. Agriculture remains the biggest sector in terms of output and labour markets in the country. The share of agriculture and fisheries (i.e. the primary sector) in total output was 29.6 per cent in 2012, and it is estimated that more than 80 per cent of the labour force was engaged in agriculture in 2010 (Inui, 2014). Citing a recent report of the United Nations Conference on Trade and Development (UNCTAD), the African Development Bank (AfDB) et al (2014) observed that from 1992 to 2010, 30 per cent of FDI was directed towards small- and medium-sized enterprises (SMEs), creating 19 times more job opportunities than investments in EI megaprojects in Mozambique (ibid).

As stated above, Mozambique's economy relies heavily on the investments in the EI, particularly coal mining and aluminium smelting projects. Private investment in the extractive sector amounted to US$ 7 billion from 2005 to 2011, while an estimated US$ 15 billion will be invested in coal extraction in the coming years (AfDB et al., 2013). In the same vein, estimates for the development of the gas sector range between US$ 200-400 billion over the next 40 years (ibid). However, there is a sharp contrast between the volume of FDI inflow and the number of jobs created in the economy from such investments. For instance, the private sector in Mozambique created less than 18,000 jobs, and only 3,800 direct jobs were created by the megaprojects in the EI in 2010 (AfDB et al., 2014).

Without factoring in unpaid family labour, the Mozambican national statistics show that the unemployment rate in the country is about 22 per cent (ibid). As the AfDB et al. (2013: p. 160) have noted, even with the expected creation of additional direct and indirect jobs in 2016, when coal is expected to reach full exploitation, the number of jobs in the that sector will remain insignificant considering the estimated 370,000 annual entrants to the labour market. Besides the enclave character of resource extraction, the inability of the megaprojects in the mining sector to translate into more jobs in the economy is compounded by a number of factors prominent among which are: weak human capital, high skilled labour and quality input requirements from extractive companies, the high cost of credit, deficient infrastructure, and the uncertain of security situation in Mozambique (ibid).

The 2008 poverty survey shows that 55 per cent of people in Mozambique lived below the poverty line (AfDB et al., 2014). Thus, extreme poverty remains high in the country. Mozambique's HDI value for 2013 is 0.393, and this positions the country at 178 out of 187 countries and territories. The UNDP (2014) explains that the country's HDI value increased between 1980 and 2013 from 0.246 to 0.393, an increase of 59.6 per cent, or an average annual increase of about 1.43 per cent. Despite such improvements, the country remains one of the poorest in the world. High levels of extreme poverty have persisted partly due to the jobless growth of the economy and the continued armed conflict in some parts of the country in recent years. The above issues can be addressed partly by the "local content" bill, which is aimed at strengthening the economic linkages of the EI in the country.

4.3.4. Policy and regulation of the extractive industries in Mozambique

The Ministry of Mineral Resources and Energy, which operates through its subordinate institution of the National Directorate of Mines (*Diretório Nacional das Minas* - DNM), has overall authority and jurisdiction over all issues regarding mineral resources in Mozambique (Ministry of Mineral Resources and Energy, 2002). There are several regulatory frameworks for the EI in Mozambique (See Appendix 2).

In 2013, the Government of Mozambique drafted the *Policy and Strategy for Mineral Resources*, which was approved by the Council of Ministers, dated 17 December 2013 (EITI,

2014a). The policy is premised on four principles: (i) ownership, (ii) beneficiation[14], (iii) sustainability, and (iv) environment. The goal of this policy is to ensure that the management and extraction of natural resources in the country will be conducted in a more sustainable and transparent manner, thereby enhancing the optimum benefits of such resources for economic development and transformation of the country. Besides, the country had also set up institutional arrangements for the validation through the publication of the first EITI.

Besides, EI regulations, there are other policies, strategies, laws and instruments that impact on employment and labour issues in Mozambique. For instance, the Government's principal policies and programmes are contained in its *Five-year Development Plan* (2010-2014), the key objectives of which are to combat poverty and promote the culture of work. For instance, Act No. 4/2007 defines the bases for and organization of social protection within the social security system, while Decree No. 53/2007 promulgates the Compulsory Social Protection Regulation (Government of Mozambique, 2013). This legislation reinforces the compulsory social protection of citizens under the country's Constitution. In the same vein, Act Number 50/09 of 11 September established the Labour Mediation and Arbitration Commission (COMAL) and approves the respective regulations in Mozambique (ibid). There is also the Labour Market Sector Policy Resolution 6/97 of 4 March in Mozambique. The objective of this policy is to "promote full employment, guarantee labour legality, protect workers, and consolidate social dialogue" (Baah–Boateng et al., 2013). The focus is the "creation of employment opportunities and competence development for the labour force though professional training" (p. 22). This policy expects to stimulate the economy and generate formal employment by offering skills training and the creation of micro- and small-sized enterprises in the in the economy. The program is planned for a five-year duration through the National Institute for Professional Training (INFP) (ibid). The programme, which gives priority to the youth, women and persons with disabilities, is expected to train about 1,000,000 job seekers (ibid).

4.4 Extractive industries in Sierra Leone

4.4.1 Extractive industries in Sierra Leone

Sierra Leone has a population of 7.1 million people, and is rich in many minerals resources, prominent among which are: chromite, iron ore, platinum, gold, diamonds, bauxite, rutile (titanium dioxide), ilmenite, zircon, and rare earth elements such as columbite–tantalite (coltan)(Mansaray, 2013). Sierra Leone has a long tradition of mineral extraction dating back to pre-colonial times, ranging from the diamond industry to, in more recent times, rutile and iron ore. The mineral sector in Sierra Leone is made up of three sub-sectors:

a) large-scale production of non-precious minerals – rutile and bauxite;

b) large scale production of precious minerals – diamonds; and

c) artisanal and small-scale production of precious minerals – mainly diamonds, and to a much lesser extent, gold (World Bank, 2008).

However, iron ore mining is beginning to make a significant contribution to economic growth in Sierra Leone. In 2012. the country' total export receipts from diamond, iron ore, and rutile concentrate amounted to US$ 1.1 billion, while export revenues from the mineral sector accounted for 70.7 per cent of total export receipts (Bermúdez-Lugo, 2013). To some extent, the extractive industry (EI) has improved government revenue in Sierra Leone. According to

[14] Local beneficiation entails the promotion of local participation, both in mining ownership and in providing services to the extractive industry (Levy, 2014).

the third report of the Sierra Leone Extractive Industries Transparency Initiative (SLEITI) (2013), the Government earned the sum of US$ 27.6 million from the mining sector in 2011. However, the revenue from the EI in Sierra Leon falls short of its potential. Curtis (2014) estimates that the Government lost revenues worth US$ 224 million in 2012, amounting to 8.3 per cent of GDP, while the 2011 losses were even higher – 13.7 per cent of GDP. The losses in government revenue since 2009 have been attributed to tax incentives granted to the mining sector. Curtis (2014) further estimates that the Government will lose additional revenues to the tune of US$ 131 million in the three years 2014-16 alone from corporate income tax incentives granted to five mining companies (ibid). Insufficient tax revenue from the mining sector has hampered the efforts of the Government to invest sufficiently in the social and economic needs of society, such as education, health services, infrastructure and the provision of social protection for vulnerable groups. Thus, tax incentives granted to extractive companies, many of which were negotiated behind closed doors, has denied impressive revenues to the government thereby making inclusive growth difficult in the country.

Given that very few Sierra Leoneans have the financial strength to fund prospecting and mining activities in the EI, large-scale mining operations in the country are foreign-owned (e.g. Sierra Rutile Ltd. in rutile, Sierra Minerals Ltd. in bauxite, and Koidu Holdings Ltd. in diamonds)(USAID, 2010). During the civil war in Sierra Leone, warlords used artisanal mining activities to finance arms purchase. However, activities in the EI have increased tremendously in the post-conflict era. For instance, diamond production doubled especially between 2004 and 2007, and accounted for 70 per cent of all mineral export earnings and about 54 per cent of total export earnings in 2006, while gold production increased by 199 per cent between 2006 and 2007 (ibid). In the same vein, the resumption of bauxite and rutile production in 2006 increased export earnings by 39 per cent (ibid).

Information regarding the number of jobs created in the EI in Sierra Leone is scanty. However, major iron ore mining companies such as African Minerals Limited have contributed in infrastructure development in the country as part of the transition from mineral prospecting to production. For example, the company tackled the challenge of limited infrastructure by constructing railway lines and a port facility in the country (Foyle-Twining, 2013). As of December 2012, the company employed about 2,796 permanent staff in Sierra Leone (African Minerals Limited, 2013). According to the company's profile published in the *Mining Journal* (2013), Sierra Minerals – the only bauxite mining company in Sierra Leone – employed about 500 Sierra Leonean workers.

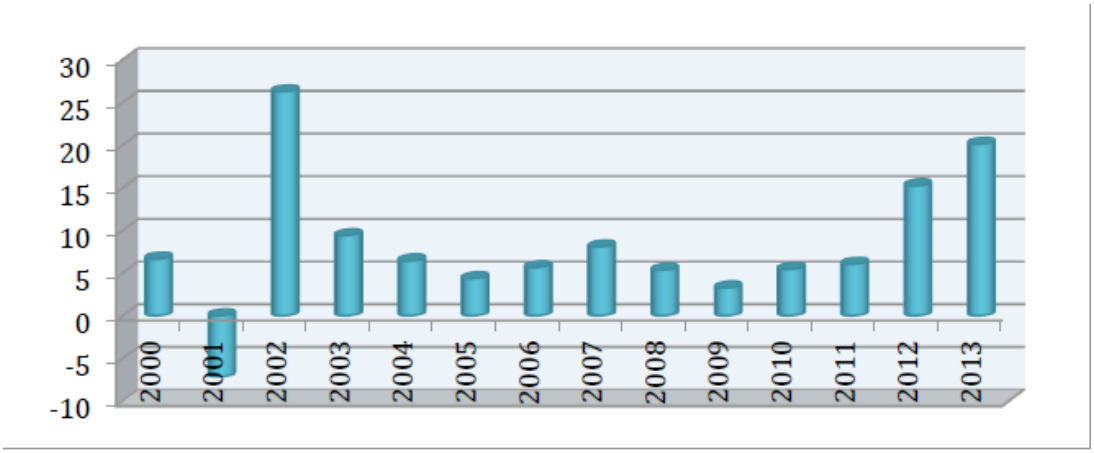
From another perspective, mining activities have also brought negative environmental and social consequences. Artisanal mining, which is dominated by the local population, has inflicted significant damage on the country's forests and biodiversity (ibid). Artisanal mining has caused loss of vegetation, soil erosion, and contamination of water sources (ibid). The United States Agency for International Development (USAID) (2007) report that mining activities, particularly in the Eastern and Southern Provinces of Sierra Leone, have caused deforestation and degradation of around 80,000–120,000 hectares of land, and the destruction continues without plans for land reclamation (USAID, 2010). Artisanal mining in Sierra Leon has resulted in child labour and abuse. Children are lured into the sector, thereby denying them the opportunity to attend school.

4.4.2 The macroeconomic outlook in Sierra Leone

Following the end of a decade-long civil war in 2002, Sierra Leoneans began the process of rebuilding the social and economic fabric of their society. Obviously, this era of peace has brought about a good measure economic dividends to the country. As the World Bank (2013b) reports, the highest overall GDP growth levels occurred in the country as economic activities are stabilized and institutions re-established. GDP growth in Sierra Leone has maintained a robust trajectory in the past decade. For instance, GDP increased to 15.2 per

cent in 2012 after expanding by 6.3 per cent in 2011 (Bank of Sierra Leone, 2012; World Bank, 2013b) (see Figure 12). This double-digit growth, driven by the onset of iron ore mining production, made the country one of the fastest-growing economies in the world in 2012. However, it must be emphasized that the overall economic situation in Sierra Leone is still difficult and the country remains among the poorest in the world. Citing the IMF, the Enhanced Integrated Framework (2013) observes that Sierra Leone's GDP per capita at US$ 615 in 2012 was the 16th lowest in the world (out of 183 countries).

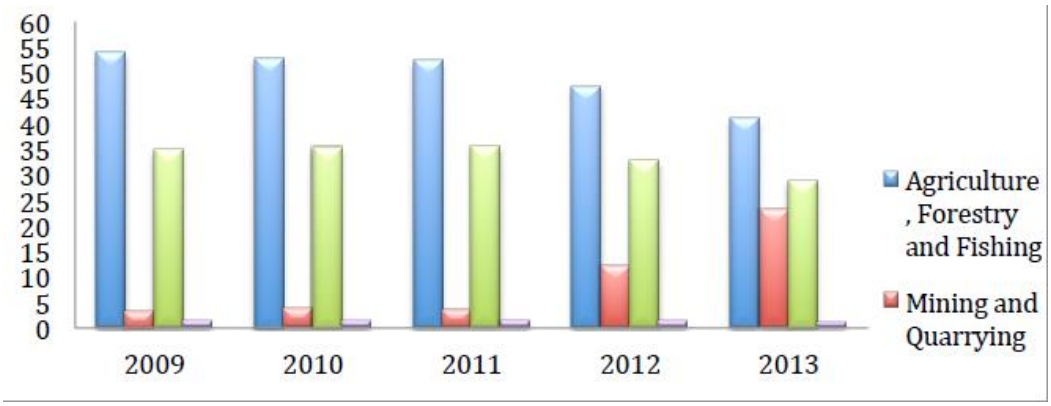
Figure 12. GDP Growth in Sierra Leone (% annual)(2000-2013)



Source: Author's compilation (2015).

Since the end of the war in 2002, Sierra Leone's GDP rose from US$ 1.43 billion in 2003 to almost US$ 3.8 billion in 2012 (Thorborg et al., 2014). The growth in Sierra Leone's GDP was due to increased production in the mining sector, particularly the recent commencement of iron ore extraction. Due to the expansion of mining operation at the Marampa and the Tonkolili iron ore mines, iron ore production in Sierra Leone increased from 137,000 tons in 2011 to 6.6 million tons in 2012 (Zayid, 2014). This huge increase in production was one of the highest growth rates in the world: the value of the iron ore exported in 2013 was over US$ 357 million – almost half of the total value of all natural resource exports in Sierra Leone (Thorborg et al., 2014). The African Development Bank (AfDB, 2013) projects that the mining sector contribution to GDP in Sierra Leone will reach 30 per cent in 2017 due largely to the expansion in existing large-scale iron ore operations.

Figure 13. The sectoral contribution to GDP in Sierra Leone (2009-2013)



Source: Author's compilation (2015).

Despite the increasing contribution of the EI, agriculture remains the mainstay of the economy. As shown in Figure 13, the agricultural sector, which includes forestry and

fisheries, is still the largest contributor to GDP and, employs about 70 per cent of the total workforce in the country. This sector declined from 52 per cent in 2011 to 42 per cent in 2013 (Coffey International Development Ltd, 2014; Bermúdez-Lugo, 2013). From 2009 to 2013, investment and production in the EI in the country increased the average GDP growth rate.

Excluding iron ore production, real GDP grew at 6.3 per cent in 2012 (Bank of Sierra Leone, 2012). This was due to increased activities in non-iron ore sectors such as agriculture, construction and other services, supported by an improved power supply (ibid). During this period, agriculture accounted for 42.0 per cent of the GDP, services 27.7 per cent and industry 27.3 per cent (ibid). It is also anticipated that the value of oil production to the Sierra Leone's economy will increase in the near future: the AfDB (2013) reports that offshore oil and gas exploration is ongoing, and that commercial production could begin after 2017. The commercial production of oil, coupled with the ongoing production of iron ore in Sierra Leone, promises to reduce the over-dependence on diamonds as a major source of revenue for the Government.

In an effort to achieve the objective of a single-digit inflation rate, fiscal and monetary policies have been restrictive in the past couple of years in Sierra Leone. The reduction in expenditure was supported with tax policy reforms to improve revenue collection. An example of structural tax reform was the expansion of the tax base and the introduction of the Goods and Services Tax (GST) in early 2009. This tax reform resulted in an increase of the revenue-to-GDP ratio from 10 to 13 per cent of GDP between 2009 and 2011 (AfDB, 2013). As a result of the unofficial single-digit inflation target, inflation rate dropped from 18.4 per cent in 2010 to 11 per cent in 2012 (ibid).

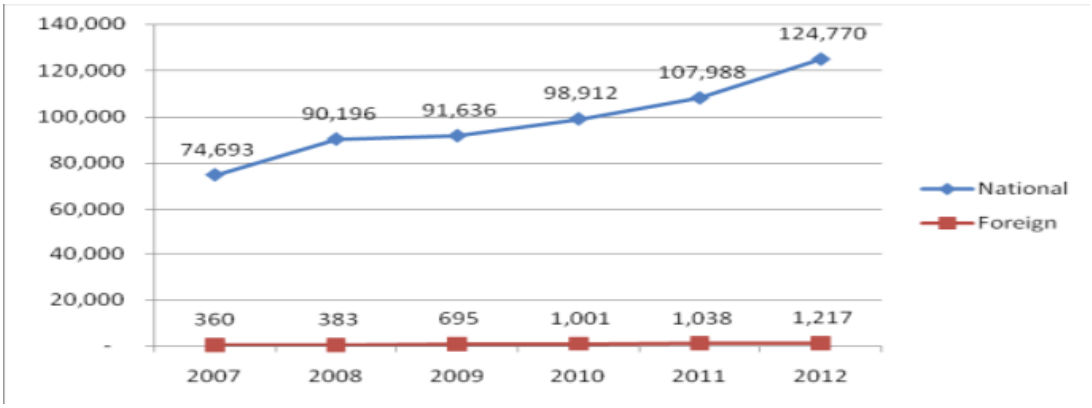
The Ebola epidemic in the country from early 2014 to early 2016 had a severe economic impact in the country: the disease spread to almost all the districts in the country. Farming and other economic activities were disrupted while international travel was restricted. Above all, there was a slow-down in critical mining operations as a result of foreign workers fleeing the country. The World Bank estimates that the epidemic will have reduced economic growth in the country to 4 per cent in 2014 (versus 11.3 per cent in pre-crisis projection), while there may be a zero growth in 2015 (World Bank, 2014a).

4.4.3 The labour market and poverty rate in Sierra Leone

With an average GDP growth rate of 5.2 per cent – excluding iron ore contributions – coupled with huge improvement in its HDI (AfDB, 2013; Government of Sierra Leone, 2013), one can conclude that post-conflict economic recovery efforts in Sierra Leone have been quite remarkable. Employment figures from Statistics Sierra Leone (2013) show that there has been steady job growth in the economy in recent years. For instance, the number of people employed in the country increased from 75,053 in 2007 in the various establishments to 109,026 in 2011 and 125,987 by August 2012 (Statistics Sierra Leone, 2013). This indicates that the employment of Sierra Leonean nationals improved from 7.9 per cent in 2010 to 9.2 per cent in 2011 and 15.5 per cent in 2012 (ibid) (see Figure 14).

However, it is important to note that Sierra Leone has a youthful population and 63 per cent of them are below the age of 25 years (ibid). A good proportion of these young people have limited education or vocational skills due to the decade-long civil war. This situation has made it more difficult to gainfully employ this group of youth in the small but weak formal labour market. Consequently, the AfDB projects that youth unemployment will reach 70 per cent in the next five years (AfDB, 2013).

Figure 14. Total job creation in Sierra Leone (2007-2012)



Source: Statistics Sierra Leone (2013).

Based on the 2011 Sierra Leone Integrated Household Survey (SLIHS) the poverty incidence in the country was 52.9 per cent in 2011, a decline from 66.4 per cent in 2003 (World Bank, 2013b). The decline in urban poverty is more notable relative to the decline in rural areas during this period: urban poverty declined from 46.9 per cent in 2003 to 31.2 per cent in 2011 (AfDB, 2013). In the same vein, overall inequality in the country has equally decreased. The Gini coefficient[15], which is calculated for per capita consumption, decreased from 0.39 in 2003 to 0.32 in 2011 (World Bank, 2013b). Despite the reduced rate of poverty, Sierra Leone remains one of the poorest countries in the world. The country was ranked 177 of 187 on the UNDP's HDI, while life expectancy is only 48 years, and over 50 per cent of the population lives in extreme poverty (Thorborg et al., 2014). The poverty situation in the country might even get worse as a consequence of the 2014-2016 Ebola epidemic.

4.4.4 Extractive industry policy and regulation in Sierra Leone

The governance of regulation of the EI in Sierra Leone is under the Ministry of Mineral Resources (MMR). This Ministry is responsible for the issuance of licenses, field monitoring, enforcement, and maintenance of records. The revised Mines and Minerals Act, 2009, and the approved National Minerals Agency Act, 2012, guide the regulatory functions of the Ministry. The Mines and Minerals Act (MMA) of 2009 established the policy framework. The National Mineral Agency Act of 2012 has the mandate for the implementation of minerals sector policy, legislation and regulations (Government of Sierra Leone, 2012). The National Minerals Agency is also essential in the implementation of the Kimberley Process Certification Scheme[16] (KPCS), which the country adopted in 2000.

In addition to the policy framework on mining, the Ministry of Trade and Industry has proposed the national Local Content Policy (LCP). This is a strategic plan, which promises to address the issue of beneficiation from the EI in Sierra Leone. The LCP is aimed at exploiting the multiplier effect of the EI in Sierra Leone through linkages with other aspects of the economy as up to now the increased FDI in the extractive sector has failed to translate

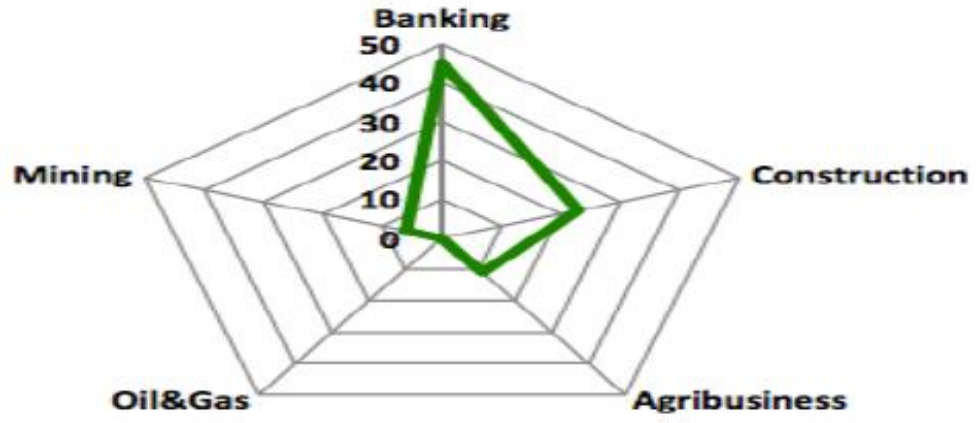
[15] The Gini Coefficient is a measure of income inequality that shows how much an income distribution differs from a situation of perfect income equality. The indicator fluctuates between 0 and 1 where 0 means there is no inequality (all people have the same income) and 1 represents the highest possible level of inequality (one person has all the income of the country and the rest having nothing) (Ture, 2014).

[16] The KPCS is a regulatory mechanism backed by a United Nations Resolution. It covers all diamond producing and processing countries. It stipulates that all diamonds in the international market must be accompanied by an authentic KP Certificate from a member state, and makes non-compliance a criminal offence. The aim of the KPCS is to curb smuggling and trade in conflict or "blood diamond" (Wonday, 2013).

to inclusive economic growth through job. Therefore, the objective of the policy is "to promote growth and development of the domestic private sector by creating linkages with the large domestic and foreign firms through the utilization of local resources and products, and to promote the integration of the Sierra Leoneans in all economic activities" (Ministry of Trade and Industry, 2013: p. 9).

As Figure 15 illustrates, the EI in Sierra Leone (i.e. mining, oil and gas) have the lowest level of content utilization in the economy. Through the creation of local content in the form of direct and indirect services to the EI by local contractors, the LCP promises to facilitate the transfer of knowledge and information to Sierra Leonean service providers in the insurance, legal, transportation, construction and banking industries. The policy also seeks to protect private businesses in the country, and by so doing, create job opportunities and ensure inclusive growth of the economy. Unfortunately, the Sierra Leonean Government has delayed passing the proposed bill on local content. This inaction has provoked local protests from diverse groups (see Appendix 3).

Figure 15. Local content utilization in Sierra Leone (%)



Source: Enhanced Integrated Framework (2013: p. 48).

The enactment of the Mines and Minerals Act of 2009, the establishment of an online repository or cadastral system to ensure transparency in the mining sector, and the establishment of the National Minerals Agency (NMA) for policy implementation are steps in the right direction. However, it remains to be seen how this policy will be implemented to promote inclusive growth and for the benefit of the people of Sierra Leone.

In addition to EI regulations, Sierra Leone's *Agenda for Prosperity* (Government of Sierra Leone, 2013) supports inclusive economic growth and poverty reduction through job creation and the establishment of a decent work environment. This national vision for development is articulated in 8 "pillars"[17] or goals, which reinforce broad-based economic growth in the country. The Decent Work Country Program (DWCP) for Sierra Leone also has policies and investment programs in key sectors, which effectively promote the creation of more jobs and higher income opportunities for youth, farmers, women and vulnerable groups (Government of Sierra Leone and ILO, 2010). Besides, key development partners in Sierra Leone like the United Nations (UN), German Development Cooperation (GTZ), the

[17] The 8 Pillars are: 1 – Diversified Economic Growth; Pillar 2 – Managing Natural Resources; Pillar 3 – Accelerating Human Development; Pillar 4 – International Competitiveness; Pillar 5 – Labour and Employment; Pillar 6 – Social Protection; Pillar 7 – Governance and Public Sector Reform; and Pillar 8 – Gender and Women's Empowerment (Government of Sierra Leone, 2013).

World Bank and the European Union, have all come together with the Government of Sierra Leone in a sector-wide approach to tackle the challenge of youth unemployment (Government of Sierra Leone et al., 2010). The programme for job creation is focused on the following areas: labour-intensive public works; private sector and agribusiness jobs; skills development and employment support; youth empowerment; research on the situation of youth; and sectoral planning and coordination.

With the assistance of the UN system and the support of international donors, the Government of Sierra Leone formulated a *National Youth Employment Action Plan* that served as the overall framework for youth employment (Koroma, 2012). The Plan led to the establishment of the Youth Employment Scheme (YES) in the country, which aims to provide empowerment and employment opportunities for young people and develop a medium- and long-term strategy in line with the implementation process of the Government of Sierra Leone's (2005) *Poverty Reduction Strategy Paper* and the Millennium Development Goals (MDGs).

4.5 Extractive industries in Zambia

4.5.1 Copper mining and inclusive growth in Zambia

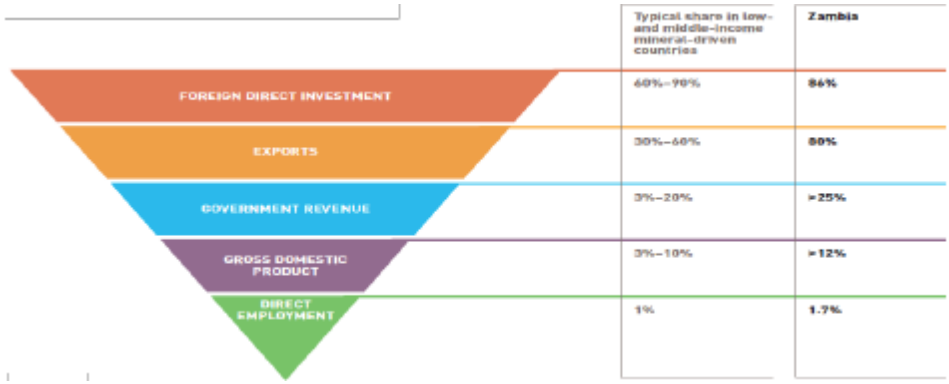
The Republic of Zambia has population of 16.2 million with a huge deposit of mineral resources. According to the Ministry of Mines, Energy and Water Development (2013), copper was first discovered in the country at the turn of the twentieth century, but large-scale production began in earnest in the 1930s with the start-up of Roan Antelop (Luanshya – 1931), followed by Nkana (1932), Mufulira (1933), and Nchanga (1939). By the 1950, copper production in the country had reached 400,000 t.p.a (ibid). Zambia is rich in mineral wealth and ranks as 7th largest producer of copper. It possesses 6 per cent of the known world copper reserves and ranks 26th out of 79 jurisdictions worldwide for mineral potential (Siwale, 2013; World Bank, 2011). With mining and quarrying accounting for 80 per cent of total exports, it is obvious that the country's economy is not diversified and relies heavily on the EI. Dating back to the 1930s, different interest groups have been engaged in industrial mineral extraction in Zambia. Yet, mineral wealth has not been used to grow the economy in an inclusive fashion through linkages to other sectors of the economy. Despite the increase in investment in copper mining in Zambia, and the increased contribution of the sector to the country's GDP (12.9 per cent), the sector has not brought about the needed transformation of the economy. Comparatively, Zambia's per capita income in 1969 was not only one of the highest in Africa, but it was significantly higher than those of present-day upper middle-income nations such as Brazil, Malaysia, the Republic of Korea, and Turkey (Ferguson, 1999, cited in Ingle, 2012: p. 5468).

Socially, nearly two-thirds of the more than 13 million population live below the international poverty line of US$ 1 per day (CMZ and ICMM, 2014), making the country one of the least developed countries in Africa. The implication is that the recent economic growth in Zambia has not been inclusive enough to create more jobs and reduce poverty. With a Gini coefficient of 0.65 in 2012, economic inequality in the country has widened given that mostly those above the poverty line have benefited from recent economic growth. Consequently, Zambia has the third highest level of economic inequality in sub-Saharan Africa, after South Africa and the Seychelles (World Bank, 2013c).

Generally, the high dependence on the mining sector shows that Zambia conforms to the inverted pyramid pattern of macroeconomic contributions of mining (see Figure 16). The model shows that mining makes very high contributions in some macro areas (notably exports and investment) but progressively lower contributions in other areas such as government revenues, GDP and employment (CMZ and ICMM, 2014). The contribution of the mining sector to overall job creation in Zambia is very minuscule when compared with

other macroeconomic contributions. According to the Labour Force Survey for 2012, over 90,000 total formal employments were created in the mining sector in 2012. This represents 1.7 per cent of the labour force, 8.3 per cent of total formal sector jobs and around 25 per cent of total private sector formal jobs in 2012 (CMZ and ICMM, 2014).

Figure 16. The national contribution of mining in Zambia (2012)



Source: CMZ and ICMM (2014).

Following the privatization of mining operations, the sector attracted increased amounts of FDI into the Zambian economy. There has been a huge increase in the total FDI flow from around US$ 90–200 million between 1970-1990s, to almost US$ 2 billion by 2011 (CMZ and ICMM, 2014). Due to increased global demand, which stems in part from the continuous growth in China and India, copper outputs and prices have been rising. For instance, in 2011, copper output in Zambia reached 833 metric tons, just short of the industry's peak of 877 metric tons reached in 1973 (Simpasa et al, 2013). These trends in the global market led to an increase in copper export earnings, which reached a record of US$ 6.7 billion in 2011 (36 per cent of GDP), up from US$ 0.6 billion (14 per cent of GDP) in 2003 (ibid). Correspondingly, Government revenue from mining taxes has also increased. Mining taxes (which includes pay-as-you-earn (PAYE) employee taxes, and royalties) contributed about 30 per cent of total government tax collections in 2012 (representing around 5.9 per cent of GDP) (CMZ and ICMM, 2014).

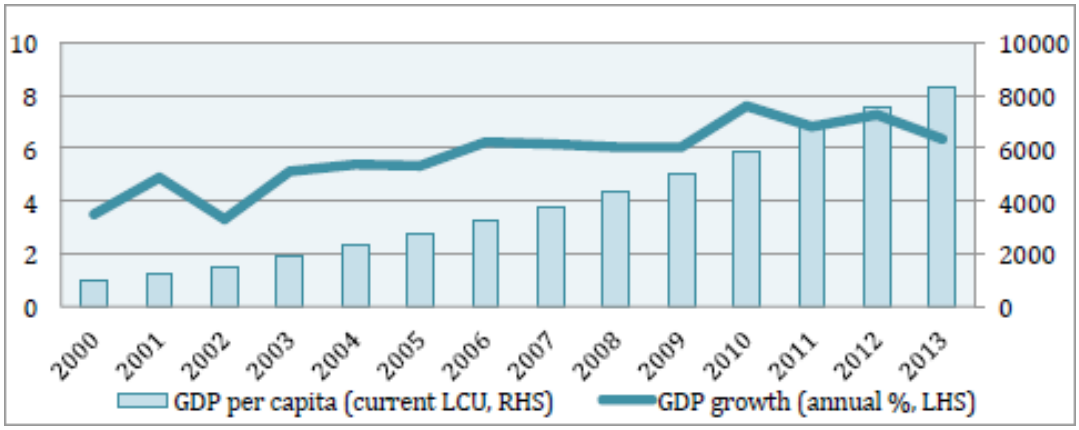
The Zambian Government has made some efforts in promoting social protection measures beyond the regular employee pension scheme in the country. In an effort to eradicate hunger and extreme poverty in rural households, the Government scaled up the Social Cash Transfer Scheme in 2014 (Minister of Finance (Zambia), 2014). According to the Minister of Finance, by June 2014 over 145,000 individuals had benefited from the cash transfer program, of which more than 80 per cent are female (ibid). The estimate is that by the end of 2014, the program will have reached about 190,000 beneficiaries in the country. The cash transfer scheme, which is scheduled to continue in 2015, promises to bring inclusiveness in Zambia's growth pattern.

4.5.2 Recent macroeconomic trends in Zambia

The Zambian economic has experienced strong economic growth in the past decade. Zambia has a GDP per capita of US$ 1,280 and the country's GDP grew at the rates of 6.4 and 7.3 per cent in 2013 and 2012 respectively (Tesliuc et al, 2013; World Bank, 2014b) (Figure 17). When decomposed, it becomes clear that recent growth in the economy was primarily driven by several factors, including measureable increase in public infrastructure spending, rising urban incomes, and increases in public employment. These factors fed into the recent expansions in the transportation sector, storage and communications, construction, community, social and personal services (Bank of Zambia, 2014; World Bank, 2014b).

Besides, financial institutions and other economic indicators have performed credibly well in recent years (Bank of Zambia, 2014).

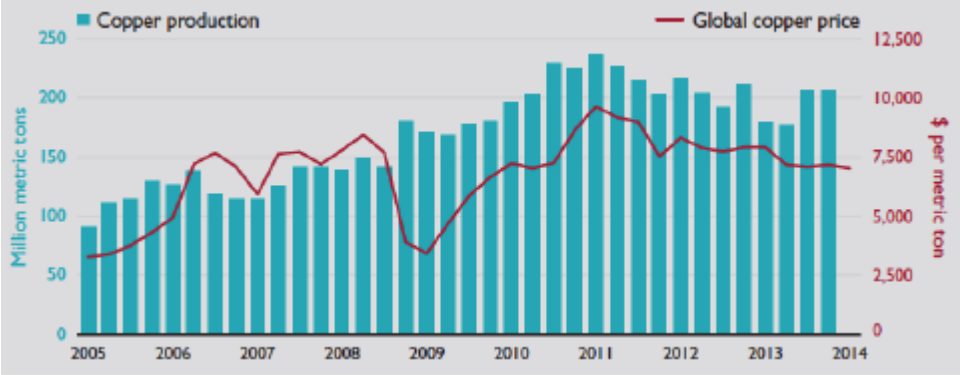
Figure 17. GDP growth in Zambia



Source: Author's compilation (2015).

According to the Bank of Zambia (2014), traditional sectors, such as agriculture, declined to 15.4 per cent of GDP. The decline has been attributed to the fall in maize and cotton production World Bank, 2014b). Other sectors such forestry and fishing equally experienced a contraction in the year 2013.

Figure 18. Zambian copper production and global copper prices (2005–2013, quarterly figures)

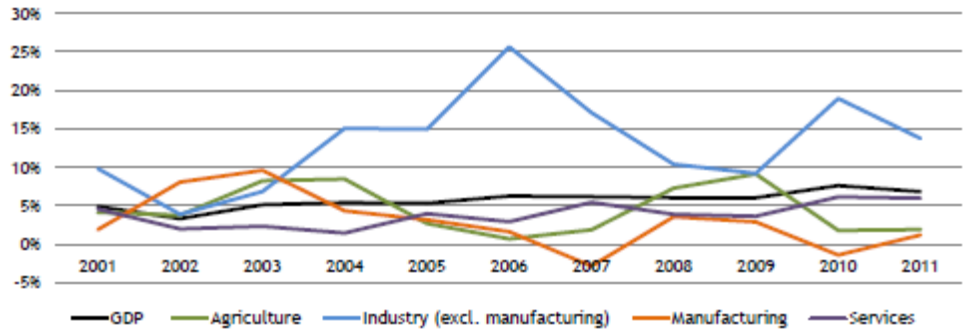


Source: World Bank (2014b).

Fuelled by foreign investment, mining and quarrying production in 2013 gave the economy a huge boost by contributing to 0.3 per cent of the GDP growth in 2013 (Bank of Zambia, 2014). The sector increased by 4.1 per cent in 2013 compared with a contraction of 2.7 per cent in 2012. The increased contribution of copper to the GDP was primarily due to the increase in production at the major mines and the opening of the Lubambe Mine, coupled with the rise in global copper prices (see Figure 18). There was also an increase of 12.3 per cent to 783,468 metric tons in 2013 from 697,918 metric tons in the production of copper by large mines, such as Kansanshi, Lumwana, Mopani and the China Non-Ferrous Mining Corporation (Bank of Zambia, 2014). Other mining and quarrying subsectors also grew by 3.6 per cent compared with 4.4 per cent in 2012 (ibid). Although the manufacturing sector grew at the rate of 5.8 per cent in 2013, it had shown the poorest performance over the last decade (see Figure 19). In 2013, Zambia's external sector show that the country incurred a balance of payments deficit of US$ 344.9 million, thus wiping off the surplus of US$ 726.7 million recorded in 2012 (ibid). On the fiscal front, there was a Central Government budget deficit of 8.673.2 million Zambian kwacha (ZMW) in 2013 (Bank of Zambia, 2014). Recent

macroeconomic growth prompted the World Bank in 2011 to reclassify Zambia as a lower middle-income country, a status it had lost in the 1980s (CMZ and ICMM, 2014).

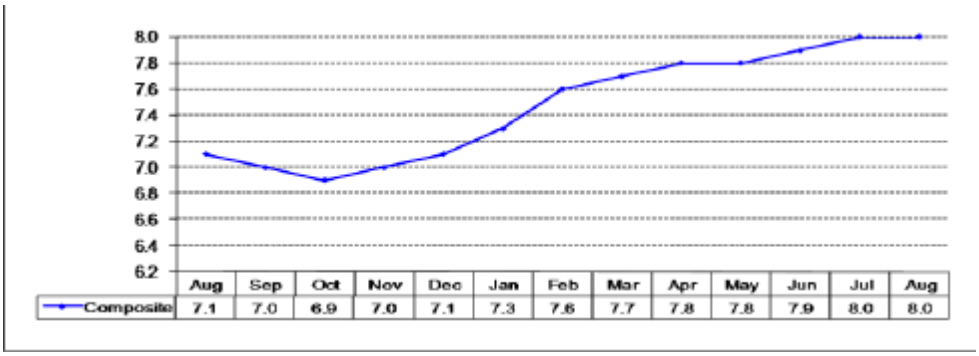
Figure 19. Economic growth in Zambia by sector (2001-2011)



Source: World Bank, World Development Indicators (2013).

With a single-digit inflation targeting regime, the end-year inflation rate in the Zambian economy stood at 7.1 per cent in 2014, down from 7.3 per cent in 2012. This mainly reflects an increase in non-food inflation in the country. However, the inflation figure remains 1.1 per cent above the 6.0 per cent official target (ibid). The latest inflation figures reported by the Central Statistical Office of Zambia (2014) show that inflation increased up to 8.0 between August 2013 and August 2014 (see Figure 20). In March 2014, the Central Statistical Office completed the process of rebasing the country's national accounting benchmark, thereby changing the base year from 1994 to 2010 for GDP calculations. This enabled the country to keep up with prices and the changing structure of the economy. The new benchmark estimates show that the GDP for 2010 is estimated at ZMW 97.2 billion (US$ 16.7 billion).

Figure 20. The annual inflation rate in Zambia (August 2013-August 2014)



	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Composite	7.1	7.0	6.9	7.0	7.1	7.3	7.6	7.7	7.8	7.8	7.9	8.0	8.0

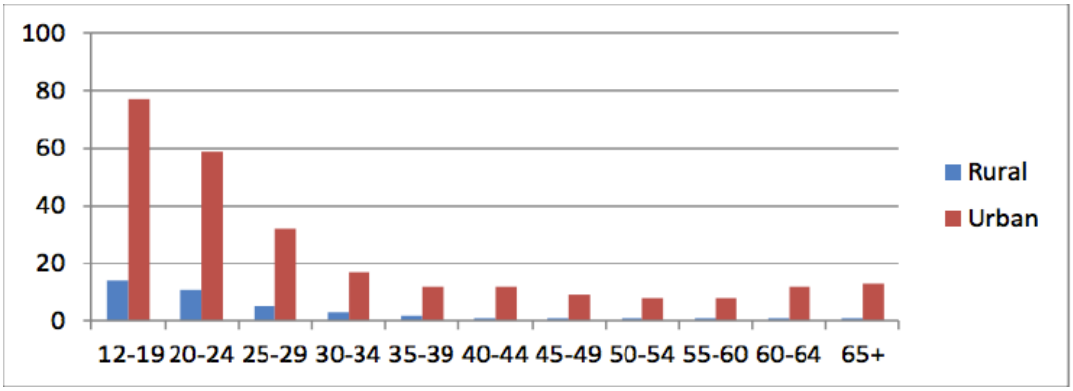
Source: Central Statistical Office (Zambia) (2014).

4.5.3 The labour force and poverty rates in Zambia

Unemployment estimates in Zambia vary from 8 per cent in the 2010 Living Conditions and Monitoring Survey, to 13 per cent in the 2008 Labour Force Survey. Unemployment is ranked as the number one problem facing Zambians (Mujeenja, 2014). In 2013, the unemployment rate was 13.1 per cent, with only 9 per cent of the working-age population engaged in the formal sector (Tesliuc et al, 2013). The unemployment rate in Zambia was exacerbated between 2008 and 2009 following the global financial crisis, causing the loss of many jobs in the mining sector. As Mateng, (2009) reports, a total of 19,239 workers – accounting for 30.4 per cent of the total labour force in the mining industry in Zambia – lost their jobs between June 2008 and June 2009. The problem of unemployment is overwhelmingly concentrated in urban areas and among youth (World Bank, 2013c – see

Figure 21). At 17.7 per cent, the unemployment rate of youth in Zambia is higher than the national average. However, Chigunta et al. (2013) argue that if the youth who are not actively seeking work were included, the youth unemployment rate in the country would be up to 38.0 per cent.

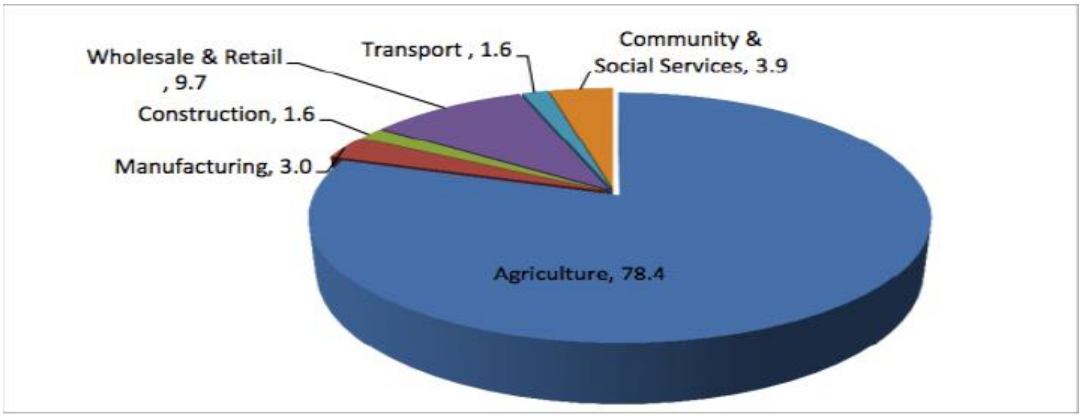
Figure 21. Rural and urban unemployment by age in Zambia (2010)



Source: Tesliuc et al. (2013).

Similar to many economies in sub-Saharan Africa, Zambia has a predominantly agrarian economy, which implies a lower share of wage employment and a higher share of non-wage activities. In 2010, 4.94 million people were in the Zambian labour force and about 4.5 million people were employed (World Bank, 2013c). A disaggregated labour market outlook shows that about 68 per cent in were farming, including fishing and forestry, while manufacturing employed only about 3.2 per cent, and mining 1.5 per cent (ibid). Like in many developing countries, the public sector is a major employer in Zambia: in 2010, public sector employment made up 6 per cent of total employment and 47 per cent of formal wage employment in the economy (ibid). At 74 per cent of women are engaged in farming, while 59 per cent of men are. Disaggregated informal economy data shows that more than 78 per cent of Zambians were employed in agriculture (Government of Zambia, 2012) (see Figure 22). Non-farm self-employment, which is largely concentrated in urban areas such as home businesses, constituted 17 per cent of total employment in Zambia in 2010 (ibid) (see Table 3 on p. 32).

Figure 22. Disaggregation informal economy employment in Zambia (2008)



Source: Labour Force Survey (2008).

Like most Africans, Zambians recognize wage employment as the only true employment. However, an Afrobarometer study (Mujenja, 2014) indicates that only 19 per cent of the labour force is in wage employment, while 32 per cent was composed of unpaid family workers. This implies that 78-80 per cent of the total labour force is in the informal

economy, which is largely concentrated in urban area in Zambia and consists mainly of unregistered enterprises (World Bank, 2013c). Deep poverty in Zambia is concentrated among smallholder farmers (4.6 million extreme poor).

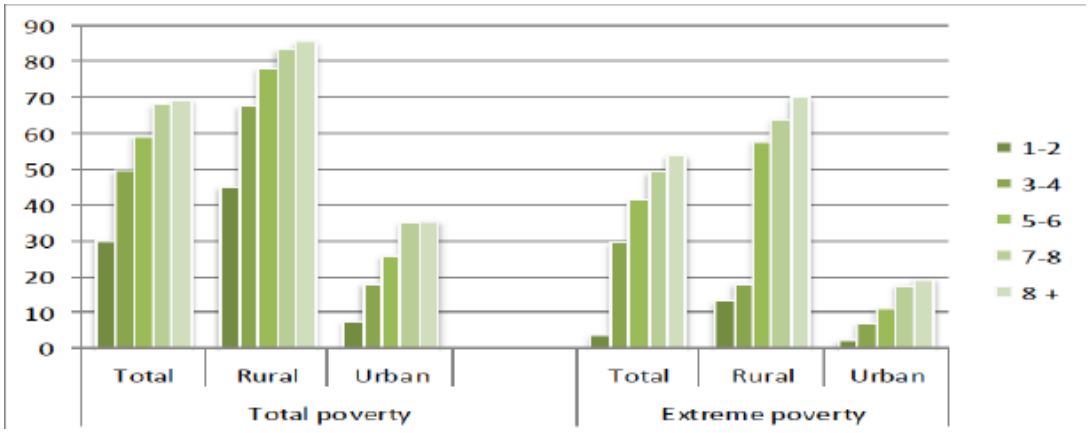
Table 3. Labour market trends in Zambia (2010)

	Rural (%)	Urban (%)	Total (%)
Agricultural informal economy	52.3	2.9	55.2
Non-agricultural informal economy	5.5	11.1	12.7
Formal economy	5.2	10.0	15.1
Unemployment	3.3	9.9	13.1
Total	62.5	37.5	100

Source: Tesliuc et al. (2013).

Despite the robust growth of the Zambian economy in recent years, there are indications that the poverty rate in the country is not abating. The 2010 Living Conditions and Monitoring Survey (LCMS) report shows that poverty in Zambia is serious and deep. The proportion of the population living below the poverty line decreased from 62.8 per cent in 2006 to 60.5 per cent in 2010 (See Figure 23). Despite the 2.3 per cent point improvement, the poverty rate in the country remains high. The 2010 LCMS indicates that 60 per cent of the population lived below the poverty line, while 42 per cent of the population was considered extremely poor (Central Statistical Office, 2012). Urban poverty declined from 29.7 per cent in 2006 to 27.7 per cent in 2010, while rural poverty increased to 80.3 per cent from 77.9 per cent during the same period (ibid). The incidence of extreme poverty in rural communities increased from 18 per cent, especially in households with eight members of more (ibid) (Figure 23).

Figure 23. Changes in poverty level in Zambia (2006-2010)



Source: Central Statistical Office (Zambia) (2012).

This trend is corroborated by the UNDP (2013), which puts Zambia's Human Development Index value for 2012 at 0.448 (i.e. in the low human development category). This index value ranks the country at 163 out of 187 countries and territories. There was also an increase in the national Gini coefficient in Zambia from 0.60 in 2006 to 0.65 in 2010

(Central Statistical Office, 2012). This implies an increase in inequality in the country. The 2008 labour force survey found that, for the 63 per cent of the labour force classified as self-employed (which includes most of the poor), average earnings were less than ZMW 270,000 per month (equivalent at the time to about US$ 0.62 per capita per day) (Tesliuc et al., 2013).

4.5.4 Extractive industry policies and regulation in Zambia

The custodian of mining policy in Zambia is the Ministry of Minerals and Mineral Development, with technical support from three constituent departments – the Geological Survey, Mines Development and Mines Safety. As stated by the Ministry, the Government's policy is not to participate in mining activities or any shareholding; rather, it is to regulate the EI in the country through appropriate legislation and policy implementation (Ministry of Mines and Mineral Development, 2014).

The Zambian Government controlled the mining industry from 1970 to 1997. This resulted in the creation of the Zambia Consolidated Copper Mines (ZCCM) in 1982. However, due to the poor performance of the state-controlled company, coupled with the need to attract private investment, the sector was privatized. The process of privatizing the mining industry began in 1997 and was completed in 2000 (Ministry of Mines, Energy and Water Development, Zambia, 2013). As stated by the Mineral Resources Development Policy (MRDP) of 2013 and Minerals Development Act of 1995, the goal of the EI policy in Zambia is to ensure that mineral exploration, development, and production in the country contribute to poverty reduction and sustainable development through activities such as local processing of minerals for value addition. The Mining Act of 1995 is credited with the attraction of US$ 5 billion FDI between 1996 and 2011 (ibid).

Although the Mines and Minerals Development Act of 1995 and 1998 brought in enormous amounts of FDI, the sector's contribution to tax revenue was very low at 1.1 per cent of GDP (Ministry of Mines, Energy and Water Development, 2013). The Mining Act of 1995 and 1998 established a weak regulatory framework, which catered more for the interests of large-scale mining companies and weakened the potential for fiscal linkages in the economy. As a sensitive issue within the context of Zambian political economy, the mining tax in Zambia is perceived to be more favourable to mining companies in the country. The mining policy presented in the 1995 Mining Act provided a lot of incentives for the extractive companies in the country (Zambian Development Agency, 2013: p.12).

Due to the minimal contribution of the mining sector to fiscal linkages despite high commodity prices and increasing production, the Zambian Government in 2013 enacted a new MRDP. The goal of the new MRDP is to "achieve a strategic re- positioning of the mining sector in order to arrive at a balance that will create a competitive, thriving and sustainable mining industry that benefits Zambians while concurrently rewarding the investors" (ibid: p.2). The MRDP, which is a revision of the 1995 mining policy, draws heavily on the Vision 2030 for Zambia, which provides the blueprint for achieving inclusive growth and poverty reduction for Zambians. However, there has been a recent change in the mining tax regime in the country. Zambia successfully increased taxes for extractive companies to 30 per cent and introduced an 8 per cent mineral royalty for underground mining operations as a final tax; a 20 per cent mineral royalty for open cast mining operations as a final tax; and a 30 per cent corporate income tax rate on income earned from processing of purchased mineral ores, concentrates and any other semi-processed minerals, currently taxed as income from mining operations (BDO Zambia, 2014: p. 3). Despite these changes, the Government of Zambia has no significant control of the EIs. As one key informant puts it:

> As a matter of fact, the mines in Zambia (Copperbelt and North Western provinces) do not even belong to our Government or the people of Zambia per se. The mines belong to foreign companies and these companies want to maximize profits as much as possible. The challenge for

our Government has been to come up with ways and means of earning as much money from the mines (Kaunda, 2014).

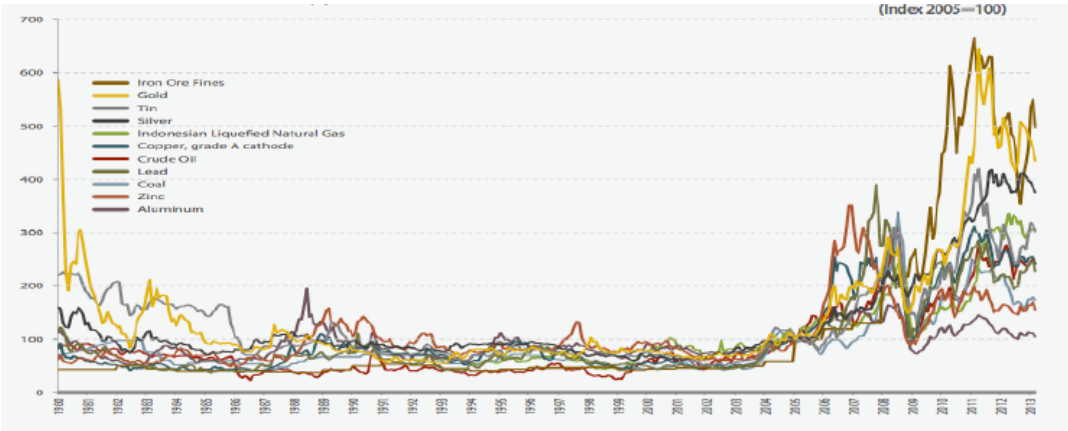
In addition to regulations in the EI, the Government of Zambia has put forward a *Strategy for Industrialization and Job Creation* (Government of Zambia, 2012). This strategy is expected to create 1 million new formal sector jobs over the next five years (Government of Zambia, 2012). To accomplish the goals of job creation and inclusive growth, the strategy plans to stimulate economic growth in those sectors that have a comparative advantage, and in which labour-intensive activities can be most effectively used to expand output and employment, either directly or indirectly. These areas include tourism, construction, agriculture and manufacturing (ibid).

Although copper mining has grown in the past decade in Zambia, the sector has not necessarily translated this growth to prosperity and inclusive growth through job creation in the broader sense. Capturing the potential of the extractive industry in the country for broader social economic development will require a break from the historical social and economic policies and development model.

5. The regulatory frameworks of the extractive industries in Africa: Evaluating policy challenges

The extractive industries (EIs) have grown in terms of production outputs and contribution to GDP in different African countries. The spike in global commodity prices (Figure 24) has contributed to increase in GDP growth in many resource-dependent economies in Africa. For instance in 2012, Sierra Leone outperformed China; and Ghana, Mozambique and Zambia outperformed India (Africa Progress Panel, 2013). However, there is a clear misalignment between the robust rates of economic growth in these countries on the one hand, and the slow rate of poverty reduction and job creation (i.e. social indicators) on the other.

Figure 24. Mineral, metal and oil commodity price trends (1980-2013)



Source: Africa Progress Panel (2013).

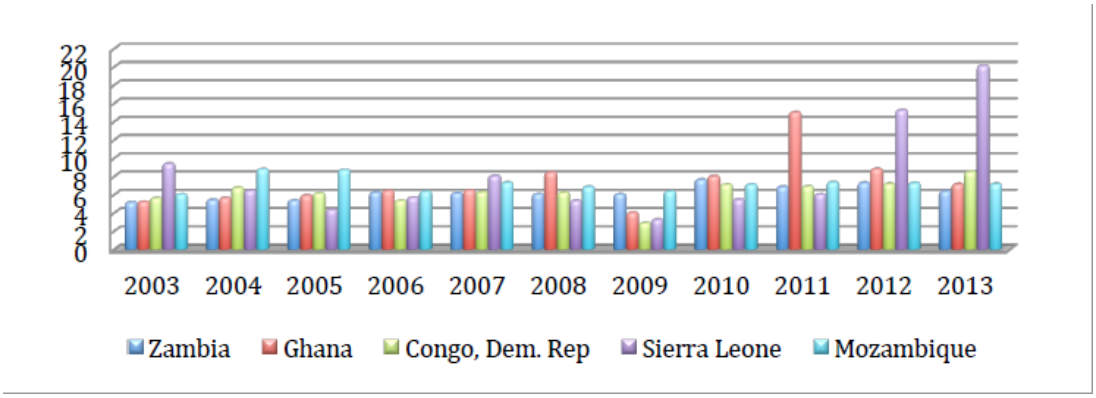
In the past decade, rising global commodity prices have contributed to economic growth across Africa. However, this trend was halted in the spring of 2014 as commodity prices began to fall on the global market. For instance, the Energy Price Index of the World Bank declined by 6 per cent during the third quarter of 2014 (World Bank, 2014a). In addition to oil, the prices of other commodities such as copper and iron ore have equally dropped sharply. For instance, the benchmark price of iron ore dropped to its five-year low of US$ 68.50 a ton (Young, 2015). The fall in prices can be attributed to a number of factors, among which are: the oversupply of some commodities, deflationary trend in the Euro area, the overall

slowdown in the global economy, and the deceleration in economic growth in China – a country that consumes 40 per cent of world copper (The Economist, 2015). Expectedly, a number of African countries that depend heavily on the EIs have been affected by the loss in revenues caused by the decline in commodity prices. For instance, there was a notable decline in the exchange rate of some African currencies. A case in point is Ghanaian cedi (GH₵), which lost 26 per cent against the US dollar (ibid). Given that copper accounts for about 70 per cent of the country's export and 13 per cent of its GDP, the decline in prices caused a drastic reduction in in mining jobs in Zambia. This situation compelled Zambia to turn to the IMF for help in June 2014 (ibid).

The preceding section shows that existing policy and regulatory frameworks guiding resource extraction in many extractive-dependent countries in Africa have a lot in common. To a large extent, these commonalities have contributed to impeding these countries from translating their extractive wealth into sustainable economic development.

First, it is important to note that resource-dependent countries in Africa have come to acknowledge the importance of stimulating local production of goods and services through the needs of EIs. As demonstrated in Figure 25, the five extractive-dependent African countries surveyed in this paper have grown reasonably well in the past decade. This has given rise to local content laws and policies. Some resource extraction regulatory regimes require investors to use domestically produced materials or products to support local manufacturers and generate employment. This is part of the extractive policies in Ghana, Mozambique and Zambia. The same policy is currently under consideration in Sierra Leone.

Figure 25. Combined GDP Growth in the DRC, Ghana, Mozambique, Sierra Leone and Zambia (2003-2013)



Source: Author's compilation (2015).

The overall goal of local content policies is to create positive economic benefits in the host country in addition to taxes, royalties, and other payments received. Such benefits may include the increased employment of workers, new business opportunities for domestic companies to provide materials and services, and the development of new industries (Environmental Law Alliance, 2013). However, local content policies in Africa have not accomplished the intended goals primarily due to poor implementation or lack of enforcement. Many of these policies lack adequate enforcement because they contain "soft" or nonbinding languages, whereby the extractive companies agree to make their "best efforts" to use local materials and services during the course of a project (ibid). For instance, the Ghanaian procurement policies for extractive companies stipulates that "[The Companies] shall, to the maximum extent possible [...] when purchasing goods and services required with respect to operations, give preference to materials and goods made in Ghana, and services provided by Ghanaians or entities" (Newmont Ghana, 2010: p. 1). Such loose language in local policy makes compliance and enforcement difficult.

Many policies guiding the operations of EIs in the Region were drafted under the auspices of international development agencies such as the World Bank and the IMF. In an

effort to attract the sufficient FDI into the extractive sector, these agencies encouraged African countries to grant extractive companies excessive incentives. In addition, many of these mineral extraction contracts are characterized by a culture of secrecy, corruption and informal deals that sold off mining concessions on terms that generate large profits for foreign investors. This trend has denied African countries a lot of revenues from the extractive sector. For instance, a study by the Africa Progress Panel (2013) reveals that between 2010 and 2012, the DRC lost at least US$ 1.36 billion in revenues from the under-pricing of mining assets that were sold to offshore companies.

African countries collect less tax revenues from the EIs. According to the IMF, the effective tax rate in the mining sector is between 45 and65 per cent, and even higher for hydrocarbons (Africa Progress Panel, 2013). However, many foreign-owned extractive companies operating in Africa have been provided with extremely favourable tax concessions and incentives, such as very low rates of royalty and exemptions from customs duties, VAT, export and corporation taxes, along with tax breaks. The implication is that resource-dependent countries in Africa are denied the much-needed revenues from taxation, which are essential to carry out public spending in order to extend quality job-creation opportunities and strengthen economic growth. In some cases, extractive companies demand that African governments refund VAT they paid. For instance, in 2011, only one of the five major mining companies operating in Sierra Leone paid corporation tax (Africa Progress Panel, 2013).

Extractive companies in Africa are equally known for tax evasion through various practices. One strategy is the practice of false invoicing or mispricing commodities. These companies have also engaged in the illegal practice of transfer pricing[18]. Given the difficulty involved in establishing the final sale prices of these commodities, African revenue authorities are always at the losing end due to their inability to know the real profit margins of the companies. For instance, between 2005 and 2009, half a million workers in Zambia's copper mines were said to have paid higher tax rates than the multinational extractive companies operating in the country (Lopes, 2014). Consequently, this has a negative impact on the tax base of African governments, due to their inability to collect the fair tax rates on the sales of extractive commodities. This is a major cause of shortage in government revenues from the extractive sector among African countries, further complicated by the fact that most extractive companies in Africa operate through maze of intermediaries and affiliates registered in different tax havens around the world.

Another issue is that resource-dependent countries in Africa have the tendency to give extractive companies free and unfettered use of other valuable and essential resources, such as water, land, and construction-grade minerals (e.g., sand, rock, rivers and surrounding farmlands) in their regulatory policies. In many instances, these are the same resources that sustain local farming or fishing communities. Even where the protection of the natural environmental is part of the EI regulations, African countries tend to focus more on the potential revenue to be gained from resource extraction than on the enforcement of existing laws.

Despite existing labour laws protecting workers in the EIs, African miners have been subjected to abusive treatment in some mining companies. An ILO study (Matenga, 2009) reveals that the casualization of the labour force in copper mines has contributed to the deterioration of working conditions in Zambia. This trend became rampant following the privatization of the sector over a decade ago. For instance, a report by the Human Rights Watch (2011) show that Zambian miners in Chinese-run companies have been subjected to abusive conditions, such as inadequate ventilation that can lead to lung disease, and regular

[18] Transfer pricing is the practice whereby companies overstate the prices of imported technologies and technical services, and sell extractive commodities from Africa to connected or affiliate companies at artificially depressed prices (Africa Progress Panel, 2013).

12-hour and even 18-hour shifts involving arduous labour. Other abuses include failure to replace workers' damaged protective equipment, anti-union activities and constant threats to fire workers who refuse to work in unsafe places underground (ibid). These conditions are all in violation of Zambia's national laws and international labour standards. Similarly, a recent study (Hoedoafia et al., 2014) shows that the health status of small-scale miners in communities in Ghana has deteriorated due to exposure to mercury emissions and contamination. Unfortunately, most of these miners do not have access to quality healthcare.

The formulation and enforcement of social and environmental policies guiding responsible extraction of resources is a challenge in many African countries. These countries have established agencies to guide against the negative impacts of extractive activities on the environment. With the efforts of civil society organizations and public scrutiny, many African countries have also adopted internationally recognized standards for environmental impact assessment (EIA) and social impact assessment (SIA) tools and frameworks for promoting sustainable resource extraction. Beside, some extractive companies have also established corporate social responsibility (CSR) practices in some of the communities where they operate. However, African countries have continued to lag behind other regions of the world in meeting environmental and social standards in resource extraction (Africa Progress Panel, 2013). Above all, the implementation of these laws within the EIs remains a challenge. The poor enforcement of environmental and social standards is partly due to corruption among government officials, and lack of the necessary institutional capacity in the responsible ministries and departments.

One unfortunate trend in many resource-rich countries in the Africa is the incidents of child labour in the EIs, especially in small-scale and artisanal mining. Many families in rural communities are compelled by extreme levels of poverty to send their children to work in artisanal mines. According to Human Rights Watch (2013), the DRC, Ghana and other countries in Africa have witnessed a boom in illegal artisanal mining due to high gold prices and the influx of foreign – particularly Chinese – investors who have helped in setting up small mines with heavy equipment. Consequently, this trend increased artisanal mining activities by locals – including children, who work in these mines, many of which are illegal, digging for gold. To put this in context, of the estimated 30,000–50,000 *Galamsey* (artisanal) miners in Ghana, 10,000 are children (Free the Slaves et al., 2013). As the ILO (2005) rightly observed, these children toil under dangerous conditions and lack access to schools, health clinics, and other basic necessities. Besides, they are exposed to fatal accidents due to falling rocks, explosions, collapse of mine walls, and the use of equipment designed for adults (ibid). Safety and health standards also deteriorated in Zambian mines following the global financial crisis in 2008 and 2009 (Matenga, 2009). Consequently, fatal mining accidents have been on the rise due to the use of unsafe mining methods and cheap products among other reasons.

Artisanal mining is a growing segment of the mining industry in Africa. However, African countries are yet to provide the necessary support to improve the productivity and safety of artisanal miners. Despite the legalization of artisanal mining in places like Ghana, small-scale miners still have limited rights of operation. As mentioned above, artisanal miners in the Region face numerous health hazards, and these conditions can partly be traced to the limited access to markets by small-scale miners in the region. As the Africa Progress Panel (2013) observed, "In much of Sub-Saharan Africa, artisanal miners are forced to operate in what amounts to a parallel economy, with illicitly mined diamonds sold to informal middlemen." (p. XX) These middlemen are linked to traders, sponsors and mine owners who provide credit, tools and mercury in return for mined gold or diamond from the artisanal miners. These transactions take place in unfavorable terms. Hence, as the Africa Progress Panel (2013) argues, the lack of a transparent local market for outputs put the miners in a weak negotiating position, and thus denies them the fair value of their output. This exploitation of artisanal miners perpetuates poverty in their communities because they hardly derive a decent wage from their output. In addition, this trend limits the productivity of the artisanal workforce and keeps the industry from developing.

Generally, physical infrastructure is a critical input, which complements other inputs such as labour and private capital in modern economic production. However, it is particularly indispensable in the productive extraction of mineral resources. Extractive-dependent countries in Africa face the challenge of weak physical infrastructure such as transportation facilities (e.g., good road networks, railways, well equipped seaports and airports), telecommunication, electricity, sustainable water supply, and good sanitation systems. The infrastructural deficits in these countries cause social and economic difficulties both for households and businesses. For instance, a (2013) report by the African Development Bank revealed that less than 10 per cent of households in the DRC have access to electricity. Electricity is also considered as the major obstacle to the sustainability of most small- and medium-sized enterprises (SMEs) in the country.

These challenges associated with EI regulations and hamper the efforts of African countries to use their resource wealth to ensure an equitable transformation of local societies in the Region. Consequently, EI in the Region has been unable to promote inclusive growth and poverty reduction.

6. Extractive industries, inclusive growth and job creation: Lessons from Bolivia, Chile, Indonesia and Malaysia

Some resource-dependent countries in other parts of what we may call developing world have clearly defied the resource curse proposition. Among such countries are Bolivia, Chile, Indonesia and Malaysia. These countries share many characteristics with resource-rich African countries but managed to use their resource wealth to lift their citizens out of poverty or at least improve their socio-economic conditions. Resource-dependent countries in Africa and the four countries above were once under the colonial domination of European countries; most are tropical countries; they have multi-ethnic populations; they were agrarian economies in the 1960s; and they are endowed with natural resources that are in high demand around the world. But the question remains: how are these countries different from their counterparts in Africa in terms of resource wealth management?

6.1. Bolivia

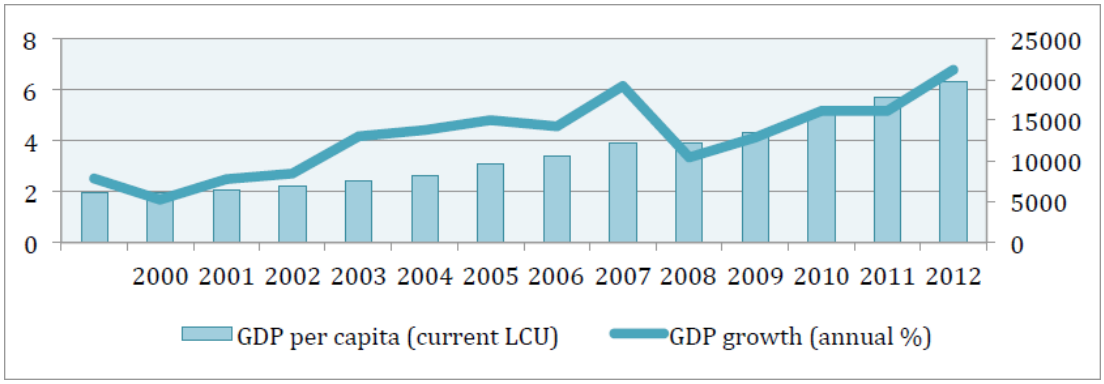
6.1.1 The recent economic outlook of Bolivia

With an estimated population of 11.4 million people in 2015, Bolivia remains one of the lower middle-income economies in Southern America. However, the country has experienced some remarkable and transformative socio-economic and political changes since the election of Mr. Evo Morales in 2005 under the banner of the *Movimiento al Socialismo* (MAS). Mr. Morales' administration implemented significant reforms, which include a modification of the constitution, increasing the role of the state in economic management – particularly, the management of the extractive industries (EIs) – and the expansion and implementation of social protection policies.

Bolivia has maintained a robust economic growth rate for almost a decade. The economic growth rate of 6.6 per cent in 2013 was not only the strongest rate in three decades, but also one of the strongest growth rates in the Southern America (IMF, 2014b). Fueled by the spike in global commodity prices and prudent fiscal and monetary policies, the economy has experienced an annual average growth rate of 4.5 per cent for the past seven years, and this has brought about an 18 per cent increase in per capita GDP over the same period (World Bank, 2014c) (See Figure 26). While Bolivia has experienced current account surpluses since 2003, public revenue has improved, and gross public debt declined to 32.5 per cent of GDP by the end of 2013 (IMF, 2014b; World Bank, 2014c). At the same time, the country has witnessed an unprecedented accumulation of international reserves. The country's foreign

reserves increased from nearly US$ 1 billion in 2005 to over US$ 14 billion in 2013, which was about 49 per cent of GDP at the end of 2013 (IMF, 2014b; World Bank, 2014c). The increase in the country's external reserve should provide an ample buffer against external shocks (IMF, 2014b).

Figure 26. Annual growth in Bolivia (GDP per capita, 2000-2012)



Source: Author's compilation (2015).

Figures from the National Statistics Institute of Bolivia show that gas exports constituted 52.8 per cent of total exports in the first trimester of 2013, followed by industrial manufacturing (24.2 per cent), mining (17.2 per cent), and agriculture (4.5 per cent) (ibid). From the foregoing, it is clear that the Bolivian economy is highly dependent on extractive resources with little or no diversification. However, it is essential to note that the Government has made plans to increase economic diversification and industrialization.

With headline inflation around 7.5 per cent in 2013 – up from 4.5 per cent in 2012 (IMF, 2014b) – and an unemployment rate of 5.37 in 2013, Bolivia has experienced a significant improvement in fiscal performance, especially social spending and transfers. Robust hydrocarbon tax revenues have supported this improved fiscal outlook in recent years. As the IMF (2014b) reports, higher social transfers are offsetting Government accumulated revenue and fuel subsidies as capital expenditure execution moves at a faster pace. As a result of Bolivia's fiscal performance, the country experienced a budget surplus of 0.6 per cent of GDP (1.8 per cent of GDP in 2012), which imply a pro-cyclical impulse of about 0.8 per cent of GDP (ibid).

6.1.2 The regulatory framework of extractive resources in Bolivia

Bolivia is endowed with numerous mineral resources, some of which are unexplored. It is estimated that the country produced 8.7 per cent of the World's total mine output of tin in 2012; 5 per cent of its silver output; 1.3 per cent of its boron output; and 3 per cent of its zinc output (Anderson, 2014a). Other minerals produced in commercial quantities in the country include antimony, lead, and tungsten (ibid). In addition to hard minerals, Bolivia is also a major producer of oil and the country is a ranked producer of natural gas in South America (ibid). In May 2006, the newly-elected Government re- nationalized Bolivia's oil and gas industries. The 2009 Constitution provides the guideline for a major revision of the legal and policy frameworks guiding the EIs in Bolivia.

The EIs, particularly hydrocarbons, in Bolivia are under the control of the state-owned company Yacimientos Petróliferos Fiscales de Bolivia (YPFB). As the Natural Resource Governance Institute (2013) reports, as the sole concessionaire, the YPFB participates in every single stage of the EI value chain. However, there are private and public foreign companies in the sector, such as Gazprom from Russia, Total from France and Petrobras, the Brazilian state-owned oil company (ibid). Despites the re-nationalization of the EIs in 2006,

Bolivia remains one of the best destinations for FDI in South America. Taxes and royalties from the EI, which have increased from 18 per cent in 2005 to 50 per cent in 2013, are also collected by the YPFB (ibid). These revenues are remitted to the Ministry of Economy and Finance. The Hydrocarbons and Energy Ministry sets EI policy and the National Agency of Hydrocarbons is charged with regulating the sector in Bolivia (ibid).

The control of the hydrocarbon extraction has brought an increase in tax revenues, which in turn led to a significant increase in macroeconomic policy space in the country. For instance, revenue from hydrocarbon taxes as part of GDP increased from 9.8 per cent in 2005 to 35 per cent in 2013 (Johnston and Lefebvre, 2014). Much of the resources from Bolivia's hydrocarbon have not been applied towards economic diversification. Hence, rents from the EI are yet to be linked to growth in other sectors of the economy. Thus, the economy has not acquired the needed productive infrastructure that can increase productivity or support jobs creation across all sectors. Rather, the investment of the resource wealth - especially under the administration of President Evo Morales - has taken a nuanced approach to human capital development through increased social protection and sustainable social benefits spending. This approach, which is another way of spending resource revenue, is having a huge social multiplier effect in Bolivia through increased social spending and development of human capital.

6.1.3 Social protection measures and human capital investment in Bolivia

Despite recent and impressive macroeconomic outlook, Bolivia remains one of the poorest and unequal countries in South America with the lowest HDIs. The value of Bolivia's HDI for 2013 was 0.667, which positioned the country at 113 out of 187 countries and territories (UNDP, 2014). It is estimated that poverty affects about 5.5 million people in the country (Arce, 2013). Right from the onset, the administration of Evo Morales and MAS made clear its intention to use natural resource wealth for the benefit of the people of Bolivia, particularly the poor and vulnerable. The increase in global commodity prices and exploitation of natural resource has enabled the State to capture surplus funds and create the needed fiscal space for social investment. In line with its social objectives of eliminating extreme poverty, the Administration has been able to redistribute the revenues from the extractive sector through social programs and to other economic sectors that generate employment, which has created a significant amount of social multiplier[19] and social wellbeing, particularly among the indigenous population. As explained by the country's Minister of Finance, Luis Arcer (cited in Schipani, 2014):

> We [the Government] use the national resources to increase production in Bolivia, and then we distribute the benefits among people. This is a distribution model, which gives to everybody, especially to the people who never had money. Now, those [people] have money [sic]. They are becoming richer, so this is the main idea of the model [...].

The Administration of President Evo Morales has established a number of social programs and projects through which revenues from the EI are expended. These social distributive channels have enabled the Government to reach poor groups of the population that were formerly neglected[20]. However, new social protection and cash transfer programs

[19] In line with the concept of economic multiplier, the social multiplier used in this context entails the use of wealth from the extractive industries for the social and human development of the people through increased spending in health, education and housing.

[20] It is important to point out that a number of social programs were in place prior to President Morales' Administration. Among such programs was the *Fondo de Inversión Social* (Social Investment Fund -

were instituted for the vulnerable groups beginning in 2005. According to Bolivia's National Statistics Institute (*Instituto Nacional de Estadística* – INE), all transfers are financed by public revenues from the direct tax to hydrocarbons (*Impuesto Directo a los Hidrocarburos* – IDH), derived after the re-nationalization of EIs in the country under President Morales' Administration (Kohl and Farthing, 2012). Conditional social protection programs established under President Evo Morales' Administration have three main components, outlined below.

The first component is comprised of three cash transfer programs:

- First among these cash transfer programs is the *Bono Juancito Pinto* Grant. The aim of this conditional cash transfer program is to improve primary school attendance for students enrolled in public schools.

- The second form of transfer is the *Renta Dignidad* (a small monthly payment to the elderly poor). Under this program, Bolivians over 60 years who live in the rural areas and do not receive contributory social security pension or any other payment under the national budget, are paid 200 bolivianos (BOB) per month – about US$ 28 – while those who receive some pension under the social insurance scheme receive BOB 150 (US$ 21) (Durán-Valverde and Pacheco, 2012). The number of participants in the program has grown remarkably from about 450,000 pensioners in 2006 to 750,000 in 2009 (ibid).

- The third form of conditional cash transfer, created in May 2009, is called the Juana Azurduy de Padilla Mother-and-Child Grant (*Bono Madre Niño-Niña "Juana Azurduy de Padilla"*). This program is aimed at promoting the use of maternal and child health services for the poor and low-income families in Bolivia.

It is important to note that the social protection system in the Bolivia has evolved into a model that combines contributory and non-contributory components in a number of benefits. As an ILO study reveals (Durán-Valverde and Pacheco, 2012), increased revenues from the EIs have enabled President Evo Morales' administration to expand and strengthen the contributory component of Bolivia's social security system, which covers the issues listed in the ILO's Social Security Convention, 1952 (No. 102). Such contingencies include disability, old age, survivors, employment injuries, health insurance, sickness and maternity allowances, family benefits and allowances.

The second component of the social protection measures is youth employment schemes. The aim of the program is to improve the employment conditions of youth working in the urban formal labour market, through the program called "My first decent job" (*Mi primer empleo digno*) (Acer, 2013). Created in September 2007, the program provides employment and vocational training for youth aged 18–24 over a period of three months, followed by an internship period in a private firm. Participants in the program are motivated by a monthly BOB 550 (US$ 79) grant from both the Government and the recipient company that contributes 45 per cent of the grant (ibid).

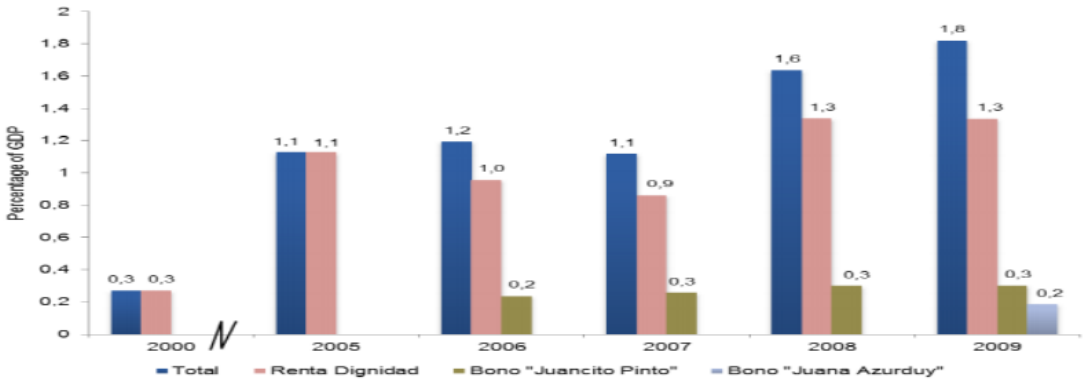
The third component of resource social redistribution comes in the form of provision of affordable housing for low-income households. By the Supreme Decree 28794 of 2006, the Government created the universal access to housing program through the Social and Solidarity Housing Plan (*Plan de Vivienda Social y Solidaria*). Filho and Goncalves (2010)

FIS), which was created in 1991. The aim was to improve the coverage and quality of health, education, basic sanitation services and prioritize pockets of poverty in rural areas (Arce, 2013). Others are the *Seguro Nacional de Maternidad y Niñez* (National Maternal and Child Insurance) created in 1996, and the *Estrategia Boliviana de Reducción de la Pobreza* (Bolivian Poverty Reduction Strategy – EBRP) (ibid).

note that, by 2009, President Morales' administration had delivered 28,858 housing units under this program, thus doubling the number delivered in the preceding 15 years.

These cash transfer programs have had a transformative impact in the lives of the beneficiaries. It is estimated that, by the end of 2009, about 31 per cent of the Bolivian population had benefited from one or more of the above social protection programs in the country (Durán-Valverde and Pacheco, 2012) (see figure 27).

Figure 27. Trends in social spending by program in Bolivia (% of GDP, 2000-2009)



Source: Ministry of Economy and Public Finances (cited in Durán-Valverde and Pacheco, 2012).

In addition to the above social redistributive channels, other social protection measures have equally been created. This includes health insurance for adults (*Seguro de Salud Para el Adulto Mayor* – SSPAM), a free comprehensive insurance designed to provide health care benefits at all levels under the national health scheme to citizens and non-citizens over 60 years of age who are not covered by social health insurance (Durán-Valverde and Pacheco, 2012).

6.1.4 The impact of increased social spending in Bolivia

Given that the distribution of the benefits of growth in form of social spending is an integral part of the human development approach to inclusive growth (de Haan and Thorat, 2013), one can conclude that natural resource wealth has improved the wellbeing of Bolivians. The expanded coverage of non-contributory social protection programs in Bolivia is the result of the increase in social spending in the country. A study by the Center for Economic and Policy Research (CEPR) (Johnston and Lefebvre, 2014) shows that social spending on areas such as health, education, pension and poverty alleviation programs in Bolivia increased over 45 per cent over the period 2005 to 2012.

Consequently, the increase in social spending in recent years has made a remarkable impact on the social and economic indicators in Bolivia. The positive economic context coupled with increased social protection spending has led to a reduction in poverty. Although the country remains one of the poorest in terms of per capita income in the Region, poverty has been reduced by 25 per cent, extreme poverty fell by 43 per cent between 2005 and 2012, while primary school enrollment reached 94 per cent in 2014 (Johnston and Lefebvre, 2014; World Bank, 2014c). In addition to increased social protection spending, the CEPR study (Johnston and Lefebvre, 2014) indicates that the remarkable reduction in poverty and inequality in Bolivia can be attributed to the rapid increase in the real minimum wage. As a measure of socio-economic wellbeing, the real minimum wage in Bolivia increased by 87.7 per cent between 2005 and 2014, while the Gini coefficient (income inequality) dropped to 46.6 in 2012 (World Bank, 2014c; Johnston and Lefebvre, 2014). Above all, these policy measures are in alignment with the Social Protection Floor Initiative proposed by the United Nations.

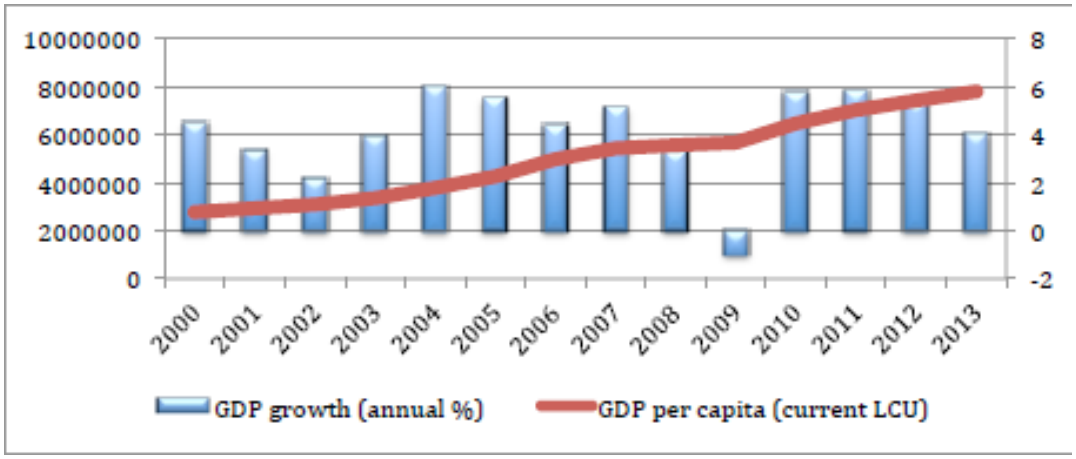
6.2 Chile

6.2.1 The extractive industry and the economy in Chile

With a population of 18.0 million people, Chile occupies a dominant position in the world mineral economy. The country is endowed with many minerals, which have contributed to its economic wellbeing in recent years. Chile has an enormous share of the global reserves of industrial minerals such as copper, molybdenum, iron, manganese, nitrate, iodine, sodium sulfate, calcium carbonate, lead, zinc, gold, silver, potassium, and lithium (Anderson, 2014b; Arellano, 2012). For the most part, Chile is a leading world supplier of these minerals in crude form. Chile accounts for 32 per cent of the world's copper output; 61 per cent of its iodine; 52 per cent of its rhenium; and about 35 per cent of world's production (Anderson, 2014b).

Following the nationalization of copper mining in the early 1970s under President Allende, investor-friendly policies were put in place, which attracted a good measure of foreign investments. The Government further capitalized on this through direct and indirect taxation for fiscal linkages. Government policies, together with academic institutions in the country, encouraged backward integration of small-scale suppliers in the mining industry in the country (Culverwell, 2000). Chile's economy has experienced an impressive and job-rich growth in recent years. The country's GDP grew on average at 5.8 per cent annually from 2010 to 2012 (Ture, 2014) (Figure 28). The boom in commodity prices greatly enhanced this growth trajectory in the Chilean economy. For instance, total mine production accounted for 15 per cent (about US$ 37 billion) and 13 per cent (about US$ 35 billion) of the country's GDP in 2011 and 2012 respectively (Anderson, 2014). According to Chile's Chilean Trade Commission (ProChile), copper mining remains the country's major export earner and accounts for about 60 per cent of Chilean exports and 18 per cent of GDP (ProChile, 2014).

Figure 28. GDP and GDP per capita growth in Chile (2000-2013)

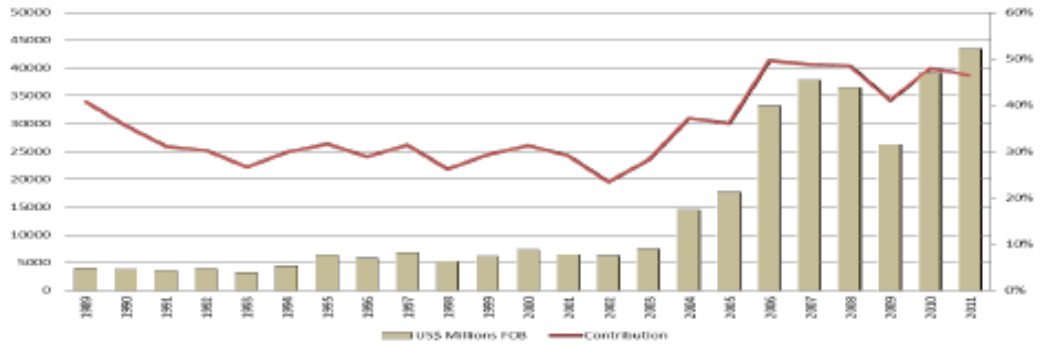


Source: Author's compilation (2015).

In all, the mining industry provides an estimated 80,000 jobs, which include suppliers (ibid). Mining, comprises over 4,600 companies, 85 per cent of which are Chilean-owned. The number of mining supply firms has grown by 35 per cent over the period 2000-2014 alone (ibid). In addition to copper mining activities, the overall value of mining production has increased in the country in parallel with the manufacturing of industrial minerals such as cement and other refined metals like steel. Foreign capital makes up a huge proportion of investment in the EI in Chile. Between 1998 and 2011, 30 per cent of FDI in Chile went into the mining sector (Calfucura, et.al, 2013). Foreign mining firms made 84 per cent of their investments in the private mining of copper and gold between 2002 and 2010 (ibid). In 2013,

total investment in the Chilean mining industry was US$ 112.5 billion (Chilean Copper Commission, 2013).

Figure 29. Copper exports and their contribution to GDP in Chile (US$ millions and % exports, 1989-2011)



Source: Arellano and Vial (2013).

6.2.2 *The decrease in the poverty rate in Chile*

Generally speaking, Chile is faced with a number of socio-economic challenges, including poverty, income inequality and the gender gap. However, in the last two decades, the country has made tremendous progress in its social and economic transformation. Most of the progress can be attributed to the sustainable and inclusive management of the country's mineral wealth. Data from the Organisation for Economic Co-operation and Development (OECD) and the IMF show that Chile's GDP per capita in purchasing power terms doubled and poverty declined dramatically. Consequently, the share of the population living below the national poverty line declined from 39 per cent in 1990 to 14 per cent in 2011, while extreme poverty fell from 13 per cent to below 3 per cent (Ture, 2014) (see Table 4 on p. 45).

The Chilean economy has grown inclusively with a dynamic trend in the labour market. The report of the OECD Economic Survey shows that in 2013, unemployment in Chile dropped to its lowest rate of in 15 years: 6 per cent (OECD, 2013 – see Figure 30 on p. 45). Chilean youth aged between 15-24 face unemployment rates of 16.3 per cent (ibid).

According to the 2011 CASEN Survey, labour income accounted for about 85 per cent of household monetary income, out of which 60 per cent was wages and salaries, and the rest was non-salaried income (CASEN, 2011). In Chile 50 per cent of women and 74 per cent of men in the labour market have jobs (OECD, 2013). There is a notably high rate of female labour force participation and a decline in gender-gap in Chile. As Ture (2014) notes, female labour force participation increased in the country from 35 per cent in 1990 to 55 per cent in 2011. This has resulted in the decline in gender wage gap[21] from 1.4 to 1.2 in Chile (ibid). While this trends points to the crucial need to improve the employment situation of women in the country, the Chilean record of 20 per cent increase in labour force participation in 21 years stands out when compared with other developing and resource-based economies around the world.

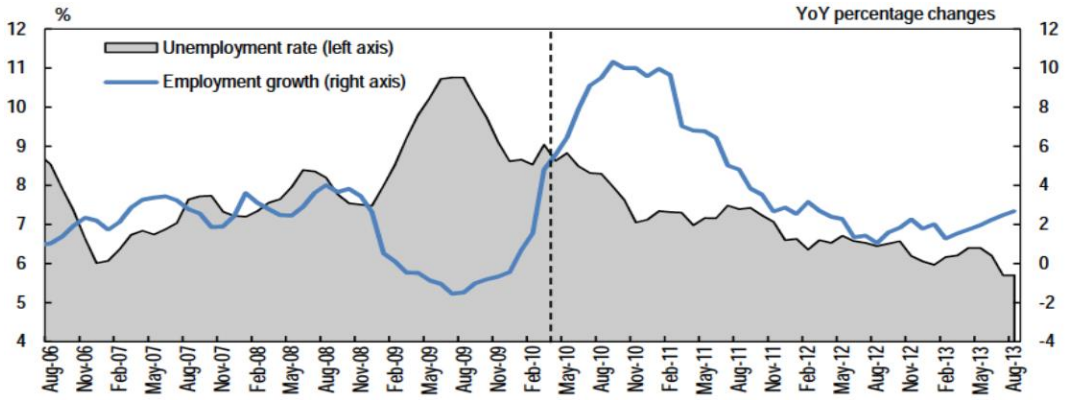
Table 4. Poverty headcount ratios in Chile (% change in population below the poverty lines, 1990-2011)

[21] The gender wage gap is defined as the ratio of the male wages to female wages (Ture, 2014).

	National poverty lines/1		Regional poverty lines		Relative poverty line
Year	Extreme poverty	Moderate poverty	US$ 2.5 per day	US$ 4 per day	50% of median income
1990	13.0	38.6	20.8	40.8	20.3
1996	5.7	23.2	11.2	26.2	19.6
2000	5.6	20.2	8.9	23.0	19.5
2006	3.2	13.7	5.1	15.6	18.2
2011	2.8	14.4	2.9	9.9	15.9

Source: Socio-Economic Database for Latin America and the Caribbean cited in IMF (2014c: p. 10).

Figure 30. Employment Growth and Unemployment Rate in Chile (2006-13)



Note: The dashed vertical line indicates a change in methodology for both variables in April 2010. The change in the methodology results in a break in the series, which leads to the old and new series not being comparable.

Source: OECD (2013).

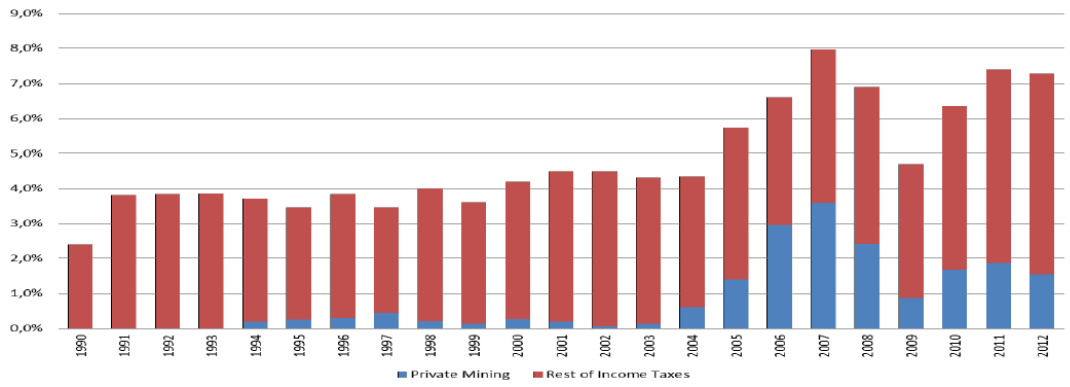
6.2.3 Local content and linkages in the extractive industries in Chile

Through deliberate initiatives and policies, resources from the mining sector have been utilized to strengthen and support other industries in Chile to enhance production, through export diversification, job creation and poverty reduction. Offering economic opportunities to local firms to directly or indirectly link up with the mining industry is the hallmark of this strategy. The first identifiable form of linkage in the extractive industries (EIs) in Chile is fiscal in nature. In this context, fiscal linkages refer to "resource rents, which the government is able to harvest from the mining sectors in the form of corporate taxes, royalties and taxes on the incomes of employees" (Morris, 2012). The government used rents from copper and other mining activities in the country to re-invest in other sectors. The huge rent accruing from the EIs in Chile can be attributed to the increase in global prices for commodities. But more important is the Copper Laws passed in Chile in 2005.

The Royalty Law (Law 20.026,) introduced a specific tax on the operational profits of mining activities of companies in Chile (Barton, 2009; Ruiz-Dana, 2007). Article 64 of the Law created a tax of 5 per cent on annual sales relating to 50,000 tons of refined copper, with a variable tax rate for sales of between 12,000–50,000 tons (Barton, 2009). The change in the tax policy in the mining sector in Chile has brought some positive results in mining rent collection through increased tax revenues in the country (see Figure 31). For instance, the ten leading mining firms increased their taxation payments to the Chilean Government by 145 per cent in 2006 relative to 2005, which amounted to US$ 266 million in 2006 (ibid). Besides, the increase in tax rate has equally helped in protecting Chilean mining companies, especially the state-owned National Copper Corporation (Corporación Nacional del Cobre - CODELCO). Tax revenue from the mining industries in Chile has been invested in different social protection programs for poverty reduction and human capital improvement (Siwale, and Kaunda, 2014).

Revenues from copper and other extractives in Chile are channeled through reserve funds, which require a minimum annual deposit of 0.2 per cent of the previous year's GDP (Natural Resource Funds, 2013). The Pensions Reserve Fund, the Contingency Unemployment Program, and the Economic and Social Stabilization Funds, which were approved under the Fiscal Responsibility Law No. 20.128 in 2006, are different aspects of social protection measures. The Pension Fund has the objectives of financing the increasing expenses of the aged and covers basic old age and disability solidarity. On the other hand, the Economic and Social Stabilization Fund is an in-built system and a countercyclical tool, which aims to synchronize government expenditures in alignment with macroeconomic outlook and trends in global copper prices (Gelb, 2011; Siwale, and Kaunda, 2014). The Chilean government also created the Innovation for Competitiveness Fund (*Fondo de Inversión y Competitividad* – FIC), on the basis of a royalty tax on mining. The objective of the fund is to increase funding for research and development projects, with the goal of improving productivity in the economy (Dowling, 2011; Siwale and Kaunda, 2014). As January 2008, the Pension Reserve Fund had a value of US$ 1.5 billion, and the Economic and Social Stabilization Fund was valued at US$ 14 billion .

Figure 31. Chile Income Taxes (% of GDP, 1990-2012)



Source: Arellano and Vial (2013).

In addition to copper mining, Chile has equally been engaged in the production and export of refined and concentrates of copper for over 20 years. From 1990 to 2011, production of refined copper increased in tons from 2.5 times, while concentrates increased 3.1 times (Arellano, 2012). Within this period, there was also a notable increase in the other products manufactured from copper from less than US$ 150 million in 2003 to over US$ 700 million in 2012 (ibid). The mining industry in Chile has equally expanded economic activities through backward integration by providing contract works with non-mining firms in the country. As Arellano (2012) notes, BHP Billiton has over 3,000 suppliers located in Chile, 40 per cent of which derive more than half of their revenues from mining. CODELCO has

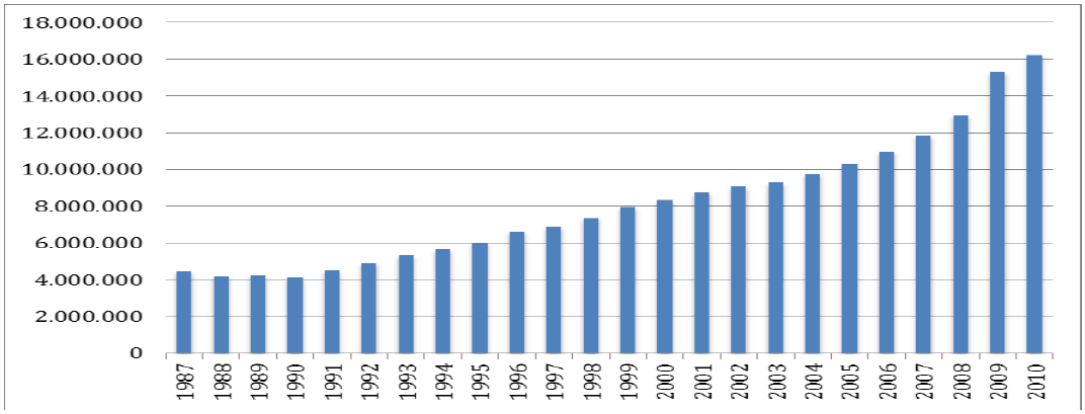
more than 4,800 suppliers; 4,300 are located in the country. These linkage activities have fostered the growth of local industries and job creation in the economy.

Besides, Chile has made conscious efforts to ensure the diversification of its economy with its mineral wealth. A good example is the growth of non-mineral products and exports. The government vertically invested in the development agricultural products such as wine, salmon and fruits (Gelb, 2011). This industry is today one of the major export earners for the country. Export figures released by the Trade Commission of Chile in 2012 (ProChile, 2014), show that the country is one of the top three largest producers in the world for a total of 23 non-copper products. For example, in 2010 a total 7,447 Chilean firms exported 4,929 such products, up from 5,496 firms and 3,503 products in 1993 (Dowling, 2011). ProChile announced that the country exported US$ 1.5 billion worth of fresh grapes in 2013. This figure amounts to 20.6 per cent of fresh grapes exports in the world in 2012 (Druttman, 2013).

6.2.4 Extractive wealth and social protection measures in Chile

The notable decrease in poverty in Chile can be explained not only by economic growth with rising labour income for all income groups, but also due to social protection measures adopted by the national government. With the rise in global commodity prices and the resultant increase in mineral wealth, governments in Chile launched a new set of social protection and social protection programs aimed at reducing extreme poverty, social vulnerability and exclusion. As Figure 32 illustrates, there is a notable increase in social expenditure in the country. Prominent among such social protection programs are the *El Puente* and *Chile Solidario* programs established in 2002 (Palma, and Urzúa, 2005). Prior to this time, Chile's *"Concertación"* governments have made remarkable efforts to reduce the national poverty rate by half during the 1990s; the level of extreme poverty has remained constant since 1998 (Ministry of Social Development, undated).

Figure 32. Government expenditure on social programs (US$ 2010) (1987-2010)



Source: Arellano and Vial (2013).

Most programs in the new set of social protection policies in the country are not based on employment in formal jobs and social security contributions. This is in recognition of the fact that such employment dependent social policies are limited by "labour vulnerability"[22]. Rights to social protection services in Chile are not acquired through employment-based

[22] In essence, those who do not have sufficient labour assets (i.e., knowledge, skills, experience, and access to capital), particularly the disabled and the elderly, cannot gain income from employment and take advantage of contributory social security. Besides, such programs discriminate against certain groups in the society, such as young people and women who are either unemployed, perform household chores or predominantly engaged in the informal sectors of the economy.

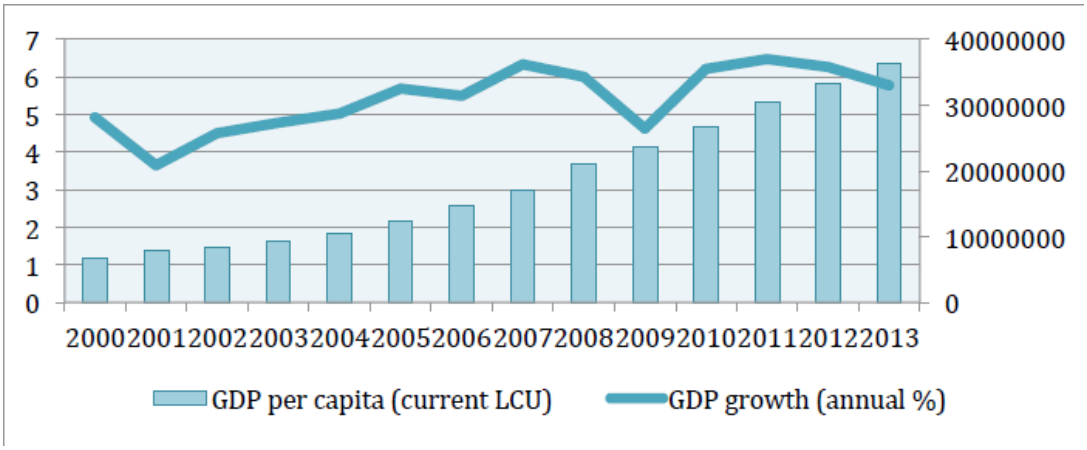
contributions. Hence, most poor people are not excluded, and this gives them access to resources to improve their potential and foster human capital for the economy. Nem Singh (2010) opines that "the mining sector in Chile has undergone a gradual but successful transformation from statist developmentalism towards the neoliberal model of development" (p. 78). This has resulted in the use of the mining, particularly copper revenue for social development through job creation and social protection.

6.3 Indonesia

6.3.1 The extractive industries and the economy of Indonesia

With current a GDP of US$ 1.02 trillion and growth rate of 6.2 per cent coupled with an estimated population of 264 million people (2017), Indonesia is the 10th largest economy in the world in purchasing power parity adjusted terms (OECD, 2012; World Bank, 2014d) and one of the most populated countries. The country has abundant mineral resources, which have been extracted at commffiercial quantities. Such mineral resources include coal, copper, gold, natural gas, nickel, and tin. Indonesia also has less significant resources of bauxite, petroleum, and silver (Kuo, 2013).

Figure 33. GDP and GDP per capita in Indonesia (2000-2013)



*LCU = local currency unit

Source: Author's Compilation (2015).

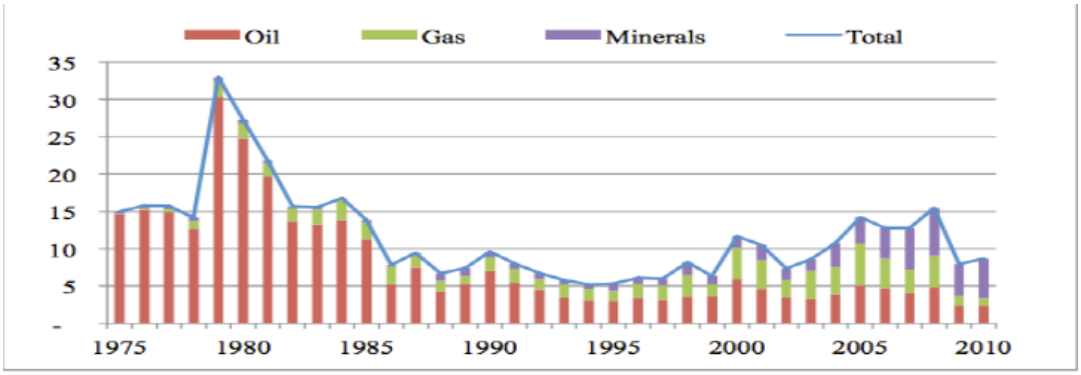
The history of economic growth in the country illustrates a continuous process of economic diversification from resource commodities to value-added production and upgrading. The dynamic linkage of the extractive industries (EIs) with the rest of the economy has spurred a robust and sustainable growth of the Indonesia's GDP for more than a decade (Figure 33). In the 1970s and 1980s, the Indonesian economy was heavily dependent on EIs such as oil and gas, coal, copper, as well as palm oil, rubber and other horticulture commodities (Kuo, 2013). The management of the EIs in the Indonesian economy is considered one of the few success stories of a developing country that escaped the "Resource Curse" (Rosser, 2007). The success story of Indonesia hinges largely on its effort on economic diversification.

Indonesia has proven oil reserves of 4 billion barrels and ranks 21st among world producers, which amounts to 1.2 per cent of world oil production (PWC, 2012). Declining oil production and increasing domestic consumption resulted in a number of policy actions. First, the country becomes a net oil importer in late 2004. Second, the Government scaled back domestic oil subsidies in 2008. Third, the Government decided to temporarily withdraw from the Organization of the Petroleum Exporting Countries (OPEC), an organization it

joined in 1962 (PWC, 2012). With proven reserves of 108 trillion cubic feet in 2010, gas reserves in Indonesia are equivalent to three times the country's oil reserves, and the country is ranked 8th in the world gas production (PWC, 2012).

The EIs in Indonesia, particularly, energy extractives, have played crucial role in the Indonesian economy, both for earning export revenue and for meeting domestic energy demands. Early in its development, the focus was to earn export revenues from these energy extractives. However, there was a change in focus and re-orientation by the Government towards meeting domestic energy needs (IEA, 2013). The Indonesian economy has matured, while revenues from EIs have been used to enhance the development of other sectors of the economy. Oil rents represented about 8 per cent of the country's GDP, and comprised about 70 per cent of the combined rents of oil, gas and minerals in 1975 (Dyna and Sothath, 2013). Between 1974 and 1985, oil contributed about 17 per cent of annual GDP in Indonesia. Today, the contribution of the EIs to GDP is beginning to decline. For instance, in 2000, the oil and gas sector contributed 12.4 per cent of GDP; 7.3 per cent in in 2007; and 2.4 per cent in 2010 (Dyna and Sothath, 2013; International Energy Agency, 2008) (see Figure 34).

Figure 34. Resource rents in Indonesia (% of GDP)



Source: Dyna and Sothath (2013).

The decline in export revenue from oil has given an added impetus to the mining sector in the past two decades. For instance, tin production has increased from about 31,000 tons – which was approximately 14 per cent of the world's production in 1990 – to 96,000 tons in 2008 – which account for 31 per cent of the world production (Rasiah, 2011, as cited in Dyna and Sothath, 2013). Today, Indonesia supplies about 20 per cent, which is the largest global market share of tin (EITI, 2014b). As reported by the Extractive Industries Transparency Initiatives (EITI, 2014b), oil production in Indonesia has declined from its peaked in 1996 with about 1.5 million barrels per day, down to .95 million barrels per day in 2011. Resource rent, particularly oil revenue, has enabled Indonesia to transform its economy, moving it toward a deepening of its reliance on industry and service sectors.

6.3.2 The dynamics of economic diversification in Indonesia

Indonesia benefited from the sudden surges in oil prices in the 1970s, and the boom in primary commodity prices. The windfall in revenues gave the Indonesian Government an opportunity to intensify the development of non-oil industries, but also posed the challenge of how to protect the competitiveness of the non-oil economy from the adverse consequences of oil windfall spending (World Bank, 1993; Zen, 2012). The Government used revenues from the oil windfall to promote horizontal and vertical diversification of the economy. For instance, during the 1970s, it devoted about 40 per cent of its budget to infrastructural development. In addition, the rent from the EIs allowed the Government to make huge investments in human capital development, particularly education and health services. During the 1970s and early 1980s, economic growth in the country averaged about 8 per cent due to the expansion of public and private investments (World Bank, 1993).

Under the umbrella of economic nationalism, the country adopted an inward-looking development approach and focused on the establishment of import-substitution industries. Investments were made in such capital-intensive and resource-based sectors as refining, liquid natural gas, chemicals, pulp and paper, fertilizers, cement, and steel (World Bank, 1993). For instance, as part of the resource-based industrial investment, the production of liquefied natural gas (LNG) added to economic output and fiscal revenues, especially after 1979. In 1983, LNG represented 23 per cent share of Indonesia's national exports (Glassburner, 1988). The government also made a US$ 4.3 billion in metal processing (i.e., steel and aluminium), a US$ 4.2 billion in refining, and US$ 1 billion in methanol and ammonia plants (ibid). While the LNG projects in Indonesia were cautiously financed, they were equally protected to some extent from uncertainties of global markets by a combination of foreign equity and long-term contracts with Japan (Glassburner, 1988). This policy was later changed in order to attract foreign investments and create jobs through labour-intensive production in the economy.

Table 5. Indonesia: Output by sector (sector share of GDP - %)

Sector	1967	1982	1996	1999	20009
Agriculture	51	23	17	20	16
Construction	N/A (a)	10	10	8	11
Manufacturing	8	13	26	26	27
Mining and utilities	N/A (a)	17	8	9	11
Services	36	37	40	37	35

(a) In 1967 the combined share of construction and mining and utilities was 5 per cent.

Source: Elias and Noone (2011).

Due to the stable growth in industry and service sectors, the share of agriculture in the overall GDP declined from 56 per cent in 1965 to 15 per cent in 2000, the contributions of the services and manufacturing sector were 39 per cent and 27 per cent of GDP respectively in 2000 (Dyna and Sothath, 2013). In addition, the shift of industrial policy from an inward to an outward stance improved the export performance of the Indonesian economy. Of particular importance here is the increase in the export value of the non-extractive sector, which was halted briefly by the Asian Financial Crisis of 1997. Industrial production in Indonesia was given a boost by the establishment of many tax and duty-free export-processing zones (EPZs) in different parts of the country in May 1986 (Sivananthiran, 2009). Apart from increasing exports, the EPZs were created with the goal of creating jobs and fostering technology transfer in the economy. Generally, rents from the EIs enabled the transformation of the economy. Between 1965 and 1997 the Indonesian economy grew at an average annual rate of almost 7 per cent (Indonesia Investments, 2014) (see Table 5 on p. 50).

The control and management of huge resource revenue in Indonesia was enhanced by the capacity of PT PERTAMINA, the state-owned Oil and Gas Company. The company was

created in 1960 and strengthened under Law No. 8/ 1971. The company was charged with the task of managing the oil and gas business, from producing oil and gas from oil fields all over Indonesia and processing them into various products, to providing and meeting the demand for fuel and natural gas in Indonesia (Pertamina, 2014). With its resource revenues well invested, Indonesia maintained macroeconomic stability and accomplished what the World Bank (1993) has classified as the three functions of growth: accumulation, efficient allocation, and rapid technological catch-up.

6.3.3 The labour market and social gains of economic diversification in Indonesia

The management of resource rents in Indonesia has contributed to measureable social and productivity gains in the country. Though EIs are not heavy employers of direct labour, the mining industry in Indonesia has contributed directly in job creation. Suryantoro and Manaf (2002) report that, from 1996 to 2000, the mining industry in Indonesia created not less than 30,000 direct jobs in the labour market. While this number of jobs might not be considered much in view of the population of Indonesia, the multiplier effect of these jobs in the larger economy has been quite impactful. Besides, Glassburner (1988) notes that Indonesia's labour supply grew as a result of government's efforts to diversify the economy away from the EIs. Citing a World Bank report, Glassburner (1988) argues that Indonesia's labour force jumped from 1.5 per cent in 1961-1971 to 4.7 per cent in 1971-1976 period.

The diversification from a resource-dependent to a manufacturing-based economy paved way for a transition from low-productive cottage industries, such as the weaving of bamboo mats, to one characterized by higher productivity in construction, manufacturing and services (Aswicahyono and Manning, 2011). The government in post-Suharto era changed the regulatory framework governing conditions of work, social protection and industrial relations for regular wage employees (ibid). Labour relations in the EPZs were further strengthened with the repeal of repressive labour laws after the end of Suharto era in 1998. For instance, national minimum wage laws were adopted, while rates of severance increased by international standards (Aswicahyono and Manning, 2011; Sivananthiran, 2009).

The diversification of the economy through an export promotion strategy began in 1985 and resulted in a significant increase in job creation. As illustrated in Table 6, the contribution of exports to the share of total new jobs created in Indonesia was 27 per cent in the period 1985-1995, and 67 per cent in the period 1995-2005 (ibid). Improved economic conditions – especially the creation of jobs – caused a notable decline in poverty in Indonesia. The increase in wage income boosted strong consumption, and enabled many to move out of poverty and into the middle class. The Government of Indonesia has equally implemented various social protection measures aimed to reduce poverty and improve human capital in the country. This includes subsidized rice (Raskin); conditional cash transfer program (*Program Keluarga Harapan* – PKH); educational assistance for poor students (*Bantuan Siswa Miskin* – BSM); and subsidized health care (*Jamkesmas*) (Perdana, 2014). These measures are geared towards meeting the target of the *2010-2014 National Medium-Term Development Plan*: to bring down the poverty rate to 8-10 per cent by 2014 (ibid).

Evidently, the share of Indonesians living on less than US$ 2 per day dropped from 91 per cent in 1987 to 51 per cent in 2009 (Elias and Noone, 2011) (See Figure 35). Consequently, the poverty headcount declined from 23.4 per cent in 1999, to 12.5 per cent in 2011. However, the Gini coefficient of income inequality rose from 0.29 in 1999 to 0.34 in 2005 (ibid). With this achievement, Indonesia was classified as a lower middle-income country.

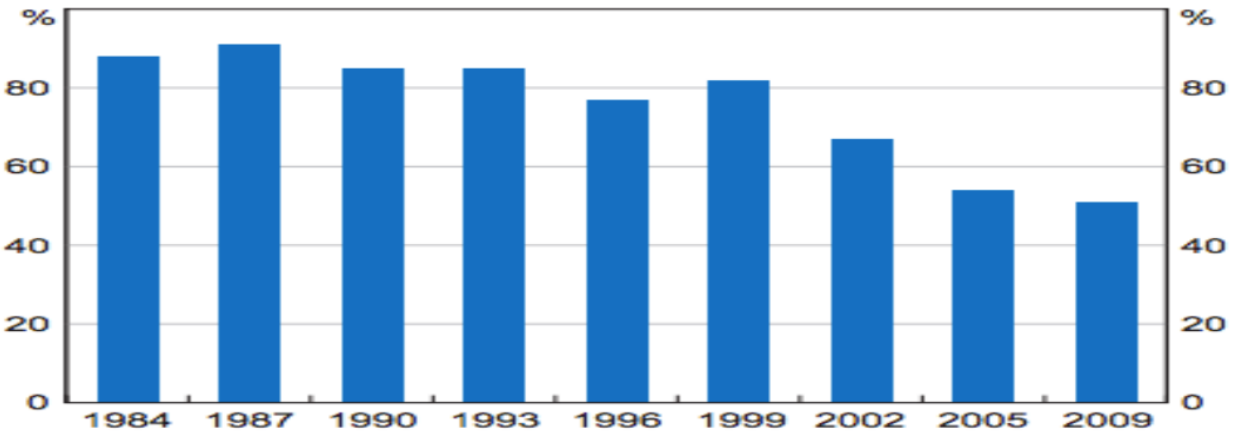
Table 6. Share of all employment contributed by export activities by major industry, Indonesia, pre- and post-crisis (1985-2005)

Industry	Total no. of jobs (million)		% of all jobs in export industries		% of all new jobs created by exports	
	1985	2005	1985	2005	1985-95	1995-2005
Primary	37.7	43.6	5.0	9.5	9.6	110.5*
Food Processing	1.5	1.8	2.5	16.8	8.8	**
Light Industries	2.7	6.4	33.6	54.9	73.0	65.6
H & C Industries	1.3	3.0	13.8	28.1	28.7	61.2
Services	23.3	40.7	7.5	17.4	27.3	36.0
ALL INDUSTRIES	66.5	95.5	7.1	16.6	26.7	67.4
Total Jobs (m.)					20.8	8.2

* Employment in domestic industries declined
** Employment growth was negative overall, though it did increase in export industries

Source: Aswicahyono and Manning (2011).

Figure 35. Indonesia: Poverty headcount ratio (Proportion of population on less than US$ 2 a day*)



* At 2005 prices; converted using PPP exchange rates

Source: The World Bank cited in Elias and Noone (2011).

6.4 Malaysia

6.4.1 The extractive industries in Malaysia

With a population of close to 31.4 million in 2017, Malaysia is endowed with over 33 different types of extractives, which can be grouped into three sub-sectors, namely: metallic, non-metallic and energy extractives. Many of these minerals contributed to the formation of national industrial base in Malaysia in the twentieth century. However, it must be noted that some of the extractives, such as barite, bauxite, copper, limonite, iron ore, and tin, which gave the country its resource rents in past are either depleted or have experienced significant decline in production (Tse, 2014).

The exploitation of extractives at commercial quantity in Malaysia dates back to the British colonial era in the nineteenth century. Historically, Malaysia had utilized the full potential of most of its natural resources at a given stage of its national development for vertical and horizontal growth of its economy. For instance, in the 1970s, the country's main export earner was tin. As the premier producer, Malaysia supplied about 40 per cent of global tin output (Lee, 2013; US Energy Information Administration, 2013). By 1980, primary extractives accounted for 33 per cent of GDP and 77 per cent of the country's exports (Bank Negara Malaysia, 2013).With the depletion of its tin deposits, coupled with the fall in price

in the 1980s, the country focused more attention to the production of bauxite and copper as the main contributors to the extractive sector. In October 1999, Malaysia's only copper mine, the Mamut Mine, ended operations (US Energy Information Administration, 2013).

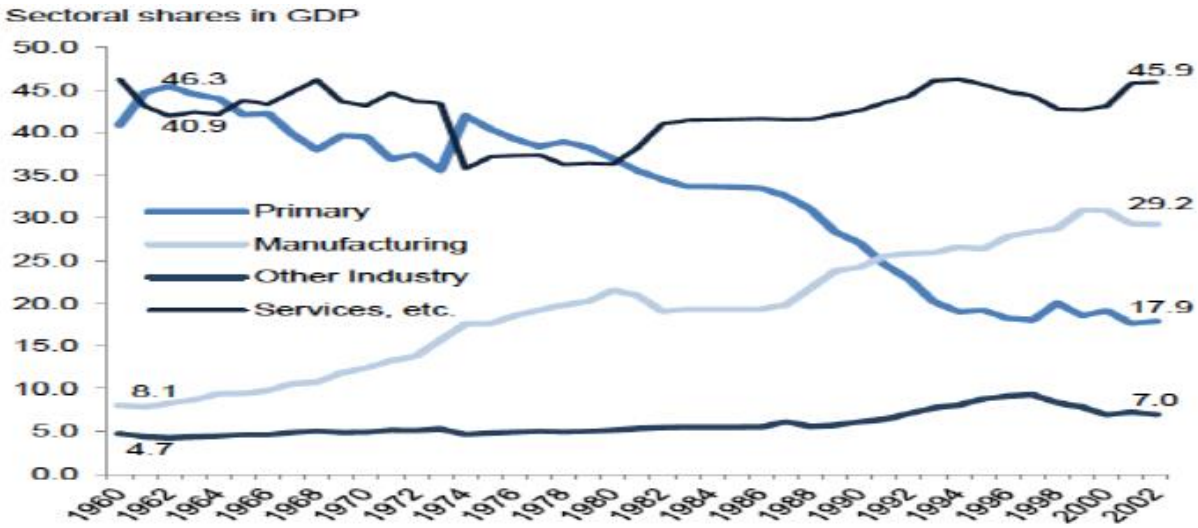
Oil and gas production have equally added to the resource wealth of Malaysia – the country has the 25th largest oil reserves and the 14th largest gas reserves in the world (Razalli, 2005). This sub-sector has made more impact with the creation of the state oil company, PETRONAS in 1975. The company provided the needed capacity, which drove the vertical diversification of oil and gas industries in Malaysia by building refineries, liquefied natural gas (LNG) facilities, petrochemical plants, fertilizer plants, shipping and retail trading (The World Bank, 2013d). For instance, in 1992, PETRONAS established two integrated petrochemical complexes (IPCs) at Kertih and Gebeng with superior logistics and infrastructure capabilities. From 1992 to date about 20 petrochemical plants have been established under the IPCs (ibid).

Through strategic economic policy actions, the Malaysian Government has intervened directly by launching ambitious industrialization programs in the 1980s. Apart from the establishment of the PETRONAS in the oil and gas sectors, the Government established the Heavy Industries Corporation of Malaysia (HICOM). The corporation was charged with the responsibility of coordination of government actions toward industrial development in the country through the Economic Planning Unit (EPU) (Ariff, 1998). Under the larger umbrella of the EPU, and through the development of industrialization blueprints, which are organized into five-year development plans, the Malaysian Government has used every policy tool at its disposal to entrench industrialization by making the economy less dependent on the extractive industries (EIs). From the *First Development Plan* (1966-1970) to *the Tenth Development Plan* (2011-2015), the Malaysian Government has enabled the transformation of the economy by deliberately shifting the focus of the economy away from extractive-based industries to industrial manufacturing dominated by electrical and electronics (E&E) for exports (EPU, 2014).

6.4.2 The extractive industries and linkages in the Malaysian economy

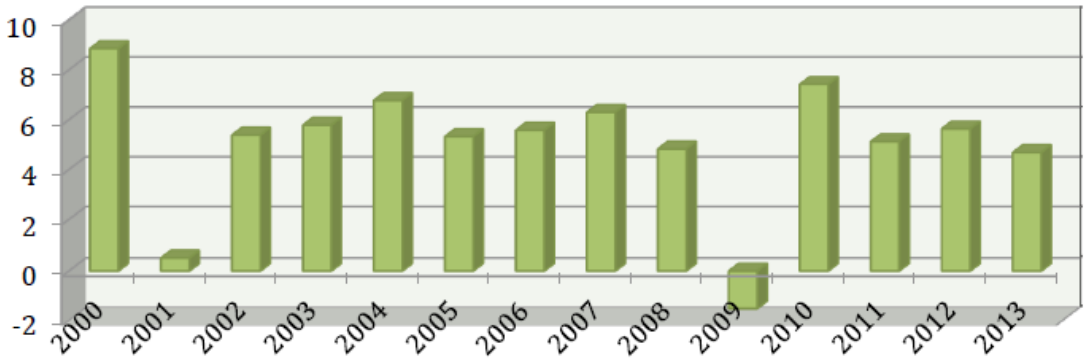
From early 1970s onwards, the Government of Malaysia vigorously pursued economic diversification policies aimed at reducing the country's dependence on EIs. As the growth drivers, the country has utilized rents from EIs to promote industrial deepening, job creation and broad-based and vigorous economic growth. In effect, the country diversified horizontally into high-tech manufacturing and, to some degree, modern services such as banking, insurance and shipping (see Figure 36 on p. 54). In effect, the Malaysian economy has experienced an average growth rate of about 5.1 per cent growth rate in the past decade (Figure 37 on p. 54).

Figure 36. Horizontal diversification of the Malaysian economy from extractives to manufacturing (1960-2002)



Source: The World Bank (2013d).

Figure 37. GDP growth in Malaysia (% annual change, 2000-2013)



Source: Author's Compilation (2015).

In the late1970s and 1980s, the Malaysian Government invested a good proportion of revenues from the export duties on extractives such as tin, palm oil, rubber and later petroleum in infrastructure and human capital development. This strategy provided an important support for the horizontal diversification of the economy. As a result, Malaysia spent over 15 per cent of its GDP in infrastructural and educational development (World Bank, 2013d). This strategy has been reinforced in all the five-year development plans up to date. In addition, the Government developed a series of industrial estates with efficient supply of utilities and basic infrastructure. These efforts toward horizontal diversification of the economy were complemented by some institutional measures such as the amendments to the Industrial Coordination Act, 1975. This law liberalized foreign equity ownership in manufacturing activities in 1985, and the partial privatization of some government-owned companies (ibid).

Vertically, the Malaysian economy also diversified into processed goods by establishing industries that add value to raw commodities. This includes companies for the manufacture of petrochemicals, oleochemicals, refined petroleum, palm oil, rubber gloves, tires and prophylactics products (Bank Negara Malaysia, 2013). Malaysia has brought to bear fiscal,

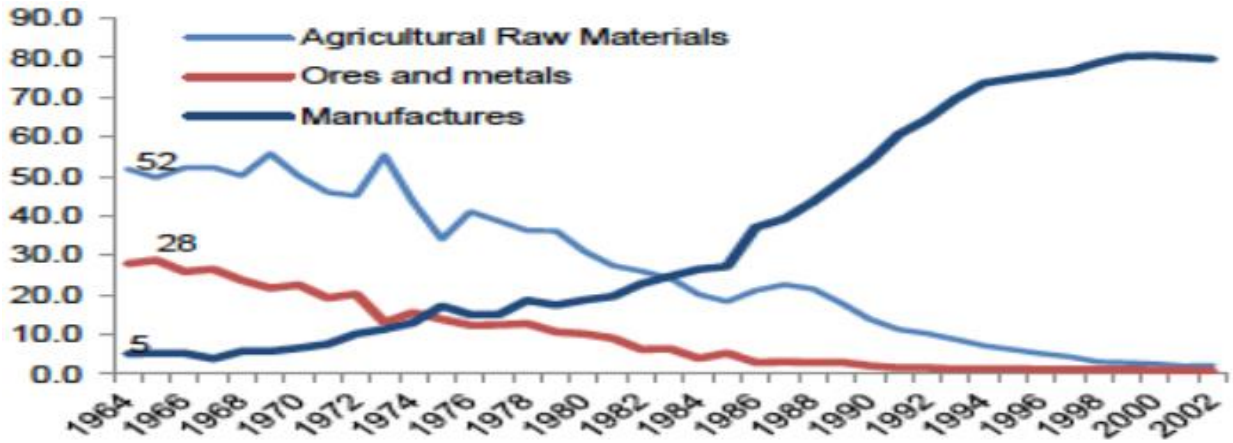
consumption and production (backward and forward) linkages from the EIs to the industrial sector. Thus, investments made possible with resources from extractives helped in driving multi-sectorial agglomerations, which have provided employment and skills transfer to thousands of Malaysians and changed the economic landscape of the country.

The objective of economic diversification in the country was promoted with the Nation*al Industrial Policy and Industrial Master Plan* in the mid-1980s (US Energy Information Administration, 2013). The plan enabled the Malaysian Government to implement different policy measures aimed at promoting the manufacturing and services sectors. The result was a rapid pace of horizontal and vertical diversification of the economy, with robust growth in the manufacturing and services sectors, and a significant reduction in the reliance on the EIs (ibid).

It is instructive to note that as of 2013, four of Malaysia's main extractives (crude oil, natural gas, natural rubber and palm oil) have been used as building blocks to create downstream industries (World Bank, 2013d). As the World Bank (2013d) observed, early in the 2000s, value-added in commodity-based manufacturing in Malaysia accounted for 12 per cent of GDP, compared to 18 per cent for raw commodities. With regard to export value, about half of all commodity-related exports were processed (ibid). For instance, gloves, manufactured with 70 per cent of rubber, accounted for over half of the exports of raw and processed rubber (ibid). This trend can also be identified in the petrochemical industry.

The diversification trend in Malaysia gave a boost to the electrical and electronic (E&E) industry in the 1980s as a leading sector in manufacturing, export generation, and job creation. According to the National Economic Advisory Council, the contribution of the E&E industry in manufacturing employment and value added saw a dramatic growth. This resulted in a drastic change in the composition of the country's export basket through export diversification (see Figure 38).

Figure 38. The changing composition of the Malaysian export basket (1964-2002)



Source: Adapted from the World Bank (2013d).

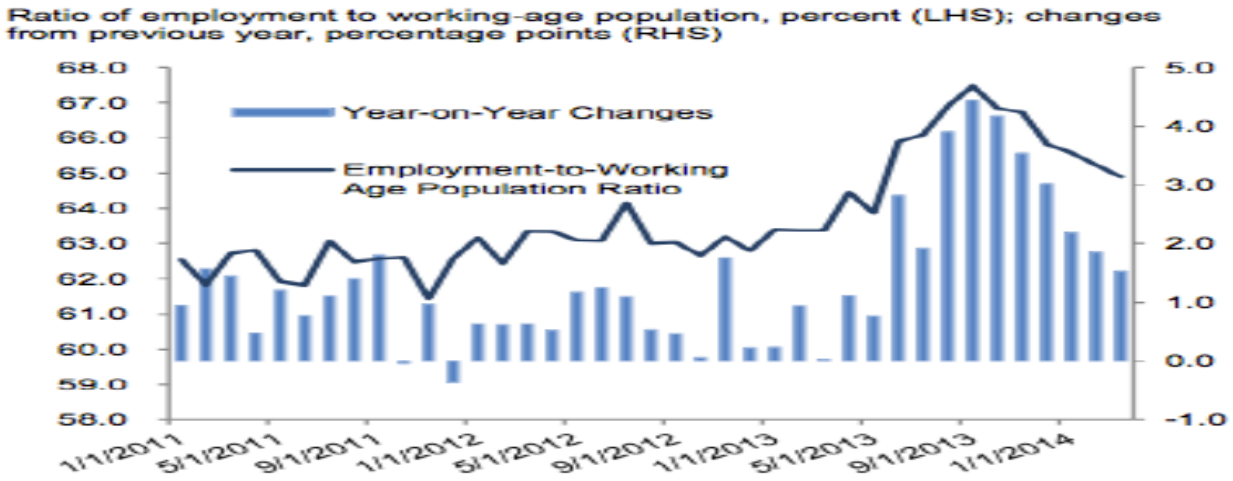
Economic diversification efforts embarked upon by the Malaysian Government have had positive results in the overall economy. For instance, the Central Bank of Malaysia (Bank Negara Malaysia) reports that the value-added of the resource-based industries increased by 6.8 per cent on a compounded annual growth rate basis between 2002 and 2012 (Bank Negara Malaysia, 2013). The increase in the resource-based industries in Malaysia has improved overall productivity of the economy and factor accumulation (physical, human and institutional capital). The diversification of the economy has not only improved government revenues over the years, but it has equally created more employment opportunities by moving underemployed or surplus labour from upstream agriculture sector to the manufacturing activities in the Malaysian economy. Consequently, there was a notable drop in the share of employment in agriculture from 31 per cent in the 1980-1990 periods to 15 per cent in the

2000-2010 periods. Conversely, there was an appreciation in the share of in the manufacturing sector from 16 per cent to 20 per cent in the same time period (ibid). The success of economic diversification efforts in Malaysia enabled the country to translate its extractive wealth into sustainable human development.

6.4.3 Translating economic growth into social wellbeing in Malaysia

Wealth from EIs, coupled with strong macroeconomic growth in the past four decades, have translated into inclusive economic growth, job creation and poverty reduction in Malaysia. With unemployment rate of 3.1 per cent in 2013 (EPU, 2013a) (see Figure 39), Malaysia achieved its major macroeconomic goals of full employment, inclusive growth and economic well-being for the citizens. As reported in the *Labour Force Survey* by the Department of Statistics, Malaysia (2014), female labour force participation rate in Malaysia increased from 49.5 in 2012 to 52.4 per cent in 2013. With an annual average GDP growth rate of 6.3 per cent for 1970-2012 period, the country's per capita gross national product (GNP) increased 25 times from 1,197 Malaysian ringgits (MYR) to MYR 30, 856 (EPU, 2013a). The wellbeing of the Malaysian people manifested in the Malaysian Wellbeing Index (MWI) 14[23] from 2002 to 2012 (see Figures 40), and its two sub-composites indices had a significant and positive correlation with GDP values in the country. The MWI has two major sub-composites: economic wellbeing and the social wellbeing (EPU, 2013b).

Figure 39. Employment growth in Malaysia (2011-2014)

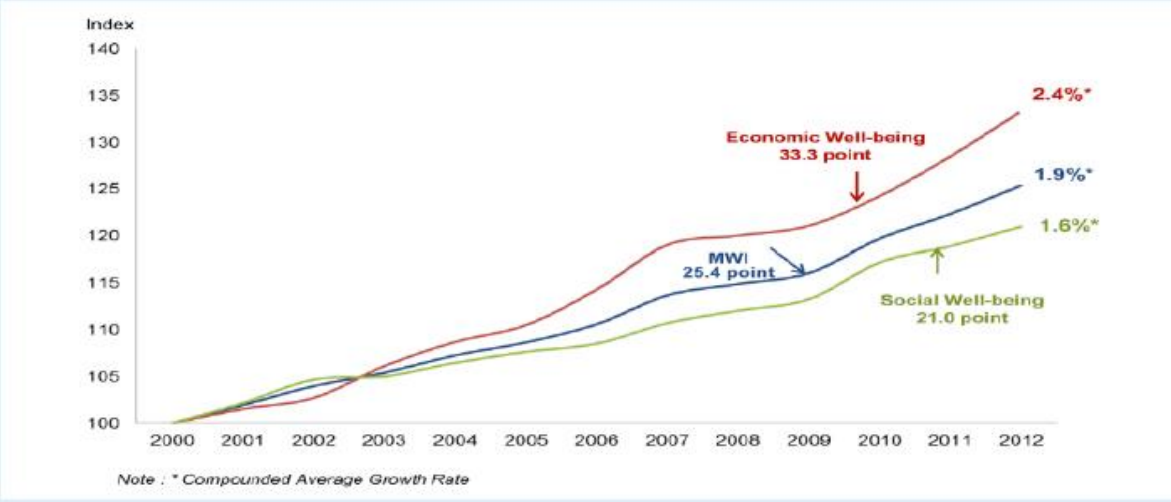


Source: World Bank (2014e).

This trend indicates that the development policies, which were centered on the vertical and horizontal diversification of Malaysia's resource-based economy, also increased the wellbeing and prosperity of the people. According to the Malaysian Well-Being Report, from 2000 to 2012, the aggregate index increased by 25.4 points, which translates to a growth of 1.9 per cent per annum (EPU, 2013b). The economic wellbeing sub-composite, which is comprised of transportation, communication, education, income distribution and working life, improved by 33.3 points. This indicates an annual growth of 2.4 per cent. The increase in the economic wellbeing shows that a good measure of the resource wealth was invested in education and human capital development in the country. This is a crucial component of a successful linkage development.

[23] The Quality of Life Index (MQLI), which was developed in 1999 and reformulated into the Malaysian Well-being Index (MWI), has 14 components and 45 indicators under two broad sub-composites. It is used to capture the diverse socio-economic aspects of Malaysian society.

Figure 40. Malaysian Wellbeing Index (MWI) (2000-2012)

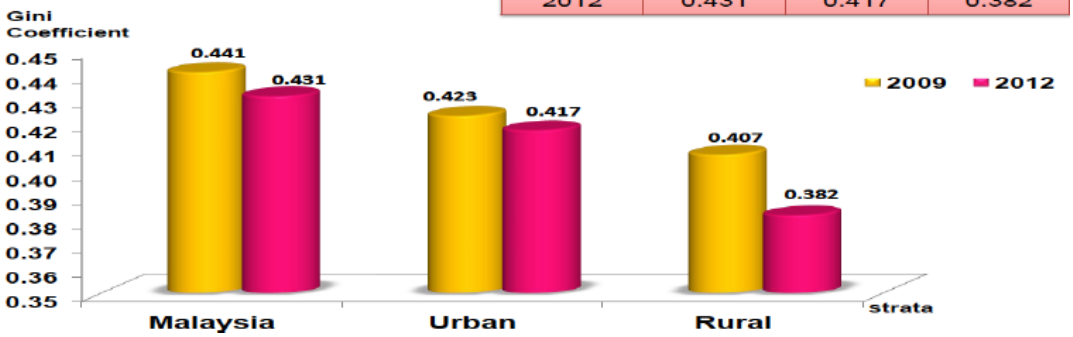


Source: EPU (2013b: p.7).

As Figure 41 above illustrates, the rate of poverty in Malaysia recorded an impressive performance with a decline in overall poverty incidence from 49.3 per cent (1970) to 1.7 per cent (2012) (Department of Statistics, 2013a). This represents decline in the country's Gini coefficient from 0.441 in 2009 to 0.431 in 2012 (see Figure 41). With this, Malaysia largely eradicated absolute poverty and moved into the upper middle-income category in the early 1990s. Together with the GDP, the gross national income (GNI) per capita in current prices grew by 6.5 per cent per annum from MYR 14, 529 in the year 2000 to MYR 30, 856 in 2012 (ibid). The improvement in the country's GNI has been attributed to factors such as capital formation, human capital and productivity (EPU, 2013a).

Figure 41. Gini coefficient by strata, Malaysia (2009 and 2012)

Year	Malaysia	Urban	Rural
2009	0.441	0.423	0.407
2012	0.431	0.417	0.382



Source: Department of Statistics (Malaysia) (2013a).

The drop in poverty happened in rural and urban Malaysia. Urban poverty dropped to just 1 per cent in 2012 as against 1.7 per cent in 2009, while rural poverty dropped from 8.4 per cent in 2009 to 3.4 per cent in 2012. With this achievement, Malaysia was able to accomplish earlier the set goal of reducing overall poverty to 2 per cent by 2015 under the *10th Malaysia Plan* (Department of Statistics, Malaysia, 2013b). Many factors, including strong institutional framework, are responsible for the rapid drop in poverty rate in Malaysia. Other factors include the implementation of various social protection measures at the national level. Notable among such measures are the establishments of health clinics (e Klinik 1 Malaysia program), and the affordable housing program (PR1MA). Others include welfare programs, which provided assistance for low-income senior citizens, children and disabled

people (KAR1SMA), as well as a government backed trust fund for low-income households (AS1M) benefiting around 100,000 households (ibid).

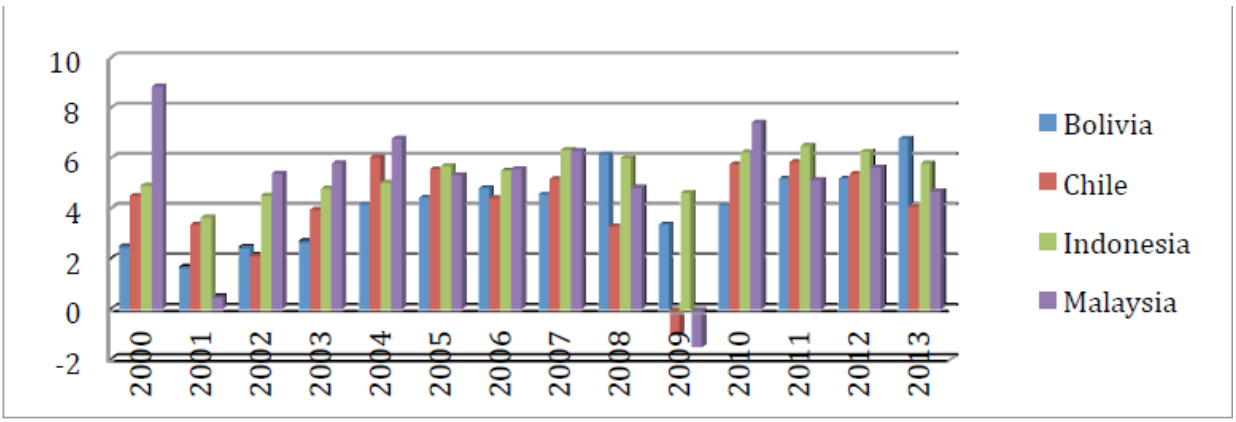
Notwithstanding its success in economic diversification, the Malaysian economy is not without its share of challenges. Despite the fact that Malaysia has unemployment rate of 3.1 per cent, which gives it full employment status, unemployment among Malaysian youth (aged 15-24 years) remains relatively high at 10.2 per cent (World Bank, 2014e). Given that youth unemployment is always higher that the overall unemployment, this may not seem particularly high in comparative terms. However, the ratio of youth unemployment to overall unemployment appears high at 3.3 times. This indicates that 60 per cent of all unemployed workers in Malaysia are between 15 and 24 years of age (ibid). The concentration of the unemployment challenge among the youth is concerning and raises the issue of skills mismatch in Malaysia.

6.5 A comparative evaluation of the extractive industries in Bolivia, Chile, Indonesia and Malaysia

The preceding section shows that Bolivia, Chile, Indonesia and Malaysia have been able to use revenues from extractive sector to promote inclusive growth. The countries achieved impressive performance on social indicators as the rate of poverty decreased drastically, more jobs were created across all sectors of the economy, and economic growth became more equitable. These countries have unique needs and circumstances, and it is important to note that they are not at the same economic status. Bolivia and Indonesia are lower-middle income countries, while Chile and Malaysia have achieved a high-income and upper-middle income status respectively. But one thing remains common: each of these countries used their mineral wealth to meet the unique needs of their people in an inclusive fashion. Against this backdrop, one is poised to ask: what features do these countries have in common, and what can extractive-dependent African countries learn from them? Generally, the four case study countries presented have maintained prudent macroeconomic management in combination with macroeconomic priority, political support and other complementary strategies to ensure broad-based economic growth.

First, when compared, these countries had a sustained average GDP growth rate of 3.5 per cent, which created the needed fiscal space for increase in social spending (Figure 42). As demonstrated by Durán-Valverde and Pacheco (2012), the size of governments (as expressed by fiscal revenue collection and total expenditure as a percentage of GDP) that have utilized their resource revenues to promote inclusive growth, have grown relative large, and in some cases experienced slight deficit. The implication is that these countries increased the participation of the public sector in the economy by reasonable percentage points of GDP.

Figure 42. Combined GDP growth in Bolivia, Chile, Indonesia and Malaysia



Source: Author's compilations (2015).

Second, this set of countries established macroeconomic stability and fiscal discipline, through the reduction of the total debt and by implication debt servicing (especially public debt ratios). The application of the principles of fiscal prudence enabled these countries to create the needed fiscal space by allowing their governments to free resources for investment in non-resource sectors and social protection measures. This was a practical strategy for reducing national debt, and led to the decline in the ratio of total debt service as a percentage of total exports. Macroeconomic prudence allowed these countries to create much-needed fiscal space for capital and social spending priorities. In turn, this fiscal space enabled them to invest heavily in infrastructural development. This effort served as the backbone for the diversification of the economy through the promotion of investments in the non-extractive sectors of the economy. Chile used proceeds from copper to invest in agriculture (fish and fruit production); oil revenues in Malaysia were invested in agriculture (forestry and palm oil production); and Indonesia used oil rent to boost agriculture by building fertilizer plants for farmers. These countries diversified their economies, but they remained in areas where they have a comparative advantage – agriculture.

Third, the case study countries also re-examined and reformed various policy frameworks guiding the activities of extractive industries, particularly the role of the state tax codes and local content policies. They were able to achieve impressive inflow in tax revenues following the review of their tax regimes. For instance, the Royalty law (Law 20.026, Article 64) introduced a specific tax on the operational profits of mining activities of companies in Chile, while Bolivia increased taxes and royalties from the extractive industries (EIs) from 18 per cent in 2005 to 50 per cent in 2013. In the same vein, all countries studied established and empowered state-owned companies to regulate EIs in the economy. For instance, in Bolivia, YPFB was created; in Chile, the National Copper Corporation (CODELCO); in Malaysia PETRONAS, while PT PERTAMINA was created in Indonesia. These state-owned extractive companies were given the responsibility of managing extractive activities in these countries, and regulate every stage of the EI value chain.

Fourth, all case study countries had the political will and a well-functioning technocracy that provided timely and prudent macroeconomic advice to the government. Evidence from these countries show that political will among the ruling elite is key to an effective and sustainable utilization of revenues from the EIs to promote inclusive growth through employment generation and social protection.

Fifth, Chile, Malaysia and Indonesia avoided serious exchange rate problems by devaluing their local currencies at the right time.

Sixth, they had informed constituencies, which helped to keep their policies on track and legitimate. Besides, these countries educated their population on government policies and also invested resource revenues in human capital development through social protection measures aimed at reducing poverty.

Finally, the case study countries implemented one form of social protection measure or the other. Social protection policies[24], either in form of conditional cash transfers or extension of pension and housing benefits to people in rural areas, enabled the countries to reduce poverty and build their human capital stock.

[24] Social protection measures transcends the contributory character of social security. It refers to public and private policy platforms designed "in response to various contingencies to offset the absence or substantial reduction of labor income; to provide assistance to families with children as well as to provide people with basic health care and housing" (UN, 2000, as cited and in OAS et al., 2010: p. 27). Through the inclusion of labour matters, social protection focuses more on the poorest and the most vulnerable and excluded members of the society.

The above factors, encapsulated in Table 7 below, enabled these countries to optimize the backward and forward linkages of the extractive sector not just for economic diversification, but also for job creation and social inclusion. By linking wealth from the EIs to other sectors of the economy, Chile, Malaysia and Indonesia were able to move a high proportion of their workforce from low to high productive sectors of the economy. These countries have shown that EIs can be a source of transformation through job-rich growth and poverty reduction if well-designed institutions and effective public policies are adopted. Economic performance in these countries demonstrates how extractive wealth can be used to trigger the process of transformation via inclusive economic growth, job creation and poverty reduction initiatives. Recent developments in these countries have come to reinforce the historically role of natural resource abundance, and the improved standard of living and inclusive industrial growth as obtained in the industrialized nations of today (John, 2011).

Table 7. Comparative perspective of extractive resources and inclusive growth in case study countries

Country	Major Extractive Resources	Regulatory Frameworks	Macroeconomic Outlook	Value Addition/ Diversification Strategy	Social Protection & Human Capital Development
Bolivia	Tin, Silver, boron, zinc, antimony, lead, tungsten. Oil & Gas (hydrocarbons)	- Under state-owned company YPF; -Re-nationalization of Oil and gas companies; -35% hydrocarbon Tax; -Environmental & Socially Impact Assessment	- Low-income status -Prudent macroeconomic management; - Low-income, High GDP - Low Inflation Rate: -low Unemployment Rate; -Programs targeting micro, small- and medium-sized enterprise (MSME)	N/A	-2013 HDI of 0.667; -Conditional cash transfer Programs; - Non-contributory social security; - Youth Employment Scheme: - Affordable Housing Scheme.
Chile	Copper, Iron, Manganese, Lead, Zinc, Gold, Silver,	- Copper mining is under state-owned company, CODELCO; -import-substitution policy	- Upper Middle-income status -GDP grew on average at 5.8 percent; -Low-unemployment rate (5%); -85 percent of household have monetary income	-Refined & concentrates copper; - Development of Wine Salmon Industries; -Grape Farming	-Low Poverty level of 14%; -Psychosocial Support and Protection Bonus; -Guaranteed Access to Monetary Subsidies; -Increase in social spending
Indonesia	Coal, copper, gold, natural gas, nickel, petroleum, and silver	-PT PERTAMINA, the state-owned Oil and Gas Company; -Foreign ownership is capped at 49% after ten years of operation	- High-income status - Prudent macroeconomic management; - GDP growth of 6.2%: -Programs targeting micro, small- and medium-sized enterprise (MSME)	- Establishment of Liquid natural gas companies; -chemical, pulp and paper, fertilizer companies; -cement & steel companies	-Subsidized rice (Raskin); -a conditional cash transfer program (PKH or Program Keluarga Harapan); -educational assistance for poor students (BSM or Bantuan Siswa Miskin); -subsidized health care (Jamkesmas).
Malaysia	Bauxite, copper, ilmenite, iron ore, and tin, & oil	-Under the state-owned oil company Petronas	- High-income status -Prudent macroeconomic management; -GDP growth of 5.1%: --Unemployment rate of 3.1% (full employment); -Female labour participation rate of 52.4%	-LNG facilities; -Petrochemical plants; -fertilizer plants; palm oil, rubber gloves factories; - Production of tires and prophylactics products	- Financial/welfare Assistance; -Home-help service; -subsidized healthcare; -pre-school education; -Quality Education and training; -Vocational training programs; - Zakat

Source: Author (2015).

7. Policy recommendations: Re-envisioning the extractive industries for inclusive growth in Africa

This section of the report outlines policy recommendations for resource-dependent African countries. It draws heavily from the experiences of the low-, middle- and high-income extractive-dependent countries presented in the preceding section. As demonstrated in the preceding section, these countries have successfully used resource rents to promote inclusive growth and poverty reduction within the context of circumstances in those countries.

Most resource-dependent countries in Africa have failed to use wealth from the extractive sector to create jobs, reduce poverty and extend opportunities by making economic growth more inclusive. This is a result of poor resource governance, administrative and institutional incapacity. Although African countries can draw a number of lessons from these countries, it must be recognized that the sectorial and spatial structures of Africa are different from countries in Asia and Latin America. While there is no single action to promote inclusive growth in extractive-based economies in Africa, there is a wide range of policy actions that can help these countries convert economic growth into job creation, poverty reduction and human development. Without such policy and institutional frameworks, resources from the extractive industries (EIs) can only act as catalyst for corruption. Against this background, this report recommends a set of policies and strategies that must be implemented in an integrated fashion by extractive-dependent countries in Africa.

7.1 Prudent macroeconomic management

To capture and translate resource revenues into sustainable economic growth and human development, extractive-dependent countries in Africa need to establish prudent macroeconomic frameworks supported by strong governance and fiscal regimes. This implies maintaining moderate and sustainable level of inflation, deficits and national debt. While counter-cyclical policies may be needed in some economies, permanently rigid and contractionary monetary and fiscal policies such as single-digit inflation targeting regimes may have a counterproductive impact of increasing interest rate beyond the reach of small and medium size businesses. This eventually will have a distressing effect on the economy by crowding out the much-needed private investment and job creation. Thus, macroeconomic prudence should create a friendly environment for small- and medium-sized businesses to thrive. This will enable them to promote inclusive growth by creating jobs in non-extractive private industries in the economy.

7.2 Increasing social protection measures and human capital development investment

Given the high level of poverty in most extractive-dependent countries in Africa, governments need to use wealth from the extractive sector to increase investments in social wellbeing and human development of the vulnerable members of the society. This would include additional provisions for quality basic education and healthcare provisions. Others include cash transfers to the vulnerable members of the society. Scholars have put other models of redistributing resource wealth for the benefit of the people. Moss (2011) suggested the oil-to-cash model of resource distribution, particularly, during resource windfalls. According to the model, governments facing resource windfalls can transfer some or all of the new income directly to the citizens in a universal, transparent and regular payment. This strategy is designed to give people direct welfare benefits, and also to enhance accountability by creating popular constituencies for good governance (Moss and Majerowicz, 2013). Above all, the government can tax the cash transfers because they would be treated as normal

income. Creating this source of revenue enables the government to build a broad tax base, which will continuously replenish government revenues (ibid).

However, many have criticized universal cash transfer model[25]. Rather than the universal approach, some countries have adopted conditional cash transfer methods. As demonstrated by resource-dependent middle-income countries such as Bolivia, Brazil and Venezuela, conditional cash transfers from resource wealth are an effective strategy for eradicating extreme poverty. In addition, spending resource revenues on social protection measures can go a long way to reduce poverty, create jobs and increase human capital. The multiplier effect of increased aggregate expenditure made possible by cash transfers would also promote inclusive and sustainable economic growth in African countries.

7.3 Improvement in fiscal regimes, revenue management and administration

To increase investments in social protection and human development, African governments need to maximize revenue inflows from the EI in order to create the required fiscal space. In view of the exhaustibility of natural resources, it is important to have an efficient and fair strategy to maximize the revenue potential of the extractive sector. This highlights the need to improve fiscal regimes and revenue administrations in the EI in Africa. While tax codes needs to be designed to country-specific circumstances, international standards guiding EIs' tax practices obtainable in OECD countries should equally apply to extractive companies operating in African countries. Fiscal regimes for EIs in Africa[26] should leverage the appropriate taxing tools such as bonus payments, royalties, gross revenues, and corporate income tax to provide sufficient revenues to the state based on the profitability of such ventures. These countries should also strengthen their tax administration capacity. Therefore, administrative staff equipped with the right tax audit training should implement fair and straightforward tax regimes for the EIs. This would enable African countries to curb illegal tax evasion practices such as transfer pricing and other fraudulent practices perpetrated by extractive companies in the Region. Similarly, African governments also need to re-examine some concessions granted to extractive companies. Some concessions are too favourable to investors, and some African countries such as Ghana and Zambia have begun the review process.

7.4 Investment in agricultural productivity

The agricultural sector has the potential of generating more employment opportunities than any other sector in Africa. Due to the abundance of land, African countries will always have agriculture as a large segment of the economy. Oftentimes, African governments are reluctant to invest heavily in the sector, creating the impression that agriculture is a backward or traditional sector. However, what is actually backward are the predominantly obsolete and frequently traditional methods used in the sector. The effect is that agricultural productivity in Africa is among the lowest in the world. While the Region possesses 24 per cent of global agricultural land, it contributes only 9 per cent of global agricultural production (Rieländer et al., 2013). To improve agricultural productivity, extractive-dependent countries should

[25] Rather than universal cash transfer; critics have argued that the windfall money can be used on things that can provide more dividends to society. Such things include the provision of physical infrastructure, and social services such as universal healthcare and education (Moss and Majerowicz, 2013).

[26] According to an IMF study, there are two forms of fiscal regimes in the EIs: (i) contractual schemes (production sharing or service contracts), and (ii) tax or royalty systems plus licensing schemes (Lundgren et al., 2013).

invest part of the extractive revenues in the agricultural sector. Investments in agricultural productivity promises to create more jobs than any other sector, increase the earning potential of farmers and reduce poverty. To accomplish this, governments investments in the sector should provide better access to input and output markets (i.e., access to inputs like fertilizers, improved seed, technologies and market for farm produce), basic infrastructure in rural areas (such as good roads, electricity and sustainable source of water), while improving the land tenure system and providing extension service agents, basic literacy for youth and access to credits for farmers.

7.5 Promoting economic diversification and linkages from extractive to non-extractive sectors

African countries should also make conscious efforts to promote the diversification of economic growth by transferring resources from the extractive sector to build the capacity that can promote sustainable private investment in other sectors of the economy. This is what Collier (2010) refers to as "investing in investing." This strategy will increase public investment in basic and much needed capital infrastructures, which are essential enablers for private investment and job creation. As noted in the preceding sections, the EI in Africa have weak linkages to other sectors of the economy, hence, it operates as an enclave. It is therefore essential for African governments to pursue deliberate policies that will link resources from the EI to other sectors of the economy. Working against the enclave character of the EI will not only establish a broad-based economic growth, but also generate more wage-paying jobs. One method to accomplish this is to invest in extractive resources processing factories within the country prior to export. The extraction and export of only raw ores will not produce the anticipated economic benefits for the increasing workforce in African countries. Efforts should be made by ore exporting countries such as Mozambique, Sierra Leone and Zambia to establish industries for the production of processed metals. As a key informant puts it, "I believe many more jobs can be created if we had manufacturing firms that process the copper and make all sorts of materials such as wire mesh, bullets, ornaments" (Kaunda, 2014). This would create the opportunity to expand the value chain and provide decent jobs for many more citizens who are ready and willing to work. However, the creation of higher value addition production will require the integration of EIs within the industrial policy in the country. Building value-added industries will be in line with the long-term strategy adopted by countries like Chile, Indonesia and Malaysia.

To accomplish this goal, African governments need to adopt a number of policy tools to attract the right investments into such value-added industries. Among such measure are subsidized credit, tax breaks and the provision of free or subsidized lands where such factories can be located. Another principle that promises to link resources from the EIs to other sectors of the economy is the increase in local content or increase local services in the resources used in the extractive sector. Extractive companies in African should not be in the practice of importing goods and services that can be provided by local vendors. Thus, resource-dependent countries in Africa need to pass Local Content policies or enforce existing policies to promote the linkage of their EIs with other sectors and create jobs. This highlights the significance of the Local Content Policy (LCP) being adopted in Sierra Leone. It is also encouraging to note that gold mining companies in Ghana are required to submit plans for recruiting and training Ghanaians as part of their workforce, while others are required to provide local content plans. As encouraging as these policies may sound, there is the greater need for enforcement and evaluation.

7.6 Creation of stabilization funds

To manage the volatility of commodity prices at the international market, African countries should also consider creating stabilization funds or future for future generations from current resource revenues. Such funds can enable them to manage the impact of any

future fall in prices. Some African countries like Ghana are in the process of creating such funds (Moss and Majerowicz, 2013). However, considering the level of poverty in these countries and their level of development, preference should be granted to human, social and infrastructural investment outlined earlier.

7.7 Improvement of labour conditions in the extractive industries

Resource-dependent African countries should also endeavour to improve labour conditions in the EIs by enforcing labour laws as outlined in national legislation and the international standards of the ILO. Mine workers in different African countries are victims of exploitation and labour market segmentation[27]. This is partly due to what an ILO study referred to as the "flexibilization" of employment protection rules (Deakin, 2013), and poor enforcement of labour laws. Many labour contracts in the EIS in Africa are privately efficient but socially sub-optimal. Mine workers are denied collective bargaining, workplace social dialogue, work-life balance laws, and work sharing arrangements rights. These unfair labour conditions obtain primarily due to inactive labour market policies in many African countries. These situations are contrary to standard employment relationships. These unfair labour practices can be addressed through legislative processes and the enforcement of existing employment protection laws. Regulatory intervention measures should promote labour rights in the EIs such as minimum income guarantees, health and safety needs of mine workers, vocational education and training provision, workplace social dialogue, and collective bargaining.

7.8 Regulation of artisanal mining activities

In recognition of the job creating potential of artisanal mining, more efforts must be made by African governments to regulate the industry in order to reduce the exploitation of the artisanal workforce and incidents of child labour. As part of local labour law enforcement, and the implementation of international labour standards (e.g., the Worst Form of Child Labour Convention, 1999 (No.182)), labour officials should inspect and withdraw children from mining activities and penalize adults and companies that employ minors. As a follow-up, formal education should be provided for withdrawn child labourers as an incentive. To ensure the effectiveness of such interventions, free universal primary and post-primary (secondary) education is crucial. Besides, labour ministries and departments in Africa should institute a campaign to raise public awareness on the hazards of child labour in mining activities and the need for early education.

7.9 Strengthen the institutional capacity of ministries of labour, mines and minerals development

Many ministries, departments and agencies charged with responsibility of enforcing labour laws and mining regulations in Africa are very weak. Thus, it has become imperative for African countries to strengthen the institutional capacity of the Ministry of Labour and the Ministry of Mines and Minerals Development to monitor and enforce labour

[27] As an economic and social phenomenon, Deakin (2013) explains that segmentation occurs when the labour market is divided or structured in a way, which is reflected in the forms taken by the employment relationship or contract. The practice is regarded as problematic because of its association with inequality and discrimination. Besides, the rationing of high quality jobs to those in a protected 'core' or 'formal' sector, as obtained in the EIs, and the resulting marginalization of others is linked to inequality of benefits and to the perpetuation of discrimination based on gender, age, and ethnic origin (ibid).

administration and labour inspection. Many of these ministries in Africa are short of experienced and qualified staff needed to enforce public policies. Adequate funding and capacity improvement in these ministries will ensure compliance with relevant laws and give protection to workers occupational health and safety concerns, especially in the mines. These ministries should also work together with mining companies and union of miners to address incessant job losses, reduction of wages or threat thereof, in mines across Africa. These are ways and means of bringing inclusiveness in the extractive sector.

7.10 Review and enforce accountability and transparency policies

African governments need to review and enforce accountability and transparency policies in the extractive industries. As noted in the preceding section, most transactions in the EIs in Africa, especially between governments and the foreign companies are conducted in secrecy. This has created a culture of corruption among the ruling elite and extractive companies in the Region. The sense of accountability and transparency are parts of democracy. Transparency in the EIs, which is a function of accountability, brings inclusiveness by empowering the people. Resource wealth should not be hidden from the people. Therefore, African governments must provide comprehensive information about public activities and transactions in the EIs. From the terms of mineral extraction contracts and the environmental and social impact assessments, to the resource revenues allocation formulas – communities must be included. The provision of timely and accurate information to the public about activities in the EI empowers the people and brings legitimacy to the activities of the government. However, the goal of accountability and transparency in the sector cannot be accomplished without efforts on the part of the civil society as well as the local and international media. These entities should contribute in monitoring and supervising the EI, especially at the local levels in Africa. These efforts will complement the current role of the Extractive Industries Transparency Initiatives (EITIs) in different African countries.

7.11 Investment in physical infrastructure

Adequate extraction of mineral resource depends on the availability of physical infrastructure such as good road networks, reliable information and communication network, airports, seaports, and reliable sources of electricity. Unfortunately, extractive-dependent countries in Africa, especially land-locked countries such as Zambia, do not have the necessary infrastructure to realize the full potential of their mineral resources. Consequently, there is an unnecessary increase in the logistical cost of resource extraction in the Region (African Union, 2009). Obviously, extractive companies cannot afford to absorb the huge cost of providing relevant infrastructures needed in the course of their operations. Therefore, it has become crucial for African government with the help of international financial institutions to invest in infrastructure development. The availability of physical infrastructures will create a favourable business environment for private investment. Increasing investments in physical infrastructure does not only reduce the overall cost of business operations in the EIs, it also raises output in the short term and increases aggregate demand and supply across the economy in the long term. As emphasized by the ILO over the years and recently reinforced by the IMF in its (2014c) World Economic Outlook, African countries can raise the quality of physical infrastructure through expansionary fiscal policy, with emphasis on improving public investment process. This objective can be accomplished through better project appraisal, selection, execution, and cost-benefit analysis (IMF, 2014c).

7.12 Cooperation of extractive companies

African governments cannot unilaterally implement policy recommendations outlined above. First, private extractive companies operating in Africa have a stake in the use of resource wealth to promote inclusive and job-rich growth, and poverty reduction in Africa.

These companies should go beyond the calls of corporate social responsibility. Therefore, extractive companies should cooperate with governments in the Region by complying with local regulations and international standards in the social, and environmental effects of mining in communities. Extractive companies should also apply transparency in contract negotiations with African countries. To enhance accountability and proper management of resource revenues, extractive companies should make it a priority to implement transparent contractual and licensing arrangements, and publish their payments to African governments on a country-by-country and project-by-project basis. In order to promote effective linkages and enhance the multiplier effect of the EI, companies should also comply with local content policies in their respective countries of operation. For the companies, the creation of additional jobs through linkages and poverty reduction will reduce their operation cost, and provide continuity of supply and distribution outlet. Above all, this will enhance social license and community buy-in for their operations.

7.13 Partnership with international development agencies

International development agencies such as the ILO, UNDP and the United Nation Industrial Development Organization (UNIDO), and international financial institutions such as the AfDB, the International Financial Corporation (IFC), IMF and World Bank have the responsibility of assisting African countries to ensure that the aforementioned policies are implemented. In line with the efforts of the EITI, OECD countries can enforce accountability and transparency in the EIs in Africa by compelling companies listed on their stock exchanges to disclose their transactions and dealings with resource-dependent countries in Africa. OECD countries can also support African countries by providing training for tax audit and capacity building in revenue management. The recommended institutional enhancement framework is illustrated in Table 8.

Table 8. An institutional enhancement framework for the extractive industries in Africa

LEVELS	INSTITUTIONS	PRIMARY ROLES	INSTRUMENTS
African Governments	1. Ministries of Mines 2. Ministries of Trade 3. Ministry of Labour 4. Environmental Agencies	1. Mining Inspectorates 2. Enforce Mining Regulations 3. Collection of Revenues 4. Create fiscal space for Social Investment	1. Routine inspection of mining sites 2. Review of mining contracts 3. Review of tax mining regimes 4. Publish EI revenues 5. Effective Revenue management
Extractive Companies	1. Multinational Companies 2. Local Companies	1. Comply with UN Standards for multinationals 2. Transparency in contract negotiations/payments 3. Address Impacts of resource extraction	1. Engage with government ministries and agencies 2. Engage mining communities 3. Utilization of local contents
Civil Society Organizations	1. Impact Monitoring Unit 2. Local NGOs 3. International NGOs 4. EITI	1. Evaluate Mining Contracts 2. Monitor Mining operations 3. Monitoring EI Revenues 4. Demand Transparency EI 5. Monitor Social Investments	1. Maintaining community interest 2. Engage Extractive Companies 3. Engage Government ministries/departments 4. Forums for public accountability
International Development Agencies	1. ILO 2. UNDP 3. UNIDO 4. UNCTAD	1. Monitor compliance with labour laws 2. Encourage Social Investments 3. Support Sustainable Extractive Activities	1. Extractive Revenue Transparency Committees 2. Capacity development of mining unions and workers 3. Monitor & Evaluate Social Investment of Revenues
International Financial Institutions	1. World Bank 2. IMF 3. AfDB 4. IFC	1. Support economic diversification strategies 2. Support strategies for social Investment & Physical infrastructure 3. Establish payment disclosure	1. Monitor transparency through Export Credit Agencies 2. Capacity Development for EI Monitoring in Africa

Source: Author.

8. Conclusion

This study is based on the premise that the positive impact of the extractive industries (EIs) in inclusive growth depends on the extent to which its output can be used to stimulate overall growth that benefits other sectors of economy. The recent spike in global commodity prices has given a huge boost to the EIs in many African countries. Unfortunately, the wealth generated from this sector has not been managed for the benefit of the larger society in many of these countries. This trend has resulted in high GDP growth, but which is devoid of the needed broad-based and inclusive growth of the economy. This challenge highlights the imperative for African countries to address their institutional and administrative challenges in order to use this wealth to promote inclusive growth and reduce poverty. This requires a long-term institutional reforms and good systems of governance.

This report recognizes the synergy between decent job creation and poverty reduction on the one hand, and inclusive growth of the economy on the other. Against this backdrop, this report adopts a holistic approach by recommending a set of policy actions that can enable African countries to translate resource wealth into job opportunities and poverty reduction. This includes the need for prudent macroeconomic management, improving and reforming EI tax codes and fiscal regimes, renegotiating contract with companies (where needed), and upgrading the tax audit and administrative capacities of government agencies in charge of extractive revenue collection. Other recommendations include increasing social protection spending and investment in physical infrastructure, as well as improved accountability and transparency in EI activities, including the establishment of effective institutional mechanisms for regulation and implementation of policies and existing laws. Given the integrative nature of these policy actions, effective implementation will require the cooperation and goodwill of extractive companies and international financial institutions, as well as the contributions of international development agencies.

The analysis here underlines the centrality of inclusive growth, job creation and poverty reduction for resource-dependent countries in sub-Saharan Africa and elsewhere. The positive impact of the EIs on inclusive growth depends on the extent to which their output can be used to stimulate overall growth that benefits other sectors of economy, and the establishment of the necessary institutional capacity for resource management and enforcement of regulations in the extractive industries. The effective implementation of these policy recommendations will require the integrated efforts of governments, extractive companies, social partners, civil society organizations and international development agencies.

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Kaunda, Salim – Head of Monitoring & Evaluation at the Policy Monitoring and Research Centre (PMRC), Lusaka.

Appendices

Appendix 1. Ahafo Linkages Program by Newmont Mining Company (Ghana)

The Newmont Mining company established the Ahafo Linkages Program in partnership with the IFC. The overall objective of the program is to contribute to enhancing the performance and competitiveness of the micro-, small- and medium-sized enterprise (MSME) sector to support economic growth as well as widespread employment and income generation in the areas near the mine. More specifically, the thee-year linkages program has three primary goals:

- To support the development of local businesses and to develop potential suppliers and providers of goods and services to the mine;
- To improve the competitiveness of local non-mining related businesses to help develop a diversified local economy outside of the mining sector; and
- To develop and improve the capacity of local business associations and institutions that can provide long-term sustainable business support, training and other services to the local business community.

Microenterprises make up 90 per cent of the businesses involved in the program and are defined as enterprises that employ up to 5 employees with fixed assets (excluding realty) not exceeding US$ 10,000.

The linkages program also places a special emphasis on supporting women entrepreneurs and incorporates HIV/AIDS into its training activities through the *IFC Gender Entrepreneurship Markets* and the *IFC Against AIDS* programs.

Newmont's decision to assess the impact of the Ahafo Linkages Program emerged out of the interest to explore additional measurement techniques that could provide information on indirect and derived benefits generated by the Program in the host communities. Based on the pilot experience, Newmont could later assess the viability of applying the same methodology to the social investments at its Ahafo operations.

To develop the most appropriate approach to measuring impacts, Newmont, with the assistance of IFC, adapted the World Business Council for Sustainable development (WBCSD) Measuring Impact Framework with the view to integrating it with other approaches used by the company, in particular Newmont Ghana's Environmental and Social Responsibility (ESR) and Monitoring Principles and IFC's Monitoring and Evaluation (M&E) Framework and Indicators.

At the end of 2007 – the first year of intervention – the number of local MSMEs engaged in business with Newmont increased from 25 to 52 and the value of goods and services procured from these MSMEs was US$ 4.2 million. In 2008, the total number of local MSMEs jumped to 125 and the local content reached US$ 4.7 million.

Source: WBCSD (2009).

Appendix 2. Regulatory frameworks for the extractive industries in Mozambique.

- The Constitution of the Republic of Mozambique of 2004 (Constitution).
- Law No. 14/2002 of 26 June (Mining Law).
- Law No. 11/2007 of 27 June (Tax Regime for Mining).
- Law No. 15/2011 of 10 August (Mega- Projects Law).
- Decree No. 11/2011 of 1 June (Regulation on Trade of Mineral Products).
- Decree No. 61/2006 of 26 December (Regulation on Mine Work Safety)
- Decree No. 62/2006 of 26 December (Mining Law Regulations).
- Decree No. 5/2008 of 9 April (Regulation of Tax Regime for Mining)
- Decree No. 16/2012 of 4 July (Mega-Projects Law Regulations).
- Decree No. 31/2012 of 8 August (Regulation on the Resettlement Process Resulting from Economic Activities).
- Decree 26/2004 of 20 August (Environmental Regulation for Mining Activities).
- Ministerial Diploma No. 189/2006 of 14 December (Basic Rules for Environmental Management for Mining Activities)

Source: Levy (2014); SAL and Caldeira (2010).

Appendix 3. Sierra Leone's local content policy: Will it ever work?

In May 2012 the Government of Sierra Leone introduced the Local Content Policy (LCP). The introduction of the LCP is in line with the realization that the Government's development objectives should be focused on supporting the private sector, which is considered to be the engine of growth for the overall economic development of the country. The Government believes that through wide-ranging legal and policy reforms, it will create an environment that promotes and protects the development of the private sector. In essence, the policy is necessary to ensure that there is sufficient linkage between the local economy and foreign enterprises.

As it is right now, the draft bill of the policy is held up at the cabinet secretariat awaiting cabinet approval before coming into effect. Prospects of the bill becoming enforceable in the nearest possible time are slim. This is mainly due to the lobbying power of corporate interests in the mining sector.

The LCP is a very good document when one takes into consideration the fact that most high profiled contracts like road construction and haulage of iron ore by the two giant mining companies (African Minerals Limited and London Mining Company Limited) are awarded to foreign-based companies. In the mining sector particularly, foreigners from China, Ghana, South Africa, Europe and the Americas are almost entirely doing all technical jobs for the companies.

Source: Theophilus Sahr Gbenda – Chairman, Association of Journalists on Mining and Extractives (2014).

Employment Working Papers

The Working Papers from 2008 are available at:

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