ASSESSING THE CHALLENGES OF DIAMOND MINING AND ITS IMPACT ON SIERRA LEONE'S ECONOMY

A Research Paper presented by:

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SIERRA LEONE

In partial fulfillment of the requirements for obtaining the degree of
MASTER OF ARTS IN DEVELOPMENT STUDIES

Major:

ECONOMICS FOR DEVELOPMENT
(ECD)
Specialization
PUBLIC POLICY AND MANAGEMENT

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The Hague, The Netherlands
December 2021

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List of Acronyms

ADMS	Alluvial Diamond Mining Areas Scheme
CCM	Cooperative Contract Mining
CDC	Chiefdom Development Committee
CMP	Core Minerals Policy
CSOs	Civil Society Organizations
DACDF	Diamond Area Community Development Fund
EITI	Extractive Industries Transparency Initiatives
EPA	Environmental Protection Agency
GGDO	Government Gold and Diamond Office
GDP	Gross Domestic Product
GoSL	Government of Sierra Leone
KPC	Kimberley Process Certification
MMMR	Ministry of Mines and Mineral Resources
MAB	Minerals Advisory Board
MSG	Multi Stakeholder Group
NDMC	National Diamond Mining Company
NGOs	Non-Governmental Organizations
NMA	National Mineral Agency
NRA	National Revenue Authority
SLEITI	Sierra Leone Extractive Industries Transparency Initiatives
SLST	Sierra Leone Selection Trust
SPU	Strategic and Policy Unit

Acknowledgement

I would like to express my gratitude to my supervisor, Dr. Elissaios whose guidance and support were so invaluable throughout the RP process. His timely and thorough feedback guided me on the right path. Beyond words, I would also like to profoundly pay homage to my second reader, Prof. Dr. Peter for his fatherly unbiased advice and guidance throughout the process.

Special dedication and gratitude to my late father whose passion for education is the driving force towards my achievement of this priceless master's degree in Development Studies. His memory will forever linger on my mind.

Finally, but most importantly, I would also like to express my profound gratitude to my fiancée, whose moral support has kept me going till the achievement of this feat in my life, not forgetting our cute son, who served as my inspiration throughout the RP process.

Abstract

There have been several policies, regulations, and laws on monitoring, directing, and improving the extractive industry in Sierra Leone, but despite strides made by the government, revenues collected from the extractive industry, especially from diamond mining have been minimal and have not in any way benefited the citizens of the country. To critically examine the reason(s) of these abysmal policies and regulatory failures, this research employed a multi-method approach of qualitative, descriptive statistics and documents analysis to investigate the challenges of diamond mining in Sierra Leone and its impact on the country's economy, using five reports of the Extractive Industry Transparency Initiatives, and the resource curse as a theoretical framework. It further argues that the resource curse is still evident in Sierra Leone, and it was among the other many reasons for the bloody civil war in the country, and it also continues to negatively impact the economic growth of the country. This research further reveals that there is still evidence of the resource curse in Sierra Leone, and it lies in either of the dimension of conflict, trade, or institution/corruption inefficiencies. The findings of the study reveal that through the institutionalization of transparency, the problem of public financial management, and unstructured and unaligned policies will be enhanced for proper management of the extractive industry and diamond extraction in particular.

Keywords

Diamond, economic growth, development, resource curse, miners

Chapter 1

Introduction

Sierra Leone is a country that is blessed with abundant natural resources, among those natural resources, diamond stand out to be the most precious mineral of the country. The country has significant diamond as well as other reserves which may offer one of the routes out of hardship. However, the country remains one of the world's poorest nations. Inflation and market volatility are among the country's macroeconomic threats, with corruption and mismanagement in the diamond mining sector serving as additional contributors to the country's slowing economic growth. This research will explore the challenges of the diamond sector and how diamond as a natural resource has contributed to the economy of Sierra Leone. This study focuses more on the inception of Sierra Leone into the Extractive Industries Transparency Initiative (EITI) scheme, the various EITI reports on the activities of mining in the country, and the country's performance in the EITI scheme. Also, this study will pose the argument that Sierra Leone's natural resource has not positively contributed to the economic growth of the country, and that there are various resource curse transmissions that are forestalling the management of the country's natural resource.

In addition, despite there have been several scholarly articles and journals on the extraction of diamond in Sierra Leone, particularly using the resource curse as a model of analysing the country's natural resource, this research tend to deviate from the traditional existing resource curse theory and focus more on how the EITI has helped to increase transparency and good management in the diamond mining industry, and also investigate if there is an existence of the resource curse in Sierra Leone, and how the EITI has also help to eliminate or mitigate any trace of the resource curse.

1.1 Background and Structure of the Research

Mining can potentially foster economic growth, job creation, infrastructure advancement, technological innovation, poverty alleviation and development of African countries that are blessed with abundance of natural mineral resource (World Bank, 1992). Mineral resources are important in uplifting a country's economy, but that is not the case with Sierra Leone, a small country located in West Africa that is blessed with abundance of natural resources. Since the beginning of diamond mining in the 1930s, the exploitation of diamond has become an important part in framing the country's economic and political sector. It did, however, contributed to the bloody ten years civil war of the country. From the beginning of diamond production, there have been conflicts over ownership, regulation, and exploitation of diamond (Reno, 1995). A priority was placed on diamonds and their ongoing operation on the rebuilding efforts of the country, but since over seventy (70) years when diamonds were discovered in Sierra Leone, there have been an ongoing debate as to what extent has its benefits the country.

Nevertheless, during the inception of diamond mining in Sierra Leone, the revenues accrued from diamond facilitated the construction of roads, provision of clean water and electricity, and infrastructural development (Maconachie, 2008). In addition, before the civil war, diamond mining served as one of the main source of forex and remittances in the country, and during this period the mining sector accounted for over 80 percent accrued from export earnings, and its further contributed to 20 percent of the GDP (NMJD, 2007). But since over two decades ago, there have been a huge income loss from the diamond business that could have facilitated the economic growth and development of the country, and presently, there is abject poverty in regions where diamonds were discovered (Maconachie, 2008, P:5). It was a resource blessing at the onset that later transformed into a resource curse.

The diamond mining sector in Sierra Leone have attracted various publications and scholarly work from notable researchers. Kabia (2018) and Davies (2000) looked at how diamond extraction fuelled and escalated the bloody civil war in Sierra Leone; as also opined by Le Billon (2008), a consequence of the abundance of natural resource. Also, Temple (2008) and Maconachie (2009) identified some mechanisms towards alleviating the effect of resource conflict, and Le Billon and Levin (2009) expressed the use of diamonds for economic growth. According to the study conducted by Zack-Williams (1995), he explored diamond mining in Sierra Leone through political economic structures (how diamond extraction has been managed by different governments in Sierra Leone). Over the era 1952-1961, there was a strong emphasis on both the fiscal motivations and the resultant repercussions from various legislation and acts performed by different players (Van der Laan, 1965). Good governance, according to some analysts, is the solution for the resource curse: policymakers and extractive industries firms working in underdeveloped countries must adhere to greater openness and accountability (Ocheje, 2006; Labonne, 1999).

In this research, I keenly explore the 'resource curse' theory as a basis for assessing the challenges of diamond mining and its effect on Sierra Leone's economy. For the 'resource curse', I explore three mechanisms (Institutions, conflict and trade) that I deemed fit for Sierra Leone's perspective on natural resource. This research focuses on the Extractive Industries Transparency Initiative (EITI) scheme, and how Sierra Leone has perform over the years since the country joined the EITI. Sierra Leone as a member of the EITI has produced nine annual reports, but for this research, only five annual reports spanning from 2013 to 2017-2018 of the EITI on Sierra Leone are examined and analysed. This research also looks at empirical studies/evidences that have been done or conducted on this research topic, with the intention to highlight the gap that prompted the objectives of this research. In addition, this research also provide some recommendations and possible solutions as to how the diamond mining sector should be reformed, regulated and benefit the people of Sierra Leone.

Chapter 1 introduces the study and assess the challenges of mining in Sierra Leone, it lays bare the foundation on which this research is built upon. It also defines economic growth, and gives the justification and relevance of the study. The research objectives and scope, methodology, research questions, and limitations are provided in chapter 1.

The theoretical framework of this research is based on the 'so-called resource curse' which is highlighted in chapter 2. Also, Analysis of other empirical evidences/studies on the same topic are thoroughly explained in chapter 2, so as to highlight the gap that exists among the studies. The history of diamond mining, the current state of diamond mining and its contribution to the economy of Sierra Leone are given in detail in chapter 3. Also, stakeholders and institutional analysis are also thoroughly explained in this chapter.

Chapter 4 looks at the methodology and the collection of data, followed with analyses and interpretations of the data collected. This chapter also looks at the results from the data collected with the intention of fathoming how the diamond sector has contributed to the economy of Sierra Leone.

Chapter 5 thoroughly examine and analyse the EITI reports on Sierra Leone's perspective. The premise of this research is built on the EITI scheme, and focuses on five EITI reports on Sierra Leone mining industry. The final chapter 6 is comprise of findings, answers to the research questions, recommendations and some possible solution as to how the diamond mining sector should be reformed, and enhance the economic growth of Sierra Leone.

1.2 The Challenges of the Diamond Mining Sector in Sierra Leone

Sierra Leone as a developing country, and among the poorest countries in the world, with a weak economy is still facing challenges in controlling its diamond mining sector. The prolonged state of underdevelopment and economic stagnation in Sierra Leone has been identified as a possible cause for social instability (Sierra express media, 2010). Despite the formation of various legal instruments in ensuring that diamond mining is transparent, yet still, diamond smuggling is rife in Sierra Leone (Hilson & Maconachie, 2016). The country's porous border between Guinea and Liberia is one of among many other reasons for the smuggling of diamonds out of the country.

Another major challenge of Sierra Leone whose economy is based on alluvial diamond processing and exports is the depletion of near-surface deposits (Hilson & Maconachie, 2016). Diamonds are becoming difficult to retrieve, as reported in a series of publications and surveys throughout the last decade. Investors have been compelled to take more risk, putting the local diggers in a more dangerous and insecure situation. While it is quite unknown when such diamond deposits will wear out, changing demand patterns indicate perhaps a robust creative rural development approach is necessary. This has further caused environmental degradation: huge deforestation and loss of biodiversity.

Diamond mining is notorious for its lack of accountability (NACE, 2009), there is a huge information gap across all levels, which leads to distrust and uncertainty about government's and corporations' financial positions, as well as their intentions. Most of the diamond mining companies do not update their websites, and hence information regarding their financial statement and tax payment are impossible to retrieve by the public. This gives room for tax fraud

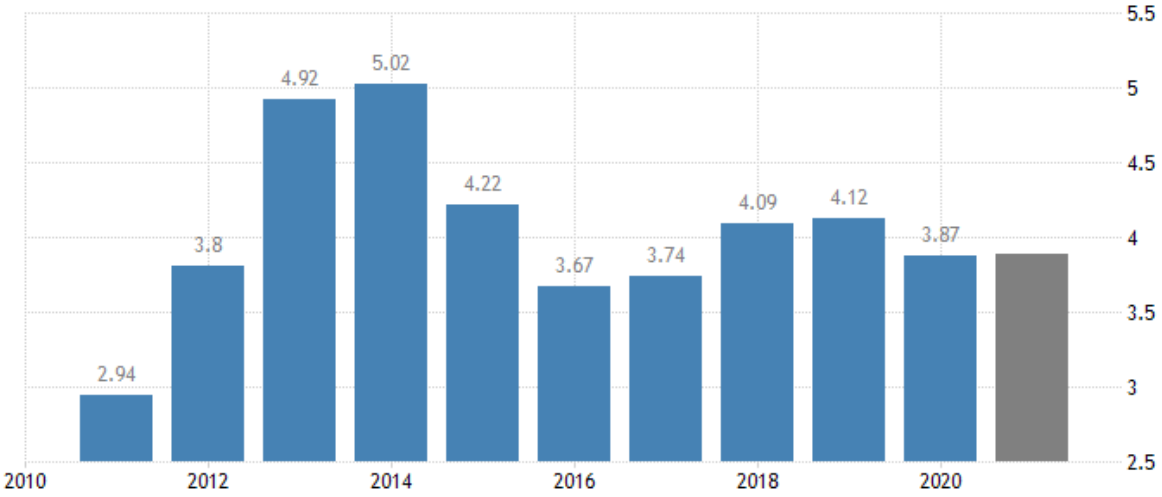
and an understatement of their annual financial position/income. On the other hand, even the government does not provide adequate information on the payment of tax and net income of diamond mining companies to the public. The blame for low transparency in the diamond mining sector could be shifted to the parliament of Sierra Leone. Parliamentary oversight is still lacking. Unlike in several other nations, the parliament of Sierra Leone has the constitutional authority to examine specific contracts negotiated mostly by the government with corporations, and they are most of the time enacted as Acts of parliament. Notwithstanding, in fact, the political party in power has being so powerful that opposition or inquiry has been impossible to access and achieve.

Furthermore, another burning challenge is the inability of the authorities charged with the responsibility to regulate and control the diamond sector are not properly monitoring the activities of diamond and mining companies. According to a new World Bank survey, there is actually no capacity to track how mining firms are acting lawfully and fulfilling the obligations they committed to uphold. Concerns have also been raised that certain firms pretending to be just experimenting are now exporting. In addition, diamond mining companies are exploiting local miners; their terms and conditions of service are very poor and unregulated, health and safety measures are being ignored, and there is a great evidence and existence of child labor.

Finally, corruption has swallowed the diamond mining activities in Sierra Leone. Rent-seeking is among the challenges facing government agencies charged with the responsibility of monitoring the activities of diamond companies (NACE, 2009). The continuous tax exemptions granted by the government to mining companies have been highlighted as a shortcut to corrupt practices (NACE, 2009). Also, the lack of adequate data on the financial statements and tax paid by diamond mining companies has also raised eyebrows as another indication of corrupt practices.

1.3 A Brief Overview of Sierra Leone's Economy

Figure 1: Sierra Leone GDP



Source: Trading economics country data/world bank
Figures are in USD billion
GDP: previous= 4.12, Last= 3.87
GDP per capita: previous= 488.89, Last= 468.49
GDP per capita PPP: previous= 1719.79, Last= 1648.05

According to Piketty (2014), economic growth is characterized as a change in a country's gross domestic product which would also be calculated as the amount of multiple benefits provided by the population in relation to national income or wealth. Rodrik (2007) stated that: "economic growth is the most powerful instrument for reducing poverty" (p: 2). Economic growth may not be the acquisition of wealth, but trade activities which satisfy the participants to the exchange of products, and usually govern the market without constraints leading to natural balance (Smith, 1776). These structural considerations include the liberty of foreign investment, market control, human and assets protection, and national institutions, which all contribute to defining the correlation between the two variables that influence economic growth (Ucak, 2015).

Furthermore, economic growth can be expounded to post-growth alternatives, which seek to uplifts the lives of humans and to promote what is equitable and sustainable; it caters for more human participation in economic activities (Margao, 2020). The elimination of GDP as a tool that tests economic development in a nation is one of the measures to go beyond growth (Gerber and Raina, 2018). It is critical to note that the aim of post-growth is not to completely eliminate GDP as a metric for calculating a country's economic growth; rather, it is to have alternatives that are more focused on human quality of life. Post-growth seeks to move beyond the traditional method of evaluating and achieving growth standards; it redefines and goes beyond what is affordable, egalitarian, and capable of meeting the actual needs of society's poorest.

The economy of Sierra Leone is quite weak and lacking in diversification. Sierra Leone's Economic growth seems to have been noticeably uneven. This uncertainty may be attributed to

unequal economic development within sectors, which is primarily driven mostly by the mining sector. Agriculture was first responsible for the economic expansion after the civil war, which was thereafter pushed by the mining sector beginning in 2010. When there is lack of consistent growth, it is difficult to attract grants/finance that may develop sectors of the economy and promote employment generation. During the year 2008 onto 2017, the country's real Gross Domestic Product (GDP) growth was at 10.6%. Fast forward to 2018 there was an increase in inflation to 17% and a depreciation of the country exchange rate at 12%. Also both the overall deficit in the budget and current account stood at 5.7% and 14% respectively (World Bank, 2021). The increase in unemployment and its effect on the economic growth in Sierra Leone is among the reasons the country has been labeled a high-risk debt country, public debts in 2019 were 64.5% of GDP, which increased in 2020 by 65.4%, with a projection of 65.9% in 2021 (Nordea, 2020).

1.4 Significance and Justification of the Research

Sierra Leone has been branded a high-risk debt country due to a rise in unemployment, and an underutilization of its natural resource, and their negative impact on the economic growth of the country. Public debts were 64.5% of GDP in 2019, rising to 65.4% in 2020, with a forecast of 65.9% in 2021 (Nordea, 2020). The country is not properly utilizing its natural resource which could offset the poverty rate, and increase the economic growth of the country; in fact, the country's natural resource has been deemed as a curse that is forestalling the development process. This in turn has resulted in a high increase in the multidimensional poverty rate, as the dependency ratio continues to surge upwards.

This research is thus essential as it will demystify the relationship that exists between the diamond mining sector and the economic growth in Sierra Leone, and it will also assess the challenges of diamond mining and also proffer possible recommendations and solutions as to how to mitigate those challenges of diamond mining with the aim of improving on the economic growth of the country. This research will also serve as a tool in aiding the government and other stakeholders of Sierra Leone to design meaningful policies that are geared towards improving diamond mining and how it can positively benefits the citizens of the country.

1.5 Scope and Objectives

The general objective of this research is to analyse and evaluate the impacts of the diamond mining sector and how it has contributed to the economic growth of Sierra Leone using the EITI scheme as the focus point of the research. It also examine the challenges of diamond mining, and tries to understand the triangulation between diamond mining and economic growth and how the former influences the latter. This research is formulated on the premise that there have been an uproar on the cry that diamond mining has not in any way contributed positively to Sierra

Leone's economy, and hence the need to investigate the reasons for that, and to proffer possible recommendations and solutions is thus important to improve the economic status of the citizens of Sierra Leone.

1.6 Research Questions

To properly understand the subject under review, and to critically examine the specifics involve in unearthing the challenges of diamond mining and its effect on the economic growth of Sierra Leone, some strategic questions have been drawn, that will also be answered at the later stage in the research to help achieve the objectives of this study. Thus, the questions are as follows:

i. Is there evidence of a resource curse in Sierra Leone, and if yes in which dimensions? (trade, institutions/corruption, conflict etc)
ii. Does participation in the EITI help protect the country against the resource curse and if yes, how?

1.7 Limitations of the Research

The first limitation of this research is the unavailability and inaccuracy of data to aid in meeting the objectives of this research. Sierra Leone as a country does not have so many institutions that keep, process and provide data, especially digital data to the general public. This has derailed the effort of so many researchers to conduct accurate research about the country's natural resource, economy and wellbeing of its citizens. In addition, to gather statistical data for this research definitely posed a problem, as there aren't updated data especially on the revenue accrued from diamond mining, and even data on the economy are mostly outsource by other parties that are interested in seeking funds and international donor support for economic development.

Another limitation of this research is to contact some senior employees that works in some ministries and departments that are charged with the management of the diamond extractive industry. Sierra Leone has been politicized, for that reason researchers find it difficult to contact some senior personnel for interview and clarification of some data needed for their research. Also, because of the Covid-19 restrictions on travelling to other countries, I have not been able to travel to Sierra Leone to collect primary data for the purpose of this research, and nearly all of my interviewees/respondents preferred to remain anonymous.

Nevertheless, despite the limitations of this research, I have strategically and properly make use of questionnaires, statistical data, semi-structured interview via telephone, and the collection of other secondary data to properly understand the challenges of diamond mining and its effect on Sierra Leone's economy.

Chapter 2

Analytical Framework

2.1. The Resource Curse: an Assessment and Analysis of Different Dimensions and Mechanisms

For many years, economists and other scholars have debated the resource curse, which literally translates to the "haves and have-nots." The resource curse, according to Murshed (2018), refers to nations that are highly endowed with natural resources but are nonetheless undeveloped when contrasted to those with fewer resources yet are economically strong. His claim was based on statistics comparing the economic progress of nations in Africa and South/Latin America with abundant natural resources to those in East Asia with hardly any natural resources. Nations that rely on natural resources will see a significant drop in exports, which will have a long-term impact on the commodities or products they create. As a consequence, the socioeconomic gap between nations that engage in industrialization and some of those that rely solely on mineral wealth will widen (Paler, 2011).

Extensive research by Sachs and Warner (2001) and Auty (2001) has shown that emerging nations that are endowed with abundant resources are far less likely to get a prosperous economy than resource-poor ones. According to quantitative study on national or cross-country data, mineral-dependent nations' economic performance has worsened. According to Auty (2001), this unfavorable relationship is attributed by proponents of the Dutch disease and unpredictability in revenue. Lahiri-Dutt (2006) expressed that a Dutch Disease occurs when the rest of the economy declines as a result of increased income from natural resources exports. Because nations prefer to concentrate on their natural resources, they tend to neglect other areas of the economy. The Dutch Disease, therefore, seems like one expression rather than a basic explanation of the resource curse.

Political considerations, as well as economic woes, may be more significant when it comes to the "resource curse" phenomenon, especially with regards to diamonds, since high market value and demand leaves them least affected by fluctuations in price (i.e, volatile market forces) than some other resources (Mehlum et al. 2006; Bannon and Collier 2003). A newer point of view has recently been used to analyze studies on the resource curse, one that deviates from traditional intercountry scrutiny applied in previous studies. To provide a more nuanced study of the impacts of resource richness and reliance, recent studies take into account provincial and district determinants and procedures, including regional democratic election as well as ethnic fragmentation (Libman, 2013 and Arellano-Yanguas, 2011). Furthermore, Zulu and Wilson (2012) opined that only a small number of political and economic leaders gain riches, while the rest of society does not, resulting in significant imbalance among those that are rich and people that are poverty-stricken (Ross 2007). It is quite obvious that corruption is one of the prevailing determinants that is enhancing the propensity of the resource curse, and both politicians and

some other public servants are highly embedded in rent-seeking other than promoting fair market values to enhance sustainable economic development.

Another facet of resource conflict is the political geography of the resource. Accessibility of valuable minerals is determined by the geographic distribution of natural resources (modulated and concentrated minerals), the proximity from the federal government influence (near or remote), coupled with the style of extraction (Le Billon, 2005; Auty, 2001). While diffused resources like alluvial diamonds are vulnerable to illegal mining and problematic for governments to regulate, specific resources like kimberlite diamonds span tiny regions, are frequently mined by a few capital-intensive companies and are subject to government regulation. Similarly, Wilson's (2011) research illustrates how Sierra Leone's distance from government supervision, as well as the geographically dispersed nature of alluvial diamonds, has aided illegal diamond extraction.

Furthermore, natural resources have sparked civil war and political turmoil in several developing countries; one noteworthy example is Sierra Leone's "blood diamond" saga. Although diamonds might be considered as a natural resource that may help Sierra Leone's economy, they have had a severe influence on the country's tax base, as well as causing political instability and social discontent among its inhabitants (Maconachie and Binns, 2007a). Despite its enormous natural resources, the nation currently ranks among the world's poorest countries. In reality, the natural resource which should be a gift has become a misfortune for Sierra Leone, since it was one of the main causes of the country's ten-year civil war. It was tainted by corruption, smuggling, and avarice, all of which hampered the country's economic development. Natural resources, are an economical attraction enabling rebel groups that, mainly out of avarice (rather than grievance), may opt to challenge the national government for access, command, and control of resources (Collier and Hoeffler, 2000). Other researchers such as Fearon (2005) and Ron (2005) refer to governance difficulties (such as state power and ability) as key factors in the link between mineral extractions with armed conflict.

Though opinions vary on whether natural resources are indeed the main reason for civil conflict, Lujala et al. (2005) claimed that they had a key role in the prolonging of armed wars like the one in Sierra Leone. However, Murshed (1999) pointed out that a country wealthy in natural resources may be privileged for a short time, but that benefit would turn into a curse in the long term. Murshed's proposal was based on a model developed for three different sectors: traded products, non-traded products, and resource-based commodity. It continued to examine their short- and long-term consequences on the economy, with a focus on depreciation, resource booms, and consumerism. Among the working paper's results was a clear signal that a country that is more concentrated on its natural resources will have poor development and poor economic performance in the long run, whereas nations with a diverse economy will do better. Consequently, even when a country has been gifted with natural resources for decades, the economic effect will be positive in the short term, but it will suffer economic issues or fall into the staple trap in the long run. In fact, a nation's economy will have low long-term growth as a

result of an unhedged economy, and enacting adjustments that would keep the economy stable would undoubtedly become a challenge.

Woolcock et al. (2001) look at how social capital interacts with natural resources, indicating that social determinants might moderate the link between natural resource abundance and growth. They claim that the unique characteristics of regions, institutions, and government relationships have a significant influence on economic growth paths in whole and shock management in general. On the other hand, Acemoglu et al. (2001) argue that institutions, rather than resource abundance per se, are a more essential driver of resource-led outcomes. They claim that different sorts of colonization strategies resulted in various sets of institutions in resource-endowed nations, which post-colonial civilizations inherited. In order to consolidate their political control and enable the exploitation of resources from the rest of society, post-independence republics frequently replicated the authoritarian techniques and structures of their colonizers. Elsewhere, Glaeser et al. (2004) analyze closely the dispute over whether governmental institutions generate economic growth or, conversely, if development and human capital accumulation contribute to institutional reform. While they conclude that investigating the nexus between institutions and economic growth is exceptionally hard owing to theoretical perspectives with assessing institutions as well as the constraints of statistical methods, they posit that regulation and human capital are in reality quite critical determinants in measuring growth.

In assessing and analyzing the resource curse in the Sierra Leone context, this research unlike other studies will try to evaluate which dimension (trade, institution/corruption, and conflict) of the resource curse is disturbing or impeding the contribution of diamond mining to the economic growth of Sierra Leone. Rather than continuing with the existing debates and literature on the resource curse, this research focuses more on identifying which dimension of the resource curse fits into the Sierra Leone context, and the mechanism involve to alleviate the effect of the resource curse. It will also evaluate and assess if Sierra Leone's involvement in the EITI has in any way helped to mitigate any evidence of the resource curse.

2.2. Empirical Studies about the Relationship between the Resource Curse and Natural Resources

There have been several studies on the resource curse which have produced mixed evidences over the period of fifty years or more, but however, it is important to note that majority of the studies are in full support of the resource curse theory as opposed to those that criticized the resource curse narratives in its entirety.

In their paper, Brunnschweiler and Bulte (2009) contributed to the argument that natural resources cause civil war, and question the key control variables in the literature. They discovered that the traditional part of resource dependency is endogenous in regard to civil unrest, and therefore instrumenting for interdependence removes it from social unrest regressions. Civil

unrest, on the other hand, appears to increase reliance on resource exploitation. Furthermore, abundance of natural resource is linked to a lower risk of conflict breaking out. These findings are resilient to a variety of specifications, and they conclude that resource abundance should not be considered as the general reason for the resource curse on economic development when considering that there are other factors that prompt civil unrest.

Their analysis was based on data that were collected within the period of 45 years on a 5 years interval period, and they used three regression equations: resource dependent equation, income equation, and conflict regression equation. They discovered evidence of linkages with natural resources and the outset of civil and social strife, but showed that it contradicts the popular belief of natural resource and conflict. Resource abundance reduces the likelihood of conflict, particularly the start of a large war, due to an income impact or disparity. Furthermore, they found little evidence of a broad relationship between resource dependency and civil conflict. Rather, it appears that inverse chain of causality holds true: crisis-torn civilizations reliant on natural resources, which is hardly a contradiction.

According to Arezki and Van der Ploeg (2010), they opined that the resource curse is less acute in countries with less restrictive trade policies, and excellent institutions. They showed that empirical data on the resource curse literature is not resilient to adjusting for the heterogeneity of some of the dependent variables. Additionally, abundant resources degrade politicians' intellectual integrity, resulting in the continuation of disastrous policies. For instance, natural resources might provide government pressure to prevent the intensity of foreign market from protecting non-resource export businesses. The discourse on the empirical data on natural resource scourge fails to dissociate from what are the primary ways to damage the significant exports of natural resources to economic growth. In their article, the primary point of argument is that stringent commercial policies seem to be evident in countries that heavily relies on natural resources.

They gave two reasons why empirical evidence on the resource curse is flawed. Firstly, little consideration is given to the endogenous nature of explanatory factors such as the characteristics of institutions or the level of trade liberalization. This is in comparison to the growing discourse on explaining the variation in nations' per capita income, where the primary focus is on finding accurate instruments to unshackle the causal linkages and account for endogenous independent variables (eg Hall and Jones, 1999; Acemoglu et al, 2001; Frankel and Romer, 1999). The majority of the empirical research on the resource curse doesn't seem to include mechanisms for trade liberalization, institutions or investment, resulting in results that are skewed and deceptive. Secondly, Islam (1995) and Parente and Prescott (1994) highlight the failure of varying variable bias in cross-country estimate of growth models. They don't account for a relationship between productivity and previous per capita income. The index on lagged income per capita would be overstated since the correlation with previous income per capita is positive. Such cross-country regressions have been utilized in the resource curse studies without regard for the bias. They conclude that the resource curse is less evident in countries with less

stringent policies on trade liberalization and good institutions, and if a country growth performance is good, no evidence of the resource curse will be visible.

Ivar Kolstad (2009) in his article The Resource Curse: which institutions matter? Opined that there are two models that are often used in the resource curse discourse/debates. One sort of model looks at how entrepreneurs choose between rent-seeking and generating income. The other kind looks into how politicians utilize favors to win re-election. The two theories have quite different policy consequences. The very first model recommends that the private sector's governance structures should be strengthened. The other model proposes that the importance of institutions that regulate the public sector must be highlighted and recognized.

The article make use of the cross-country data that was formulated in Sachs and Warner (1997) to empirically analyze the influence of both public and private sector institutions on that of the resource curse. The article finally conclude that, in the resource curse discourse, both the patronage and rent-seeking model implied that excellent institutions are essential to prevent the adverse effects of natural resource. Nevertheless, the patronage model emphasize institutions that regulate the affairs of the public sector, while rent-seeking model focused on institutions that manage the affairs of the private sector. Conclusively, the article at the same time examined both theories and discovered that more premium should be laid on the private sector institutions, because they are more essential in combatting the effect of the resource curse.

2.3. Empirical Studies about the Activities on Diamond Mining in Sierra Leone

There have been so many studies about diamond mining in Sierra Leone and how it has affect the lives of citizens in the country. Several approaches and methods have been used to undertake several studies, although the resource curse theory has been used the most, other researchers and scholars have also employed the corporate social responsibility theory, political economy, power, and other regression techniques to properly understand and analyze the diamond and mineral situation in Sierra Leone.

In his article, Wilson (2013) utilizes the concept of the resource curse to study diamond mining in Sierra Leone, and how it has affect the livelihood of local miners and the country as a whole. His article investigates within the period of 1930-2010 how diamond extraction has thrive over four eras in Sierra Leone: during the colonial independence, the All Peoples Congress period, and the years of the bloody civil war. According to the research, the overall impact of mineral mining in the country has fluctuated since diamond extraction started, ranging from a gift to a curse at several pivotal periods in Sierra Leone's history.

The study included two major additions to the resource curse theory: historical examination and multi-scale assessment of the consequences of diamond extraction in relation to resource curse or blessing. As a more sophisticated study of the fixed assessment of the resource curse, it also represented and highlighted the different transition of blessing to a curse

and vice versa of the natural resource in Sierra Leone within the period of 1930-2010. These transitions was as a result of the bloody civil war and several regime/government changes in the country. It continued to show that diamond extraction has blessed and cursed Sierra Leone in so many ways during 1930-2010, and it was among the main reasons for the ten years bloody civil war in the country. The paper strategically highlighted that the theory of the resource curse is not consistent, and can be better off with good administration and governance.

Similarly, Maconachie and Binns (2007) opined that according to mounting evidence, most countries in Africa with considerable natural resource have reaped minimal benefits, instead enduring youth unemployment, mismanagement, political unrest, and, in other instances, social unrest and local uprising. It has been argued that diamond extraction played a significant part in fueling a terrible civil war in Sierra Leone about two decades ago, a subject which has led to a flourishing literature on 'conflict diamonds'. Nevertheless, as the country recovers from the period of devastation, other studies shows that diamond might be a catalyst for post-war development.

Their paper investigates the impact of artisanal diamond extraction after the bloody civil war in Sierra Leone, concentrating on two war-affected villages in the Eastern region of the country. The study analyzes the diamond extraction scenario in the framework of wider development initiatives in post-conflict rebuilding, based on field data collected between the period of 2002 and 2007. It is proposed that sustainable growth may be achieved if future legislations and regulations are based on the comprehensive understanding of both the links connecting diamond extraction and inclusive growth at the district, provincial, and metropolitan regions. .

Furthermore, Chandra (2009) feels that the societal benefits of mining outweigh the negative repercussions, but underlines the importance of effective public policy in attaining this aim in the immediate future. Wilson (2015) has also investigated corporate responsibility, power structures, barriers to community engagement in Sierra Leone's post-war diamond and rutile extraction districts. In order to enhance the sociocultural, environmental and health of diamond explorers and their societies, Lichte (2014) attempted to understand existing environmental consciousness, customs and beliefs of vulnerable groups and identified insight, participation and current scope for small-scale adjustments at artisanal mining operations level.

2.4. Existing Gaps

In the above empirical studies, most of the researchers have used different theories and concepts to linked and understand the relationship between the resource curse and natural resource. In Sierra Leone there have been many researches published on minerals, especially diamond mining operations and how they have affected the lives of miners, residents, and the nation as a whole, ranging from political strife to commerce to institutional failures. Various aspects and processes have been emphasized, examined, and assessed on various situations based on different nations' management structures. Despite the fact that studies on the resource curse and diamond mining in Sierra Leone have been conducted, none of them have linked the Extractive Industries Transparency Initiatives (EITI) scheme to diamond mining in Sierra Leone, and how the EITI has helped to mitigate or exacerbate the resource curse on diamond extraction. Ultimately, this study intend to fully fill that research gap that has been in existence for so long.

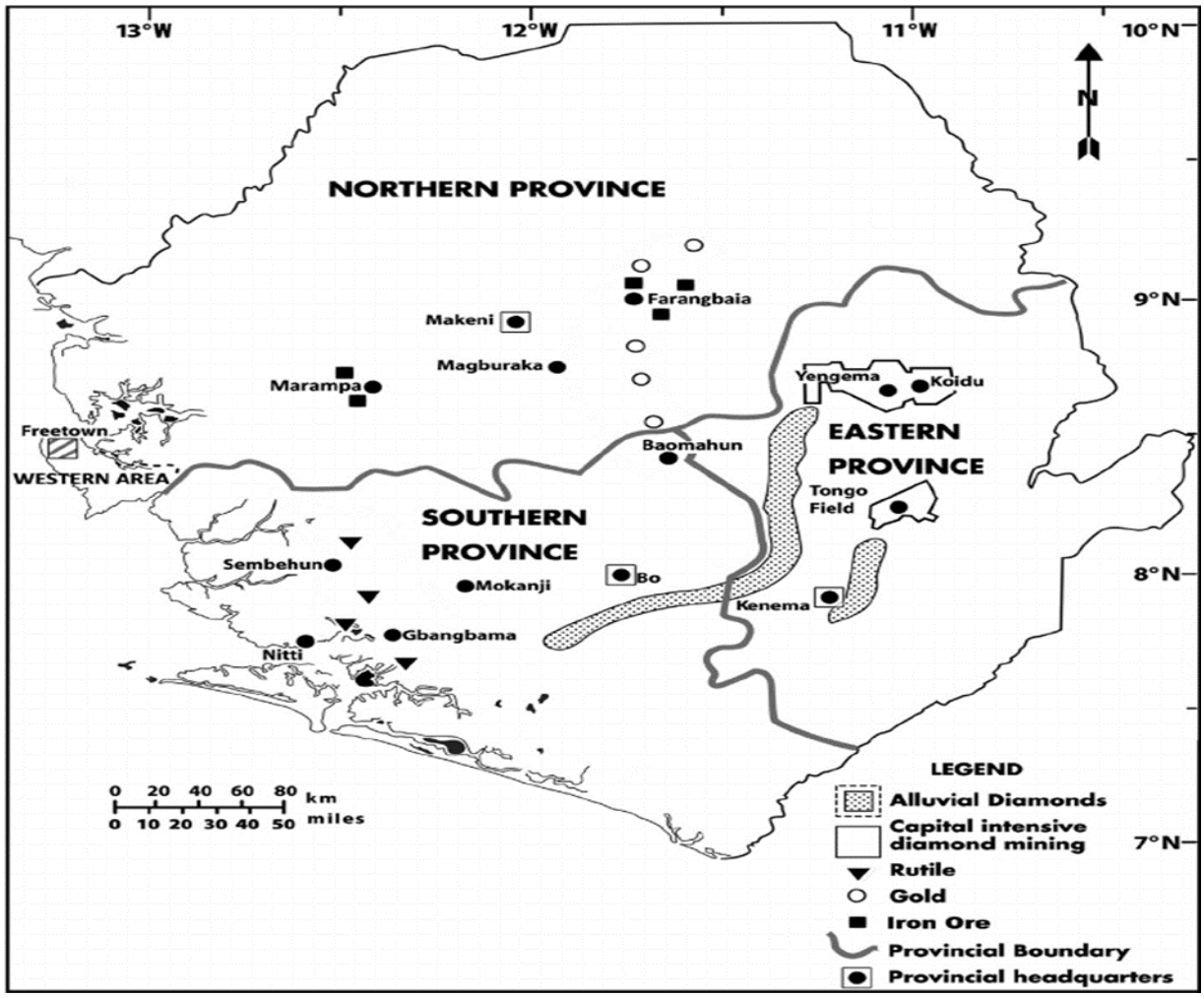
Chapter 3

Formation and Assessment of the Mineral Sector in Sierra Leone

This chapter highlights the formation of the diamond and mineral sector and assesses how it has transformed over the years with the creation of many organizations and sub-agencies that are charged with the responsibility of managing the mineral sector in Sierra Leone. It also analyze the stakeholders and legal framework of the mineral sector and how several policies and legal instruments have been initiated and revised overtime.

3.1 History of Diamond Mining in Sierra Leone

Figure 2: map of mining locations in Sierra Leone



Source: uploaded by Akiwumi 2014, from 'Strangers and Sierra Leone mining: cultural heritage and sustainable development challenges Article'

Sierra Leone's destiny has been linked to diamond mining following their detection in the 1930s. And during the industry's early stages, the 50s and 60s, large quantities of diamonds were extracted for export. The Alluvial Diamond Mining Areas Scheme (ADMS) authorized traditional alluvial mining in 1956. In accordance with the 1973 Cooperative Contract Mining Scheme (CCM) and that of the contract mining scheme during the period 1959-1971, the SLST, that later transformed to the National Diamond Mining Company (NDMC) opened small reservation areas and rented them to local operators (Reno, 1995; Zack-Williams, 1995). Holders of license under the ADMS traded their diamonds to private firms and to the Government Gold and Diamond Office (GGDO) in order to diversify government and private revenue streams. The beneficiaries of those dealings were mostly the local and Paramount Chiefs. Chiefs control over rights to mineral deposits and prospects for rent finding expanded with new jurisdiction over contractual scheme members. The Chiefs granted more access to Lands to foreign investors, the elites and influential in the state, rich businessmen, etc. enabling the influx and supremacy of the Lebanese with bigger capital in the diamond mining sector (Fithen, 1999; Reno, 1995; Zack-Williams, 1995).

In the year 1971, the then President Siaka Stevens embarked on the privatization of the diamond sector that ushered in the takeover by the Lebanese merchants, his motive was to boost forex and remittances in the country (Fithen, 1999). He furthered to transform the SLST to NDMC in the same year, with the hidden intention to seek political elite support. The consequences of this selfish act by President Stevens subverted the country's economic growth, local economic development, etc. In the years (1985-92) following President Momoh tenure as President in the country, he ushered in the IMF that gave economic freedom in the mining sector, and that ejected the Lebanese as the main contractors that were monopolizing the diamond trade (Reno, 1995). The result of this abysmal selfish political moves by both Momoh and Stevens as highlighted by Bayart (1989) in Reno (1995: 31) formed an irrational 'power over' of few political elite that selfishly personalized the mining sector at the detriment of local miners. It was noted that because of the 'over polluted' corruption and 'political elitism' in the diamond sector, coupled with unemployment and injustice were among the main reasons for the civil war in Sierra Leone.

Fast forward to present days, Sierra Leone diamond and mining sector as a whole has faced tremendous changes in the aspect of regulation, legal framework and reforms. Such reforms and legal framework includes the formation of the National Mineral Agency (NMA), the mines and mineral act of 2009, the artisanal mining policy 2019, the EPA 2008, the NRA 2002, the finance act 2016, and the extractive industries revenue act, 2018. All of the aforementioned regulations and reforms are geared towards promoting better diamond and mineral extraction so that it can boost the economic growth of the country and hence promote other socio-economic activities among its citizens.

3.2 Stakeholder and Institutional Assessment

To properly understand the formation and activities of diamond mining in Sierra Leone, it is but important to highlight and assess the stakeholders and institutions that are instrumental in monitoring, controlling, and directing the diamond and mineral sector in Sierra Leone. The stakeholders and institutions are the drivers of policy formation and administration on the activities of diamond and minerals in the country, and their roles and responsibilities played a crucial and vital part in ensuring that diamond is a blessing rather than a curse.

3.2.1 The Kimberley Scheme

The Kimberley process certification scheme, Sierra Leone's well-known and globally praised governance project in the diamond business, has been universally regarded as a viable path forward in severing the relation between authorized diamond commerce and unauthorized conflict diamonds. The problem of illicit diamond has attracted the attention of scholars, legislators and the press, both inside Sierra Leone and abroad, since the conclusion of the blood diamond civil war era in 2002. Considering the catastrophic influence diamonds have had on several countries in Africa throughout the past decades, there seems to be widespread worldwide acknowledgement of the significance of Kimberlite extraction in the proper management and selling of diamonds.

The KPCS was born out of a series of discussions conducted in Kimberly, South Africa, commencing in May 2000, wherein non-governmental organizations governments, and the commercial sector came together to discuss the topic of illegal and conflict diamonds. In December, 2000, the United Nations General Assembly had approved a decision endorsing the formation of an international standard certification framework for rough diamonds, following extensive discussions comprising 35 Nations. After two years later, in November 2002, the idea was officially adopted during a ministerial conference in Interlaken, Switzerland. The plan went into full enforcement on January 1, 2003, across over 45 member Nations, including Sierra Leone. Most industry watchers see the KPCS as the international benchmark of contractual corporate responsibility procedures, and it is currently supported by national law in over 70 Nations.

At the initial stage of the KPCS adoption in Sierra Leone, there has been a massive transformation from unauthorized diamond dealings to authorized and approved standards of diamond dealings. Since the implementation of the KPCS in Sierra Leone, diamond sales via the Government Gold and Diamond Office (GGDO) have grown substantially, as can be seen in Table 2. If you compared the data from 1999 before the scheme to that of 2000 after the implementation of the scheme, it is quite obvious that a substantial rise can be seen. Furthermore, when KPCS production began in 2003, export revenues increased even more drastically. The increase in revenue facilitated the construction of infrastructures that were damaged and burnt down during the civil war.

Table1: GGDO (1998-2006) Diamond export from Sierra Leone

YEAR	CARATS	VALUE (US $)	DUTY, 3% (US $)
1998	15,818.04	1,780,287.41	53,408.22
1999	9,320.32	1,244,825.34	37,344.76
2000	77,372.39	10,066,920.81	302,007.62
2001	222,519.83	26,022,492.27	780,674.77
2002	341,859.23	41,732,130.29	1,251,964.71
2003	506,723.37	75,969,753.32	2,193,335.84
2004 (+)	499,242.43 (A)	89,618,053.54	2,688,541.60
2004 (+)	58,030.54 (K)	11,172,434.79	335,173.04
2005	552,044 (A)	119,429,528	3,582,885.84
2005	116,665 (K)	22,510,716	675,321.48
2006 (*)	209,762 (A)	45,535,966	1,366,078.98
2006 (*)	30,631 (K)	6,984,425	209,532.75

Source: GGDO diamond export figures 2001-2006 extracted from Maconachie (2008)
(+) Figures from January to September 2004
(*) Figures from January to June 2006
(A) Alluvial, (K) Kimberlite

Fast forward to the 2010s to that of the current state of the KPCS in Sierra Leone, the export of diamonds have increased significantly (recent statistics will be explain in chapter 4), although the KPCS has clearly achieved great progress in combatting illegal diamond extraction and its relation to armed conflict, several observers have noted it has accomplished almost nothing to combat the hardship, unemployment, and deplorable labor conditions which artisanal miners encounter on a regular basis (Silberfein, 2004; Olsson, 2006).

3.2.2 History of the Diamond Area Community Development Fund

The Diamond Area Community Development Fund was founded in 2001 with the goal of improving post-conflict rehabilitation and tranquility through transfer of diamond benefits, reclaiming of insurgent-controlled diamond fields, and elimination of illicit diamond extraction (GOSL, 2008). The DACDF receives 0.75% of the overall diamond export earnings and allocates it

to diamond extraction localities for municipal (infrastructural) development initiatives. Biennial subsidies are distributed, originally to chiefdoms outrightly, however since 2006, via districts and Chiefdom Development Committees (CDC). Twenty percent of half of the year accumulation is split evenly between Chiefdoms that mined diamonds. The remaining funds are prorated depending on the percentage of artisanal licenses awarded across each Chiefdom (sixty percent) as well as the district councils (twenty percent). This is important because, the money allocated to local Chiefdoms is used for local community development and soft loans for local farmers which improves local trade and economic development.

The fund could have generated $6.43 million dependent on revenues of $856.8 million (2001-2009). About Le 13,534 billion ($3.72 million, 2009 value) has been released during August 2010 due to DACDF payouts been halted in 2007-2008. Around 2006, nonetheless, roughly 71 Chiefdoms and 13 local governments in 11 regions had reaped the benefits. The geographical distribution was inequitable. Ninety percent of the payouts went to Kenema, Bo and Kono districts (consult table 3 for reference). The most funded districts received $0.68 per year in payments per capita.

Table 2: Allocation of the DACDF to diamond extracted districts, from 2001 to 2009

Diamondiferous District	DACDF allocation, 2001–09		Population (2004)	DACDF share per capita	
	Leones	US$	(2004)	Leones	US$
Kono	6,187,782,084	1,604,848	335,401	18,449	4.78
Kenema	3,691,348,605	957,379	497,948	7,413	1.92
Bo	2,274,533,268	589,918	463,668	4,906	1.27
Pujehun	699,990,730	181,548	228,392	3,065	0.79
Kailahun	324,887,548	84,262	358,190	907	0.24
Bonthe	15,528,380	4,027	139,687	111	0.03
Moyamba	3,487,291	904	260,910	13	0.00
Bombali	309,896,149	80,374	408,390	759	0.20
Tonkolili	15,425,568	4,001	347,197	44	0.01
Port Loko	4,915,257	1,275	453,746	11	0.00
Kambia	4,755,947	1,233	270,462	18	0.00
Total	13,532550,827	, 3,509,770	3,763,991	3,595	0.93

***Sources*: data from Ministry of Mineral Resources; GOSL (2006), extracted from Zulu and Wilson (2012). Note: At that time the exchange rate was US$ 1 = Le 3,855.68 as at 31 December 2009 (Bank of Sierra Leone, 2009)**

Nonetheless, certain Chiefdoms made minor advancement in communal infrastructure, as well as access to healthcare, education, transportation, and recreational facilities. Projects mostly focused on building infrastructure or repair (health centers, courthouses, bridges, and roads), which had minor negative economic consequences in certain Chiefdoms, such as access to improved farm products and earnings for some. DACDF regions had lower levels of illicit mining than non-DACDF regions, while Chiefdoms with abundant diamond reserve had lower rates of illicit mining than Chiefdoms which have relatively low diamond reserve, according to two surveys including 19 and 13 Chiefdoms, respectively (NMJD, 2006; USAID, 2008).

Although the top level committee on the activities of diamond in the government of Sierra Leone continued to express concerns about the mismanagement of the DACDF, this finally led to the cessation of payouts in 2007-2008. The committee's main point of concern was an obvious lack of openness, community knowledge, and local engagement in decision-making procedures involving the fund's wage. Despite the fact that CDCs are meant to guarantee that implementation process is fair and transparent, they are frequently made up of local rulers, such as Paramount Chiefs. Some claim that this has undermined the idea of community ownership, alienating many groups such as youths or the women (Temple, 2005).

3.3 Core Stakeholder Assessment

This subsection highlights the core stakeholders that are charged with the responsibility of managing and monitoring the activities of the mineral sector in Sierra Leone. It is however important to note that, these core stakeholders are the engine that runs and stabilize the mineral sector, and it is important for them to be properly formulated, assessed, and evaluated so that they can properly undertake their tax which is to effectively manage the mineral sector in the country so that it can contribute to economic growth and development.

3.3.1 Assessing the Central/Executive Arm of Government

The President and the cabinet serve as the decision making body for the Sierra Leonean government. Other administrative group and the civil service have major political and administrative divisions, although below the level of the president and his cabinet. Though it has extremely little administrative and operational capability, the Ministry of Mines and Mineral Resources (MMMR) plays a vital role in approving the applications for mining license. Other ministerial officials continue to stress the importance of their policy-making and monitoring

responsibilities. The established National Mineral Agency Act of 2012, and revise Core Minerals Policy have been overlapping with the authority of the MMMR. Core Minerals Policy (CMP) has been transferred to the Strategy and Policy Unit (SPU), while environmental regulation has been transferred to the Environmental Protection Agency (EPA).

3.3.2 Assessing the Local Government

As the Chiefs who represents provincial districts in the province tend to play a significant role in administering provincial areas, keeping peace and stability, collecting taxes, and granting property rights, their power remains substantial. They control a significant amount of the surface rent from land leases for mining activities, and therefore they are the main authorizers of concessions for mineral extraction. Some members of the federal elite favor the chieftaincy structure because they feel attached to their ancestral chiefdoms, and believe that minimizing spending on national government administration would equally reduce cost on province administration.

A hereditary-based regional social structure exists in which people who make frequent visits to their provincial hometowns to feed the destitute, construct homes for close relatives, and seek economic possibilities, do have interest in keeping it intact. This method of rural administration has one of the worst administrative capacities in the world, and so far too much authority is concentrated in the hands of local chiefs. As with many chiefs, they meet with members of their community on a regular basis and keep a record of their leadership, with the majority of that responsibility falling on their shoulders without any substantial assistance or guidance from the federal government.

3.3.3 Assessing the Impact of Other Development Partners

Many Development Partners (DP) such as the World Bank, IMF, Kimberley Scheme, EITI, DFID have throughout the years firmly aided the mineral sector's governance structures, notably the programs that led to the establishment of the Environmental Protection Agency (EPA) and the National Mineral Agency (NMA), and also the creation of the 2009 Mines and Minerals Act (MMA). They have been considered to be an important participant in assuring the mining sector is constantly in excellent condition, and they also take part in the assessment of Ministries Departments and Agencies (MDAs) that are necessary in the mineral sector management. Persuasion that doesn't always work or is well received by Sierra Leoneans or the government are frequently critical of DPs because they insist on sticking to their tried and true methods, developed by and offered as the professional standards from other Nations.

In addition, political and regulatory changes may be sacrificed in order to advance favored tactics and policies. The aim is to establish access points and frameworks for future projects, complementing their strategic and operational goals. Furthermore, such pragmatism could leave

behind the following problems: conflicting legislation, overlapping management and administrative functions between different government entities, a lack of alignment between implied and expressed laws, and legacies or inactive institutions unable to perform their obligations, example is the Minerals Advisory Board (MAB). Legacy institutions with a very limited operational mandate may have overlapping responsibilities with contemporary, well-managed institutions.

3.3.4 Assessing the Impact of Major Mining Companies

Sierra Leone's mining industry has had great success getting favorable government contracts. Secondly, Government of Sierra Leone (GoSL) officials really don't seem interested in mounting any type of legal fight when non-compliance issues are found, even if the laws of Sierra Leone are being broken. In that same aspect, mining firms have had a substantial effect on the sector's governance, although they are justified in doing so since their purpose is to generate profit and keep their wealth. Companies are now faced with the need to cultivate partnerships with other stakeholders in order to guarantee the safety and protection of their activities, as well as persuade government in order to maintain flexibility with royalty and tax payments. The government of Sierra Leone now has a percentage of shares in most of the major mining companies.

3.3.5 Assessing the Impact of NGOs and CSOs

Since the launch of the campaign by several civil society organizations (CSOs), some citizens and communities have made statements expressing their frustrations with the nature of concessionary mining contracts, which deviate from Sierra Leonean legislation, and the current situation for many mining-impacted communities. Their reports are of excellent quality, and they've drawn on Sierra Leoneans and foreign specialists in their efforts to create them. Additionally, they've had lengthy discussions about minerals sector governance on radio and in various public forums. Activists spend much of their time doing anything other than prescribing change. There have been efforts to conduct more prescriptive work, but those efforts have not yet produced comprehensive analyses of the development policy options in the extractive industry. These analyses should be made available for broader use by GoSL officials so that they can develop regulatory and institutional alternatives in the sector.

3.3.6 Assessing the Impact of Local Diamondiferous Communities

Currently, local communities' potential to manipulate policies and regulation of the mining industry is limited, as they are the most directly impacted stakeholder group. Concerning the point above, ties among mineral companies and local communities are inherently problematic because of the interruption due to massive mineral extraction. Differences within

the community, such as opposition to tribal leaders or discomfort with an inflow of migrants in search of employment, are also contributing factors present.

Table 3: Stakeholders level of participation, interactions and responsibilities

Stakeholder group	Level of participation	Responsibilities	Interactions
Central government	High	➢ Formulate and enact laws/policies for the mineral sector ➢ Issues licenses and contract agreement to mining companies ➢ Set tax tariff and exemptions	➢ Work in line with local government for the implementation of mining laws ➢ Seek funds and technical guide from other development partners
Local government	Medium	➢ Provide Lands to mining companies ➢ Interpret local laws and custom practices to mining companies	➢ Implement the central government's policies through the administration of local chiefs ➢ Receive royalties from mining companies
Other Development Partners	Medium	➢ Ensure ethical standards are met (KPCS, EITI). ➢ Provide the international framework upon which the central government should work with.	➢ Liaise with the central government to implement international standard practice ➢ Provide funds to the central government in the form of grants or loans for the improvement

			and development of the mineral sector.
Major mining companies	High	➢ Maximize profit; employ local community people; pay tax and royalties. ➢ Hold on to their corporate social responsibilities.	➢ Obtain license from the central government ➢ Liaise with other development partners to implement standard practice
NGOs and CSOs	Low	➢ Act as social commentators for the implementation of best mining practices. ➢ Provide technical support to the government in the form of reports on surveys and research.	➢ Liaise with local government to ensure mining companies are executing their corporate social responsibilities ➢ Seek funds from other Development partners to conduct periodic surveys of the mining industry.
Local diamond communities	Low	➢ Implement the laws/policies as per the direction of the local government	➢ Work directly with the local government on the implementation of polices

Source: own creation

3.4 Legal Instruments and Framework of the Mineral Sector in Sierra Leone

There have been several institutional, regulatory and legal reforms established by the government of Sierra Leone to improve the revenue collection from the mineral resources in the country. Mining sector reforms include the creation of the Environmental Protection Agency (EPA) and the National Revenue Authority (NRA), the implementation of the Mines and Minerals Act 2009, the passage of the Public Financial Management Act 2016, the promulgation of the 2018 Extractive Industries Revenue Act, and reforms in the areas of transparency and accountability. In continuation of these revisions, the 2003 Core Minerals Policy has been superseded with the 2018 Sierra Leone Minerals Policy.

While minerals are non-renewable commodities, the overall aim of Sierra Leone with regards to mineral extraction is to derive most of the mining sector earnings into income-generating and improving the quality of life of Sierra Leoneans. The revenues from the mining industry should be used to create an environment that is attractive for private sector economic growth and development. This should include infrastructure development, manufacturing assets, capacity building, and the improvement of healthcare and educational amenities. As a result, mineral policies establishes a framework through which income produced from the exploitation of minerals may be channeled to economic and social development rather than wasteful consumption.

Despite substantial advancements in the legal framework governing the mining industry's growth, significant inefficiencies, statutory document gaps, contradictions, and contradictory requirements persist in certain instances. When combined, these obstacles create enforcement and implementation problems. Additionally, legislation is often misunderstood by the people.

Chapter 4

Methodology

The methods of collecting data for this research is the multi-method approach: qualitative interviewing, descriptive statistics and documents analysis. The methods are used to properly assess the challenges of diamond mining and its effect on the economy of Sierra Leone.

The descriptive statistics are secondary data that are retrieved from Statistics Sierra Leone, the Kimberley Certification Scheme, SLEITI, and the government of Sierra Leone from the period of the discovery of diamonds, to post civil war, and onto the current state of the diamond situation in the country.

For the qualitative interview, both the structured and semi-structured interview methods are implemented. The structured approach is used for key stakeholders, which were selected using a non-random sampling technique based on the mandates of their work. The key stakeholders that were highlighted are senior policymakers from the MMMR, the ministry of finance, and the MSG. There are three (3) key stakeholders that were interviewed for the purpose of clarifying, collecting and understanding data that is helpful to this research. On the other hand, for the semi-structured interview, a random selection of participants that are five (5) in number, which include local miners, executives of mining companies, are been interviewed.

Ultimately, for the aspect of the document analysis, I have collected various papers from the Extractive Industries Transparency Initiatives (EITI) reports on Sierra Leone between 2013 and 2017-2018. This should put me in a better position to fully comprehend the challenges facing the diamond mining sector, as well as how the state and other relevant stakeholders are working together to amplify and enhance diamond mining in Sierra Leone so that it would make a significant contribution to the economic growth of the country and raise the living standards of local miners and residents

4.1 Research Method Rationale

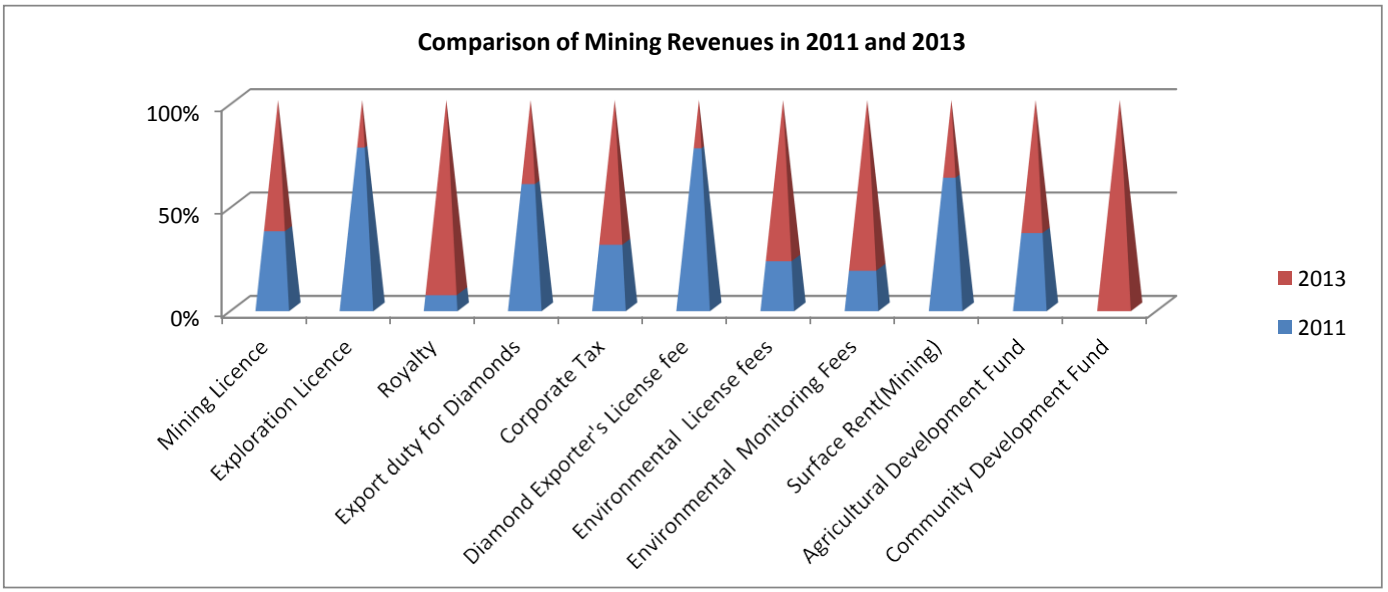
For this research, I have unbiasedly positioned myself in a free and fair manner without any prejudice to the data obtain therein. The descriptive statistics and qualitative interview are selected on the basis that, the descriptive statistics will provide secondary data that have been verified and used by credible institutions and researchers. The qualitative interview is done to provide an insight on the activities on mining from the views of key stakeholders, mining companies' executive and local miners. And of course, because of the travel restrictions, I have employed the use of questionnaires, emails and telephone calls as a method of doing the interviews. Documents analysis is also done so as to assess, evaluate and analyse various annual reports of the SLEITI (2013-2017/2018) that are essential in helping to understand the dynamics of the diamond mining industry in Sierra Leone, and to observe the trend of revenue accrued from diamond mining and the mineral sector as a whole in Sierra Leone. It is however important

to note that, Sierra Leone was suspended from the EITI in February 2013 because the country failed to adhere to the requirements and standards of the EITI for both its 2010 and 2012 reports, hence the reason I started with the analysis of the 2013 report so as to ascertain if from that period (2013) onto the latest report (2017-2018) the country has met all the requirements designed by the EITI.

4.2 Descriptive Statistics

This section of the descriptive statistics obtains statistical data spanning from 2011 to 2019 from renowned and credible institutions such as the SLEITI and KPC.

Figure 3: Comparison of mining revenue streams between 2011 and 2013



Source: SLEITI 2013 report

In the above figure 3, a notable decrease in diamond exporters' licenses took place, indicating the difficulties faced by diamond export businesses in 2013. Also, the number of companies that made tax payments increased in 2013. In contrast to mining firms, which deplete their capital gains after the upfront investment recovery period, corporations have the potential to become a major income source due to the limited time that tax allowances are permitted. In 2011, rent and licensing fees on the surface and for exploring increased, while lease payments on the mine rose. While royalty revenues and mining license receipts have been on the rise, this period of time, during which the study is performed, is revealing a general shift in the extractive industry towards growth and commercialization in the value chain.

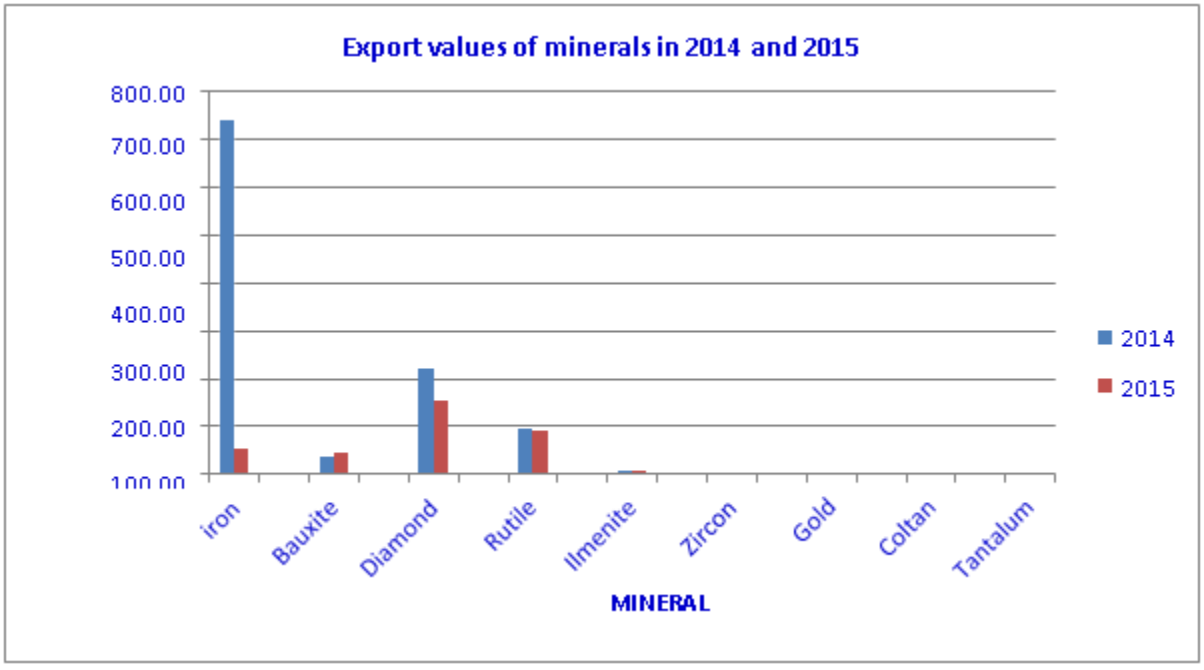
Table 4: Percentage of mineral contribution to total export 2010-2014

Year	Diamonds	Gold	Bauxite	Rutile	Ilmenite	Iron Ore	Zircon	Other Minerals
2010	56.6	4.6	15.5	20.2	1.3	-	1.8	-
2011	54.0	3.0	16.2	14.3	1.8	6.1	4.4	-
2012	22.4	0.8	2.4	23.8	0.5	49.5	0.6	-
2013	10.4	0.2	0.8	7.2	0.1	59.4	-	21.8
2014	14.9	0.1	2.8	6.9	0.5	53.4	-	21.29

Source: Bank of Sierra Leone, extracted from SLEITI 2014 report

In the above table 4, it is revealed that diamond contributed more to the total export in the country than other mineral in the years 2010 to 2011, save for 2012 to 2014 when Iron Ore and other minerals contributed more.

Figure 4: Minerals export values in 2014 and 2015



Source: SLEITI 2015 report

Table 5: Values of the total mineral export in 2017 and 2018

Mineral Type	Unit	2017 (Vol)	Value ($m)(2017)	2018(Vol)	Value($m)(2018)

Diamonds	Carat	98,577.29	24,944,325.51	541.862.01	86,083,470.23
Bauxite	WMT	1,646,853.60	60,456,894.47	1,822,122.64	64,060,326.04
Rutile	DMT	161,814.87	126,555,092.49	104,539.64	99.997,507.67
Ilmenite	DMT	59.651.74	8,058,802.56	53,723.19	7,900,717.63
Zircon	DMT	30,555.34	1,988,152.50	57,653.00	21,682,433.95
Iron Ore	WMT	5,946,673.67	98,994,962.07	968,585.02	13,149,240.71
Gold	oz	4,568	5,100,000	4,354	5,300,000

Source: SLEITI 2017-2018 report

In the year 2017, the value of diamond decreased significantly as the price of iron ore, Rutile and Bauxite surged upwards. In 2018, the price of Iron Ore dropped while the price of Diamond increased.

Table 6: KPC Volume and Value of total import-export 2019

	Volume(carats)	**Value (USD)**	**KPC Counts**
Production	700,109.47	167,632,632	
Import	0	0	0
Export	700,109.47	167,632,632	150

Source: https://www.kimberleyprocess.com/en/sierra-leone-0

In 2019, according to data obtained from KPC, the production of diamond increased significantly as compared to 2018, and there was also a significant increase in the value per carat.

Chapter 5

Document Analysis and Assessment of the Sierra Leone Extractive Industries Transparency Initiative Scheme (SLEITI)

This chapter gives an overview of the Extractive Industries Transparency Initiative Scheme, its objectives and ethical standards for member countries, with a particular focus to Sierra Leone. The SLEITI scheme is also thoroughly analyze; documents analysis of five annual reports spanning from 2013 to 2017-2018 are evaluated and assessed to ascertain the gains the EITI scheme has had if any on the diamond industry in the country.

5.1 An Overview of the Extractive Industries Transparency Initiative (EITI)

The EITI is a worldwide recommended requirements practice for gas, oil, and natural resource governance. It aims to solve the extractive industries' most pressing governance problems. The EITI Benchmark necessitates the collection of data throughout the extractive sector value chain, from the source of mining to how money is channeled via the state and thus its impact on the economy. This covers how permits and leases are assigned and recorded, who are the shareholders of those activities, the financial and regulatory procedures, production capacity, payment status, where income is transferred, and inputs to the country's economy, especially the creation of jobs.

In fifty-five (55) nations across the globe, the EITI Protocol is in use. Agreements and leases, output, collection of taxes, income distribution, and socio-economic expenditure are all required to be disclosed in a yearly EITI Document by all of these nations. During every 3 years interval period, every nation goes through a performance-assessment process known as Validation. The Validation is used to evaluate progress toward achieving the EITI Benchmark and to encourage country-level discussion and training. This also protects the EITI's credibility by requiring all Extractive Industries Transparency Initiative (EITI) participating nations to adhere to identical international benchmark.

Every participating nation has its state secretariat and stakeholder committee comprised of officials from the government, mining industry, and CSOs and NGOs members. The stakeholder (normally called MSG) committee makes choices as to how the Extractive Industries Transparency Initiative procedure in the nation is implemented. A global multi-stakeholder Group, comprised of members from countries, extractive industries, NGOs and CSOs organizations, investment firms, and multilateral agencies, develops and oversees the EITI Standards.

5.1.1 THE EITI VALIDATION OVERVIEW AND PROCEDURE

The EITI procedure does not work without validation. It is used to evaluate performance as well as encourage discussion and training at the national level. Also, it protects the EITI's credibility by requiring all EITI participants to adhere to identical worldwide standard. Its goal is to administer all participants a fair evaluation as to whether a nation's EITI adoption meets the EITI benchmark requirements. The assessment of the Validation document also aims to determine the EITI's effect on participating countries, and also the execution of EITI-encouraged practices, lessons learned from EITI rollout, or any considerations stakeholder groups have conveyed, and also suggestions for prospective implementation of the EITI standards. The Validation Guidelines lays forth the approach, as well as instructions for evaluating the Standards of the EITI provision. It also provides empirical explanation which validators should use in certain circumstances to verify that a requirement is met. In other instances, a nation may adopt a variety of methods to addressing an EITI requirement, and thus the guidelines of the Validation includes an illustration of the pieces of information that perhaps the validator should examine.

For a country to be validated, the following procedures should have been met and approved by the Multi-Stakeholder Board:

The first step is to prepare for the validation procedure, which involve a self-assessment test so as to ascertain the readiness and adherence level of the EITI standards. The guidelines of the Validation contains a section that explains how stakeholders may specify the goals or operations they would want Validation to focus on according to their work plan.

The second step is to collate all the previous data and past deliberations initiated by the Multi-stakeholder Board of the EITI. The Secretariat examines pertinent material, meets with local stakeholders, and takes an active role in country analysis. This involves face-to-face meetings with stakeholder groups, the Unbiased Supervisor, and some other important stakeholders, which include stakeholders from mining companies, civil societies, etc. The Board imposes a uniform method for gathering data, including stakeholders' input, and specifying timeframes for the first assessment.

The next step involve the appointment of an independent validator via a process of bidding that is open and competitive. The independent Validator determines whether the participating country Secretariat conducted its first evaluation in line well with the guidelines of the Validation. It will also involve a thorough examination of all relevant documents for each need, as well as the country Secretariat's previous assessment of each standard, a threat framework for random inspections, and additional stakeholder engagements.

The independent Validator may be asked by the Board to conduct random inspections on particular criteria.

The final procedure is the review of the Board, which is charged with the responsibility to conduct an unbiased review of all documents presented before them by the independent validator, and afterwards determined if the EITI standards and requirements have been achieved or not. The report on the validation is thus confidential until the final review of the EITI Board is reported for

publication. It also important to note that the Board gives recommendation in the review as to progress, and any required actions necessary.

5.2 The Sierra Leone Extractive Industries Transparency Initiative Scheme

As of June 2006, Sierra Leone stated that it intended to adopt the EITI. SLEITI was introduced at the Presidential state building on July 28, 2007, previously having passed an EITI work breakdown structure in 2006. In August 2007, the Multi Stakeholder Group was formed, having met an agreement between other factions in the mineral industry. Sierra Leone officially became an EITI member on February 22, 2008 in Doha. The country released its first report in 2010, covering the period 2006-2007. In 2013, the Extractive Industries Transparency Initiatives suspended Sierra Leone because the nation had not met essential EITI criteria in two Validation Rounds covering the period 2010 to 2012 in accordance with the EITI Guidelines. However, the country was reinstated in 2014 after having met the independent validator review that was also in consonance with that of the international Secretariat Board recommendations.

There have been nine EITI established reports by the SLEITI since the country adoption of the scheme in February, 2008. Despite tremendous effort in keeping up to date with its reporting, the SLEITI has faced consistent delays and untimeliness in issuing out its report. The country first report covering the period 2006-2007 was released in the year 2010, while its second report that covered the period 2008-2010 was released in 2012; the report following the year 2011 was issued out in 2013. During the Ebola scourge, the country was faced with some setbacks in publishing its report, but however, an extension was granted for the SLEITI to publish its report covering the financial year 2012 in 2015; and the 2013 report was released in 2016, within this same year in December, the 2014 report was released. The SLEITI again appealed for an extension for its 2015 report which was released in 2018, in the same year during the month of June, the 2016 report was released. Fast forward to 2019, the report covering the financial year 2017-2018 was released.

The SLEITI under the administration of the Multi Stakeholder Group is charged with the responsibility to ensure that that all EITI requirements and validations are met and adhered to within the prescribed context as stated in the EITI framework. The Multi Stakeholder Group have published five SLEITI progress report since the adoption of EITI scheme. This progress reports are in line with the initial assessment of the International Secretariat of the EITI on member states.

5.3 Document Analysis of Five SLEITI Annual Reports Spanning From 2013 to 2017-2018

For the purpose of this research, five of the nine SLEITI annual reports spanning from 2013 to 2017-2018 are thoroughly analyze and assess based on six strategic pillars: Stakeholders engagement, Transparency, Accountability, Revenue generated, Governance/Management structure, and enabling environment. These pillars/variables are the estimators that decides if Sierra Leone have achieved their objectives in joining EITI, and if at all the EITI scheme has helped in improving the revenue generated, transparency, and management structure of the mineral industry in the country. It is also important to note that the SLEITI reports covers other minerals in Sierra Leone like Gold, Iron Ore, Bauxite, Rutile, and also Oil and Gas, but for this research, my main analysis/review is focus on diamond and the role it has played under the six aforementioned pillars/variables.

5.3.1 Document Analysis/Review of the 2013 SLEITI Annual Report

The 2013 report was the fifth report published by the SLEITI, and it covered the activities and operations conducted by the extractive mineral sector which included the extraction of oil and gas. The objectives of the report were to publish an annual financial report for the period 2013 that is in line with the EITI guidelines and requirements, and to also include a reconciliation report and other activities performed by the different stakeholders in the extractive industry. Thus, the methodology used was a document review of several legal and regulatory instrument such as the Mineral and Mines Act of 2009, and the Petroleum exploration Act of 2011, etc.

The 2013 SLEITI annual report is thus analyze/review under the following pillars/variables:

- **Stakeholders Engagement:** A Multi Stakeholder Group that was consisted of representatives from: the District councils, Audit service Sierra Leone, mining companies, the President office, CSOs, NRA, Sierra Leone Parliament, Ministry of Finance, The Local Government Ministry, MMMR, etc. They conducted several meetings that led to the selection of the Independent Administrator that was mandated to collate and publish the report.
- **Transparency:** The 2013 SLEITI report was done by Messrs Boas and Associates that acted as the Independent Administrator charged with the responsibility of collating the report. All of the mining companies that were targeted and included in the report disclosed their level of production and revenue stream of activities, and in turn, the government produced receipts that were in agreement with their disclosure. The Independent Administrator compiled and reconciled all figures that were released for publication in the report.
- **Accountability:** The MSG was charged to act as supervisors during the course of the reconciliation of the report. They were also responsible to convey/disseminate the

data/discovery that were found in the report. Their effort also spanned to proper coordination of all parties involved, and hence promoted fairness in the 2013 report.

- **Revenue:** The 2013 SLEITI report stated that the production of diamond as at that time stood at 604.74 thousand carats. The total diamond production and export is as follows:

Table 7: the value of total export and production of diamond

YEAR	2010	2011	2012	2013	2014
Production	437,552	355,337	532,555	612,394	593,622
Export Vol.(_000carat)	437	355	532	604	594
Export Value(_000US$)	113,514	129,766	161,719	185,667	207,789

Source: SLEITI 2013 report

Also, in 2013 the export of diamond rose to about 14.8 percent, and the mineral sector contributed to the country's net export more than any other sector.

Table 8: Contribution of mining to the net export of the country

Item	2012	2013	2014
A. Total Exports	1,081,219	1,891,910	1,490,130
B. Minerals Export	839,679	1,790,999	1,389,937
C. Iron Ore	357,002	1,064,385	742,066
Mining % to Total Exports (B/A)	77.6	94.6	93.2
Iron Ore % (Total Exports) (C/A)	33.0	56.2	49.7

Source: SLEITI 2013 report

In addition, the contribution of the mining sector to the economic activities of the country rose to 20.1% more than 2012 which saw an increase of 15.2%. The mining sector accounted for 2.6% of the country's total GDP.

- **Governance:** According to the 2013 report, governance is still an unresolved problem in the mineral industry, the directives/ functions of the Ministry of Mines overlapped with that of the National Minerals Agency formed in April 2013. Also, the EPA does not fully implement their mandate to monitor mining companies on environmental issues. There

is also a greater problem with the regulation of small-scale miners, and illegal mining is still evident in the country, especially hard-to-reach regions.

- **Enabling Environment:** Mining companies were regulated by the Mines and Minerals Act of 2009, and they went through several processes (first come first serve basis) to obtain mining license which passed through three stages: Application, Validation, and Approval stage. There are four types of licenses: Reconnaissance, Exploration, Small-scale mining, and Large-scale mining. It is important to also note that some mining companies are exempted from paying some taxes, while the government has shares in most companies.

5.3.2 Document Analysis/Review of the 2014 SLEITI Annual Report

The 2014 report was the sixth report published by the SLEITI and like the 2013 report, Messrs Boas and Associates were the Independent Administrator charged with the responsibility to collate and reconciled the activities of all registered mining companies and that of the government of Sierra Leone. The aim was to reconcile all mining firms' payments to the government, to produce a 2014 report in compliance with that of the EITI Standards, etc. The methodology used was the same as in the 2013 report.

The 2014 SLEITI annual report is thus analyze/review under the following pillars/variables:

- **Stakeholders Engagement:** While early information collection focused on conversations among stakeholders in terms of putting the task in its proper context and set reporting deadlines, the MSG itself was already established to supervise such intervention. A feasibility study was carried out by the Independent Administrator to determine the reporting criteria.
- **Transparency:** Companies involved in the mineral industry are required to make details about their business dealings, especially payments (taxes and royalties) to the state, publicly available. The government is also required to make public any revenue it receives as a result of industry activities. The Independent Administrator do the reconciliation and publicize additional extractive industry information in tandem only with EITI Guidelines.
- **Accountability:** In order to implement and disseminate the outcomes of the SLEITI report, a MSG consisted of delegates within the state, businesses, and CSOs was assigned to supervise the operation. In addition, the implementation of EITI must be promoted so that it may be integrated into wider transparency outcomes within the country.
- **Revenue:** There was a significant increase of diamond export of about 19.40 percent more than that of 2013. The value of the total export of 620,181.11 carats at the beginning of 2014 was estimated around $221,713,243.46. Both Artisanal and Kimberlite mining production surge upwards respectively, but reduced at the later part of the year due to

the Ebola virus. Mining contributed 1.8% of the country's GDP compared to 2013 percentage of 2.6.

Table 9: Production level and values of minerals

Mineral	2012	2013	2014	2013-14 % Change
Diamonds ('000 carats)	559.79	603.81	594.37	-1.6
$	149,855	188,690	207,732	
o/w Gem ('000 carats)	401.15	453.03	503.94	11.2
o/w Industrial ('000 carats)	159.63	141.78	90.43	-36.2
Rutile (000 M/tons)	94.49	120.35	115.05	-4.4
$	191,058	104,223	93,794	
Bauxite (000 M/tons)	666.32	543.39	1178.57	116.9
$	15,858	16,724	39,934	
Ilmenite (000' M/tons)	21.52	32.36	35.8	11.8
$	8,067	7,763	4,554	
Gold (ounces)	4354.70	2893.29	1470	-49.2
$	5,507	3,431	1,689	
Iron Ore (000' M/tons)	6600.0	14745.31	19307.99	30.9
$	452,760	1,154,533		

Source: http://mofed.gov.sl/EPRU/Economic%20Bulletin%20%202014%20-%20final.pdf

At the end of the year 2014, the value and production of diamond reduced drastically because of the Ebola and closure of some major mining companies.

- **Governance:** The governance of the mineral sector in 2014 was a bit better than that of 2013, as the Environment Protection Act of 2013 and the Mines and Minerals operations was enacted and regulated respectively.
- **Enabling Environment:** The NMA Act of 2012, the Mines and Mineral Act of 2009, the Finance Act of 2016, and the Custom Act of 2011 laid the foundation for enabling environment for mining companies to thrive on. The manner to obtain licenses still remain the same as in 2013.

5.3.3 Document Analysis/Review of the 2015 SLEITI Annual Report

The 2015 report was the seventh report published by the SLEITI and like the 2014 report, Messrs Boas and Associates were the Independent Administrator charged with the responsibility

to collate and reconciled the activities of all registered mining companies and that of the government of Sierra Leone. In addition to describing the various sectors in Sierra Leone related to mining and the extraction of natural resources, this report includes licensing and mining, as well as extraction, production, industrial output, beneficial shareholding, contract clarity, state involvement in the mineral sector, collection of taxes and allotment, socioeconomic expenditure, as well as key performance indicators of the Extractive Industries Transparency Initiative in the country.

The 2015 SLEITI annual report is thus analyze/review under the following pillars/variables:

- **Stakeholders Engagement:** The MSG that's made up of MDAs, CSOs and other mining companies were responsible for the selection of the Independent Administrator. During the period of the report, they conducted an institutional review to evaluate the performance of the MSG.
- **Transparency:** The major mining companies disclosed their financial transactions and the government confirmed receipts, save for some discrepancy which is as a result of a disagreement of figures of that of mining companies and the government.
- **Accountability:** For the 2015 report, the figures were audited by an approved independent auditors that was in line with the recommendation of the Independent Administrator. Both the government and mining companies published their respective transactions according to the template provided by SLEITI.
- **Revenue:** The total export of mineral in 2015 decrease to $358,863,680.68 compared to 2014 figure of $1,109,239,334.77 the reason was the effect of the Ebola scourge. There was a decline of the license fees of diamond exporters to the tune of $204,316 in 2015 compared to that of $2,900,000 in 2014.

Table 10: Production level and export value in 2015

MINERAL TYPE	PRODUCTION QUANTITY	UNIT	PRODUCTION[3] VALUE(US$)	EXPORT QUANTITY	UNIT	SALES VALUE (US$)
Iron Ore	768,327.00	wmt	26,471,562.01	1,390,768.00	Wmt	47,916,839.26
Iron Ore	0.00	dmt	0.00	351,009.00	Dmt	6,469,166.53
Diamonds	299,622.79	carats	74,857,913.72	294,863.19	Carats	73,668,772.78
Rutile	126,021.00	dmt	98,212,872.47	116,870.59	Dmt	91,081,618.51
Ilmenite	37,634.00	dmt	5,271,995.15	37,809.33	dmt	5,296,556.42
Zircon	1,389.00	dmt	694,500.00	2,545.00	dmt	1,272,500.00
Bauxite	1,475,786.08	wmt	48,191,938.34	1,321,691.78	wmt	43,159,973.95

ARTISANAL MINING						
Diamonds	N/A	carats	0.00	205,176.20	carats	80,651,180.81
Gold	N/A	grams	0.00	107,613.91	grams	3,694,705.22
Tantalum	N/A	kg	0.00	517,510.00	kg	2,956,687.20
Zircon	N/A	DMT	0.00	104.00	DMT	2,695,680.00
			253,700,781.70			**358,863,680.68**

Source: SLEITI 2015 report

The production and export value decreased significantly as compared to that of 2014 because of the Ebola scourge which led to the closure of several mining companies.

- **Governance:** The government was more involved in the activities of the extractive industry than that of 2014. The finance Act of 2015 and the Diamond Trading Act were the main legal and regulatory instruments that regulates the mining industry.
- **Enabling Environment:** Just as in 2014, the NMA Act of 2012, the Mines and Mineral Act of 2009, the Finance Act of 2016, and the Custom Act of 2011 laid the foundation for enabling environment for mining companies to thrive on. The manner to obtain licenses still remain the same as in 2014.

5.3.4 Document Analysis/Review of the 2016 SLEITI Annual Report

The 2016 report was the eight report published by the SLEITI and like the 2015 report, Messrs Boas and Associates were the Independent Administrator charged with the responsibility to collate and reconciled the activities of all registered mining companies and that of the government of Sierra Leone. The methodology used was the same as the previous three reports (2013-2015).

The 2016 SLEITI annual report is thus analyze/review under the following pillars/variables:

- **Stakeholders Engagement:** There was an intense stakeholders' engagement by CSOs, MDAs and other mining companies especially in the aspect of formulating the road map for continuous SLEITI progress reporting. In consonance with several meetings conducted, they selected Messr Boas and Associates as the Independent Administrator.
- **Transparency:** The same problem of discrepancy still existed in the 2016 report, and some major mining companies deliberately failed to participate in the reconciliation process, hence a red flag for transparency as the principal objective of the EITI.
- **Accountability:** In terms of accountability, the same structure and format of the 2015 report was carried out also for the 2016 report.
- **Revenue:** In 2016, Diamond was the mineral with the highest export with a figure of 33.5% of the total mineral export from the country. Mineral royalty increase from $9,225,535.47 in 2015 to $16,491,230.43 in 2016, and the export duty on diamond also

decrease to $2,355,113.12 compared to $2,390,857.32 in 2015. A total of $114,792 was unresolved discrepancy in the receipt of the government, the reason was about four major mining companies failed to participate in the reconciliation process to solve the discrepancy.

Table 11: Mineral production level

Mineral	Exports(US$)	%
Iron Ore	142,333,017	30.2
Diamonds	157,930,828	33.5
Rutile	106,953,521	22.7
Ilmenite	3,141,331	0.6
Zircon	867,637	0.2
Bauxite	51,077,065	10.8
Gold	6,855,757	1.5
Tantalum	2,372,673	0.5
	471,531,832	**100**

Source: SLEITI 2016 report

- **Governance:** The 2016 report indicated a willful failure of participation of four major companies in the reconciliation process, despite there are laws that demand for their inclusion. Also, some major mining companies were audited to prove the authenticity of their data.
- **Enabling Environment:** The issuance of license is still on a first come first serve basis, with all the other legal and regulatory instruments fully intact and enforce.

5.3.5 Document Analysis/Review of the 2017-2018 SLEITI Annual Report

The 2017-2018 report is the most recent report published by the SLEITI on December 31st 2019. The Independent Administrator like the previous report was still Messr Boas and Associates, and they were charged with compiling and reconciling the report for the purpose of

publication to the general public. The objectives and methodology of the 2017-2018 report was the same as the previous reports over the years.

The 2017-2018 SLEITI annual report is thus analyze/review under the following pillars/variables:

- **Stakeholders Engagement:** Like the previous report, stakeholders' engagement was done between MDAs, CSOs and mining companies as to the selection of the Independent Administrator, and also the supervision of the reconciliation process.
- **Transparency:** As stated in the report, the financial transactions between major mining companies and then government was published, but yet still the issue of transparency still is a great problem in the mineral sector as discrepancy persist to exist, and unification of the reporting template is still an issue unresolved.
- **Accountability:** As required by law, the MSG selected the independent auditors and also the Independent Administrator for the reconciliation of the report.
- **Revenue:** Export of mineral decreased during 2018 because of the dropped in the price of Iron Ore. Diamond production surged upwards, and it was reported that four of the world's top diamonds were discovered in Sierra Leone during the 2017-2018 period. The revenue collected from mining activities in 2017 was $40,262,279.43 and $60,457,327.22 in 2018.

Table 12: mineral production level and Value

Mineral Type	Unit	2017(Vol)	Value ($m)(2017)	2018(Vol)	Value($m)(2018)
Diamonds	Carat	95,430.22	24,147,980.44	561,022.40	89,127,405.46
Bauxite	WMT	1,823,562.37	66,943,969.86	2,034,354.81	71,521,767.83
Rutile	DMT	165,467.00	129,411,416.20	113,668.80	108,730,015.71
Ilmenite	DMT	57,026.00	7,704,071.58	54,645.17	8,036,307.19
Zircon	DMT	619	40,276.64	13,245.36	4,981,382.47
Iron Ore	WMT	6,521,008.00	108,555,971.87	0	0

Source: SLEITI report 2017-2018

- **Governance:** As in the other reports, governance is still a challenge in the 2017-2018 report as stated by the IA. There are so many lacunas in the new mineral policy that unaddressed so many transparency issues.
- **Enabling Environment:** The issuance of license is still on a first come first serve basis, with all the other legal and regulatory instruments fully intact and enforce.

5.4 Analytical Conclusion

The 2013 SLEITI report signaled an unbalanced system of collecting payments (taxes and royalties) from mining companies, and it also exposed the nonuniform method of mining companies disclosure of their revenues/profits. It also emphasized the need for a revised MMA Act, and an enforcement of the regulations surrounding the mineral industry. For the 2014 report, the payment of surface rent increase compared to that of 2013, although there was a decrease in revenue due to the Ebola Scourge. Several major mining companies shut down their operations and redundant hundreds of local miners and supporting staffs. Amongst the several recommendations made by the independent Administrator, the obvious and most compelling was for a better payment and record system between the mining companies and the government.

According to the 2015 report, only two mining companies reported to have paid community development fund as part of their corporate social responsibility. There was also a discrepancy of $354,159 and $870,507 absolute discrepancy that was left unresolved by the Independent Administrator. It was recommended that NRA should issue out a timely standard template form for the reporting of financial transactions between the government and mining companies. The 2016 report indicated that there is still unresolved discrepancies in the reconciliation figures since the start of the implementation of the EITI in Sierra Leone, which signaled lack of transparency and mismanagement in the mineral sector. In terms of royalty payment, there are different time schedule for the various mineral mining companies, which according to the Independent Administrator is not in line with best practice and it's does not promote transparency. The unresolved discrepancies amounted to $159,628 and $65,497 for both the years 2017 and 2018. There was also no uniform rate levied by the government on mining companies for surface rents, and at the same time there are no requirements for mining companies to make direct payment to government institution responsible for the collection of such, and that is a great lacuna in the new mineral policy.

Finally, the five reports examined above have critically highlighted the information gap among all the actors that are involve in the mineral industry in Sierra Leone, the reports have also exposed the inefficiency of the NMA and MMMR to monitor the activities of mining companies, and it is safe to say that the EITI has had minimum influence especially in the aspect of transparency and accountability in the mineral industry. It is also important to note that, this

research unearthed that there are overlapping figures in the descriptive statistics presented by different actors/stakeholders, the reason is that according to the five SLEITI reports been analyzed, there are unresolved discrepancies since the adoption of the EITI in Sierra Leone. Furthermore, diamond as a mineral is slowly losing its value as compared to rutile and bauxite, and majority of the mining companies now in Sierra Leone are focusing on mining other minerals rather than diamond.

Chapter 6

Findings, Recommendation and Conclusion

This chapter gives an insight of the findings, recommendation and conclusion of the research, in the direction of fulfilling the objectives of the research and to answer the two main research questions therein.

6.1 Findings

The findings in this research is based on documents analysis, interviewing and descriptive statistics, which were used to properly understand and evaluate the challenges and impact of diamond mining on the economy of Sierra Leone. According to the results of the document analysis, the EITI operation in Sierra Leone has many apparent impacts, including ongoing discussions and current contributions to tax changes. Revenue from the industry decreased significantly from $74 million to $26 million between the period 2013 to 2016 due to a decline in commodities prices as well as the Ebola outbreak. However, due to the government's commitment to openness, the mining industry and the oil sector can boost domestic resource mobilization by attracting high quality investments

Although the implementation of EITI has produced many key results, difficulties remain to maintain a degree of openness that is compatible with the EITI Standard requirements. License awarding challenges have been substantially addressed and a complete mineral cadastre management system has been opened to the public. Government mechanisms, however, still fail to efficiently monitor transfers of mineral rights among private enterprises. Much has been released about agreements regulating large-scale mining operations, but government openness policy has yet to be formalized.

Throughout the history of the nation, the artisanal mining industry in the country is of significant importance with a heritage of transparency. Majority of Sierra Leone's mineral export has been from diamond and gold that stemmed from artisanal mining, but the availability of extensive information on production data is still a cause of worry. The adoption of EITI nevertheless led to better fiscal transparency, particularly at sub-national stage in spite of continued deficiencies in the administrative capacity of local government agencies.

The result from the descriptive statistics indicates that due to the fact that one of the previous findings was that diamonds are the primary source of foreign profits, employment and tax collection, it is reasonable to conclude that the greater the value of diamond exports, the greater the impact of diamonds to GDP growth. This is not an absolute connection since, in addition to diamond export earnings, other variables including governance as well as other associated problems may either boost or hinder the influence of diamonds to GDP growth. Apparently, there is much more to the diamond sector's intended contribution to economic growth and development in Sierra Leone than only real output and foreign currency earnings to take into consideration.

In conclusion, greater export valuations per carat or foreign currency profits alone do not result in increased exports or GDP growth. This is unexpected given that GDP is calculated using exports, and greater exports improve GDP while also increasing GDP growth. There are grounds to believe that governance problems, such as good governance, a transparent tax collecting system, and good diamond revenue management, contribute to better exports, Economic growth, and human development results. The connections between exports, GDP, and poverty alleviation or human development are considerably more complicated than anticipated, with a variety of factors that may impede or increase diamonds' impact in each of the figures and tables emphasized above. In addition, the level of production of diamond has not been constant, there are periods when its production increase and other periods when its faces a significant decrease. This is the result of so many factors, such as the Ebola scourge, evidence of high illegal mining, nonconformity of mining companies to adequately disclose their contract agreement with the government to the public, thereby understating their revenue (Audit Service report, 2015).

The excerpts of the interviews results are thus highlighted below:

According to a local miner, when asked what benefits have they derived from mining? He had this to say:

"Mining has not contribute positively to his life and that of his family, his children are still struggling to go to school because of school fees, and their health is deteriorating as the days goes by because of lack of good medical care. He continued to say that, even the mining companies that most of them are working for as local miners are not fulfilling the terms of their contract, as they have no insurance and other facilities to aid their sustenance."

An excerpt of the interview conducted with a key stakeholder in the MMMR about the increase of illegal mining in the country reads:

"The problem we have right now is to recruit monitoring and compliance officers in the ministry so that they can help in monitoring hard-to-reach diamond areas where these illegal mining takes place, and it is quite difficult because the government wage bill is too heavy on them, hence we are now soliciting funds from our donor partners to initiate our programs. We have however made some progress with the certification and EITI scheme"

A very senior member of the MSG, which is the body responsible for the implementation of the EITI in Sierra Leone when asked about the gains and success story of the EITI had this to say:

"The EITI scheme has so far helped in the transparency of revenue collection so far in the country, especially in the disclosure of the financial statement of mining companies and the acknowledgement of receipts by the government. But however, there is still room for improvement, as the SLEITI is seeking a uniformity in reporting template of financial statement of mining companies and also in the case of surface rent payment."

Furthermore, an excerpt of the interview conducted with a very senior director in the ministry of finance about the mechanisms the government has put in place to tackle any evidence of the resource curse in Sierra Leone reads:

"There have been several reforms and policies on how to effectively regulate the mineral industry, especially in the aspect of transparency, accountability and revenue collection, albeit the fact that there are still a higher percentage of illegal miners, but yet still the country is stable and the anti-corruption commission is doing a fantastic job to curtail the level of corruption in the country. Also, we have improved on our trade policies, hence, we as a government are expecting a better outcome of all the sets reforms and policies we have implemented."

An excerpt from the interview with a senior executive director in a mining company when asked about their experience so far in the mining industry reads:

"The problem is that the laws are overlapping and there is no uniform system in place in terms of payment of surface rents and many a times the local chiefs are requesting some unwarranted financial assistance from us. Also, because of the depreciation of Sierra Leone currency as compared to the US dollar, actual and estimated profit calculation, and other operating costs are sometimes uneven. Finally, the country does not have enough mining experts, so they normally hired international mining experts from other countries."

6.2 Conclusion

The international community has promoted transparency in the years after the turn of this century as an instrument to address misuse and mismanagement of natural resources revenue for bribery, accountability and government effectiveness, development and peace in many undeveloped countries. In particular, it promotes transparency. In reality, in many situations, donors insist that recipient nations, for example by joining the EITI, improve transparency in the administration of the income of natural resources. The distribution of information on the management of important natural resources and their incomes to the public is an essential pillar of transparency efforts such as EITI. The concept is that individuals may demand better and potentially fairer revenue management by educating the public about natural resource earnings. In other words, with better access to information the general public will be responsible, to a certain degree, for income production and expenditure, for their governments, public authorities and extractive industries.

This research has demystified the triangulation between diamond mining and its impact to Sierra Leone's economy in presenting tangible evidences that ascertain that diamond mining has had a ripple effect wherein it was a blessing prior to the civil war until it is now a curse which has not improved the standard of lives of local miners and any tangible improvement in the economy of the country, albeit a slight increase in its export value which has not had a corresponding positive effect in the economic growth and development. This research has further exposed the maladministration of the authorities involve in formulating policies of the mineral industry which has continuously failed to tackle illegal mining, disclosure of contract by major mining companies, excess corruption and institutional deficiencies, and the over-reliance on natural resource which has carried the evidence of the resource curse since the bloody civil war.

In conforming to the objectives of this research, I employed the multi-method approach which tries to answer the two main questions crafted for proper understanding of the topic under review:

First main question: Is there evidence of a resource curse in Sierra Leone, and if yes in which dimensions? (Trade, institutions/corruption, conflict etc). In consonance with the analyses in chapter 4 and 5, this research finds that, Yes, there have been an evidence of the resource curse in Sierra Leone that is in the dimension of institution/corruption deficiencies. In the document analysis, this research finds out that Sierra Leone has relied on the mineral sector for the most

part of its total export, and that has not in any way contributed positively to the human development in the country neither the real GDP. In addition, drawing from the findings of Arezki and Van der Ploeg (2010), that pinpointed that lack of effective policies in monitoring and regulating the mineral sector is a catalyst for corrupt practices by both the principal and the agent, and excellent institutions always tend to improve governance and derailed the adverse effect of the resource curse.

Furthermore, it is quite evident that, despite the implementation of the EITI scheme, it has not improve the governance and related institutional deficiencies in the mineral industry, and diamond mining is now slowly losing its production value to other minerals in the country. Also, despite the mere reduction in the level of corruption in Sierra Leone, yet the country continues to rank high in the world in terms of corruption, and according to the Millennium Challenge Corporation (2021) one of the sector with the highest percentage of corrupt practices and a failed score is the mineral sector, which shows evidence of inherent corruption and weak institutions.

Second main question: Does participation in the EITI help protect the country against the resource curse and if yes, how? In order to enhance the License Registry or MCAS the EITI process has contributed to the transparency of income and remains a reference source. The question of mining rights bought and sold following their implementation in 2015, without payments of capital gains tax, is being highlighted in the EITI Reports and presently addressed by the MSG and its members through the Act of 2018 which depicts the regulations of the Extractive industries revenue. However notwithstanding the impacts of the Sierra Leone EITI process, some stakeholders have said that Sierra Leone does not always consider the EITI Standards to be entirely applicable. The process has still not been fully covered by small-scale and artisanal mining, although this represents around 60 percent of the diamond industry in Sierra Leone and is an important contributing element in the country's war.

In addition, so far, the EITI has not fully achieved its intended objectives, and according to the findings of this research, despite strides made by the EITI scheme in improving transparency in the mineral sector, yet still there is a clear evidence of unstructured and unaligned policies that are not benefiting the lives of Sierra Leoneans neither any tangible improvement in the economic growth of the country. In fact, in nearly all of the recommendations been made by the Independent Administrator, year in and year out it has stressed the implementation of sound polices and effective and excellent institutional enhancement. Another loose end of the EITI in resolving the resource curse is that Sierra Leone has suffered the negative consequences of commodity reliance, and the management of diamond earnings is essential to the whole economy's existence. When there is poor governance or mishandling of funds, the entire institutional structure can be disrupted, as seen in the country. Another important aspect is that institutions can help restore stability once the corrupt system has been removed and adequate policies that are effective and monitored have been developed, as we have seen in Sierra Leone, where the EITI, DACDF and KPC have been implemented but have had little effect on poverty alleviation due to institutional inefficiencies.

Conclusively, there are significant problems in the area of public financial management, particularly in relation to the monitoring of local payments and transfers according to the five SLEITI reports been analyzed. There is also a long standing of unresolved discrepancies which have not been settled since the adoption of the EITI scheme in the country. Lack of demonstrable benefits on their alleged broad goals by EITI and other transparency programs presents tough issues as to whether the mechanisms designed to link more information disclosure to reduced corruption and improved governance of resource income are genuine. Also, the result from the interviews are in tandem with the analysis of the five SLEITI reports which continuously raised a signal of lack of transparency, corruption, unmet financial benefits to local miners, unresolved discrepancies, etc. However, Sierra Leone has the ability to systemically divulge data even if extensive labor, data quality and appropriate IT infrastructure are required for both governments and business systems. SLEITI can become a mechanism for compiling existing information and analyzing government and business reporting gaps in Sierra Leone through institutionalization of transparency.

6.3 Recommendations

This research has identified several lacunas in the SLEITI scheme that warrant immediate addressed so as to improve the governance of the mineral industry, and also to mitigate the resource curse which thrives in the dimension of corruption/institution deficiencies. In an attempt to promote increase in revenue management, transparency and accountability in the mineral sector especially in the aspect of diamond mining, the following recommendations are thus essential for implementation:

- There is no question that there is still a solid argument for assistance for institutional reform problems, addressing governance difficulties and developing capacity as the key foundation for future commitment. The need to provide this kind of support through a variety of different areas of activity, such as the commitment to policy dialogue and consultation, continuing (and innovative) operational project-driven support with technical assistance, and the development of continuous research and knowledge production, in ensuring that lessons learnt from other successful countries are applied in Sierra Leone.
- More work is needed on the rules, laws, and procedures that regulate the licensing of mining firms. In the first place, complete and transparent explanation on the subject of ‘special agreements' is required, i.e. when permits and mining agreements are signed in contradiction with laws and procedures specified in the Mines and Minerals Act of 2009. When specifically designed agreements ought to be an alternative for the ministry, there must be a set of rules and conditions under which they may be utilized – and the reason and procedure for doing so must be well stated and transparent.

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Appendices

Structured interview questionnaires

1. How has the revised mineral policy helped to better the governance of the mineral industry?
2. Since the adoption of the EITI in Sierra Leone, how has that helped in improving the Transparency and Accountability in the mineral sector?
3. To what extent has the revenue derived from diamond mining help in improving the economy of Sierra Leone?
4. What are the visible infrastructural projects mining companies have done/undertake in local diamond areas?
5. What are the different mechanisms the government have put in place to tackle any evidence of the resource curse in Sierra Leone?
6. For the purpose of ascertaining the benefits local miners have derived from their paymasters, how effective is the MSG engagement at local grassroots level?
7. What are the measurement put in place by the government to tackle the increase in illegal mining?
8. What mechanisms the NRA has initiated to ensure a uniform method of payment and contract disclosure of mining companies and the acknowledgement of receipts by the government?

Semi-structured interview questionnaires

1. What are the challenges of local miners and what is/are their coping mechanism?
2. What has been their experience in the mining practice over the last decade?
3. What benefits have they derived from diamond mining?
4. What has been the government support to local miners and their activities?
5. What is the opinion of small-scale/local miners about the influx of large-scale mining companies in Sierra Leone?