# PALACKÝ UNIVERSITY IN OLOMOUC FACULTY OF SCIENCE

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# WEALTH - THE ISSUE AND CHALLENGE OF AFRICA

MASTER THESIS

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I declare in lieu of oath that I wrote this thesis my work of other has been acknowledged in the text a	
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## Palacký University in Olomouc

#### **Faculty of Science**

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# **MASTER'S THESIS PROPOSAL**

Student

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#### Title of thesis:

# Wealth – the issue and challenge of Africa

### Bohatství jako zdroj problémů v Africe

#### **Principles and strategy for elaboration:**

The aim of the thesis is to explain the problems of wealth, particularly of natural sources on the African continent. The thesis will deal with factors that influence wealth as well as with the course of events from the past up to present. On the basis of these pieces of knowledge the thesis will evaluate the application of the wealth for the economy of selected African countries and for the welfare of their inhabitants. Towards the end the thesis will outline the perspectives of further application of the profit from natural wealth for the development of the selected country.

#### Outline:

**Synopsis** 

Abstract, Key words

Abbreviations and Acronyms

- 1. Introduction
- 2. Methodology and the assessment of literature
- 3. History and the evolution of wealth on the continent
- 4. Factors that influence the wealth of a country
- 5. Application of wealth and the opportunities for development
- 6. Comparison of countries Sierra Leone and Botswana
- 7. Discussion
- 8. Conclusion

Czech synopsis

**Apendix** 

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## List of abbreviations

AFRC Armed Forces Revolutionary Council

AU African Union

CSO Central Selling Organization

DCR Democratic Republic of Congo

ECOWAS Economic Community of West African States

EITI Extractive Industries Transparency Initiative

FDI Foreign Direct Investment

GDP Gross Domestic Product

GRICS Governance Research Indicator Country Snapshot

HDI Human Development Index

HDR Human Development Report

MNC Multi-National Corporation

NDMC National Diamond Mining Corporation

OAU Organization of African Unity

P&M Petroleum and Mineral

RR Resource Rich

RUF Revolutionary United Front

SADC Southern African Development Community

UN United Nations

UNAMSIL United Nations Mission in Sierra Leone

UNDP United Nations Development Programme

UNITA National Union for the Total Independence of Angola

UNSC United Nations Security Council

WB World Bank

WDC World Diamond Council

WTO World Trade Organisation

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#### **Abstract**

The increasing dependence of the modern global economy on fossil fuel like natural gas, oil, and mining has created a path for generating large-scale revenues for the countries that are rich in natural resources. African countries with their extensive natural resources have managed to bring in huge revenues, yet a close look at these countries shows widespread hunger and poverty. The inadequacies within the institutional, regulatory, and economic framework as prevalent within the African nations create a scope for establishing lack of procedural transparencies, and widespread corruption, over the money generated from these natural resources. These ultimately lead to poverty, hunger, violent conflicts and even wars over resource control, human right abuses, and often stifled national development. In the context of Africa, diamonds form the natural resources that have played a major role in fuelling and sustaining violent conflicts in many of the African countries over the last few decades after the end of the Cold War. This paper aims to explore the role of diamonds in fuelling and sustaining the various African civil wars, in order to assist in the prevention of future conflicts, while also studying to seek effective post-conflict measures in the diamond initiated conflict environments. The analysis draws largely on the experiences of Sierra Leone and Botswana, the two African countries where diamond mining forms the main source of revenues.

# **Key words**

Africa, blood diamonds, Botswana, conflict, corruption, development, diamonds, Dutch disease, economic growth, mineral wealth, natural resources, poverty alleviation, revenues, Sierra Leone, transparency, war, welfare

## 1 Introduction

The immense wealth of the African continent, its human and natural resources, were the foundation stone and much of the subsequent superstructure of modern capitalism. Slavery and then European colonialism came and went but the legacy of both remains interwoven into the economic and social fabric, the life experience and expectation of the inhabitants of the whole of Africa. Despite the energy and ambition of many of its peoples, most of the internecine warfare, unable to break free of the chains of historic and ongoing bondage; its citizens often desperate to escape; its western-sponsored governments corrupt and self-serving; hard won independence mutated into new dependencies upon imperial patronage; aid the natural and geopolitical climatic forces and change, ill-equipped to defend itself against any of these; ill-served by the international agencies, unable to afford the medicines and healthcare to properly defend its people from decimation by diseases that had no such purchase elsewhere. How did this situation come to be? How so much potential could become so much loss and despair? How can this potential be at least unleashed?

A look at the modern global economic trends clearly shows that the nations are largely dependent on natural resource extractive industries for their basic sustenance, which has led to accumulation of large wealth in the form of accrued revenue of the countries rich in the natural resources (Nwete, 2004). General logic would lead one to believe that the generation of such revenues in the Resource Rich countries (RR) would automatically cause widespread growth and development in these regions (Bannon and Collier, 2003). Almost paradoxical to this logical theory of the RR countries and their rapid economic growth and development, stands Africa, where we find that despite earned revenues from the Petroleum and Mineral (P&M) deposits, the continent also accounts for persistently poor GDP growth rate and widespread poverty and hunger (Arrighi, Silver, and Brewer, 2003). The various foreign investments or FDIs and the revenues generating from the P&M resources, have done little in terms of improvement

in the standard of living of the poor African people. Instead, it has aggravated the sufferings of the common people in the form of resource-based wars, violence clashes and political conflicts (Jensen and Wantchekon, 2004), which has hindered the economic growth, degraded the environment owing to incessant mining, and also resulted often in gross human rights abuse. Such negative attributes developing from resource wealth also known as the 'paradox of plenty' has resulted in 'Dutch disease' (Karl, 1997: 5) along with the gradual moving out of a large segment of the commercial sector from the national economy of the many resource rich African nations.

Originally, it had been contended that the resource-based wealth of the African nations would assist in the breaking away of the cycle of poverty and the lack of development that had been plaguing the continent for many years (Garry and Karl, 2003). Despite the predictions of various economists and other experts, much of Africa, especially the states that are rich in mineral resources, face widespread corruption, poor economic growth, and a lack of effective governance. Thus, despite its rich natural resources, modern Africa remains highly dependent on the foreign grants and international development aid, for its basic sustenance, as it tries hard to tackle the persistent issues of poverty and underdevelopment (Sorensen, 2001).

In the African continent, various reports show that major factor contributing to the stunted growth in economy, the large number of civil clashes and political conflicts, is the wild rush to control these natural resources (Darimani, 2005). The wealth derived from the natural resources has caused large number of conflicts and violent wars (Table 1) on the African continent (Lwanda, 2003), along with widespread looting of the resource earned revenues by both the political parties and the so-called 'rebels' (Ross, 2003). This is evident in the Sudanese conflict, where the Chinese investment of more than \$8 billion in the country's oil resource and their subsequent arms and ammunitions supply to Sudan to protect their own interest in the oil fields have resulted in widespread

corruption and violent clashes and a downward spiralling of the Sudanese economy graph (Durrant, 2006).

**Table 1**: The year of origin of the various conflicts in Africa that stemmed from the natural resources of the countries.

African countries	Year of conflict initiation	Natural resource
Algeria	1992	Fossil fuel like gas and oil
Angola	1975	Fossil fuel and diamonds
Congo	1993	Copper, uranium, cobalt, diamonds, gold
Liberia	1989	Iron, diamonds
Nigeria	1992	Oil
Sierra Leone	1991	Diamonds, rutile
Sudan	1983	Fossil fuel

Source: Lwanda (2003: 1-5).

The Cold War, characterized by ideological and territorial conflict between the United States and USSR, ended in 1991, and with it came to an end the bi-polar international order and power balance. The end of the war also heralded various changes and constraints for the newly independent and postcolonial African countries. "The absence of any major ideological contestation between the East and the West failed in the short-term to generate the anticipated "peace dividend" for several conflict-ridden and war-devastated African states. The plethora of armed conflicts, civil wars, and brutal struggles for control over the financial revenues and territories of 'blood diamonds' have exacerbated Africa's postcolonial socioeconomic and political problems" (Orogun, 2004: 151). The various armed skirmishes and the in-border terrorist/rebel attacks for gaining control over the natural resources have resulted in terrible conditions for the general citizens of these countries, while also spelling disaster for some of the neighbouring countries of the war torn regions of Angola, Sierra Leone, Sudan, Congo and Liberia. The result of these violent conflicts, that were primarily started, sustained, aggravated and financed by the natural resources, is political

instability and the increase in continual regional insecurity. This is evident in the "intensification of border states' hostilities and the acute political instability of many states in southern, central, and western African sub-regions" (ibid). Thus, we find that in the present post-Cold War era, the African countries are facing various intricate situations and challenges, stemming from these natural resources.

The term 'blood diamonds' specifically refers to the stones that are mined and exported from certain regions in the sub-Saharan part of Africa that are reeling under violent armed conflicts. Various rebel factions, insurgent tribal lords, and dissident soldiers, often start these violent armed conflicts and use the proceedings from the illegal sale of the 'blood diamonds' in order to get more arms and ammunitions, leading to political destabilization and cross-border military raids, with "a major humanitarian refugee catastrophe" (Orogun, 2004: 151) as evident in some parts of Africa. The 'blood diamonds' form a significant part of the world diamond sales and Kate Dunn in her article informs that the "blood diamonds represent 4 to 15 percent of the world's \$6.8 billion annual diamond production. The stones are mined by rebel groups to buy guns and fund wars against democratically elected, internationally recognized governments." (Dunn, 2000: 1).

Four sub-Saharan countries in the African continent have become a major area of crises in this diamond-based conflict, and these are the countries of Angola, Liberia, Sierra Leone, and Democratic Republic of Congo. Sustained interstate and intrastate armed conflicts have been initiated and also later financed for prolonged periods, simply for the lure of capturing and controlling the financially lucrative, diamond producing mines. In case of Angola, which has been facing violent civil wars right from the mid-1970s, proceedings form the illegal sale of the 'blood diamonds' were extensively used "for UNITA offensives that in the 1990s elevated Angola's civil war to a new plateau of savagery. At Andulo, UNITA's headquarters in the central highlands of Ango, Mr. Savimhi personally haggled with arms merchants and diamond traders who flew in from

Europe. He bargained using small bags of diamonds, each of which contained several million dollars' worth of gems"; according to Robert Fowler, the Canadian ambassador to the United Nations and chairman of a committee that investigated violations of the embargo against UNITA (Harden, 2000: 4). Here it is very clear that the situation is indeed very grim, in post-colonial Africa, and the natural resources instead of elevating the economic conditions of the countries and improving the living conditions of the general people, are instead striving for just the opposite. Here it must be noted that USSR and US held the aforementioned four countries as of great significance during the Cold War era and considered them as major strategic points in the conduction of the war related operations. After the end of the cold war with the breakdown of USSR, and subsequently US losing interest in the African nations, there was a complete dissolution in the ruling order, criminalization of the state authorities, de-nationalisation in the arena of collective national security, with ensuing social disorder and conflicts. However, amidst this picture of conflict and disorder, there are some countries that have taken positive steps and achieved strong economic growth and a stable national condition that promote growth and development. Countries like Senegal, Nigeria, postapartheid South Africa, Kenya, Botswana, Tanzania, and Ghana, despite their natural resources have fared well, with strong democratic governments, competent governance, and effective regulation by the enforcement agencies. While at the same time we find that some countries have suffered violent armed conflicts, fragmentation of the states, or the complete breakdown of the central governing bodies, as in the DRC, Rwanda, Liberia, Sierra Leone, Ethiopia, Sudan and Somalia. While some of these conflicts were based on religion, ethnic clashes, communal violence, and regional differences, the major clashes were for the control and dominion of the economic resources like oil, gold, copper or diamonds. Many of the internal state conflicts have permeated into the neighbouring countries and have taken the form of widespread regional wars with possible international aspects and involvements. Thus, we find that the natural resources when "mined responsibly, as in Botswana, South Africa or Namibia, diamonds can contribute to development and stability. But where governments are corrupt, rebels are pitiless and borders are porous, as in Angola, Congo or Sierra Leone, the glittering stones have become agents of slave labour, murder, dismemberment, mass homelessness and wholesale economic collapse" (Harden, 2000: 1).

The large instances of violence and bloodshed, and ensuing poverty precipitated by the 'blood diamonds' in many of the African countries led to the formation of the UN backed Kimberly Process Certification Scheme, which hopes to stop the trade in illegal diamonds. Along with the illegal trade, the diamond mining industry in Africa also suffers from a lack of transparency within the tenders called, and the subsequent bidding processes for the mining procurement. There is also a complete malefaction of the revenues earned from the natural resources, leading to the public fund diversion into individual accounts, leaving citizens in abject poverty (Eshelby, 2004). The public fund diversion has resulted in almost non-existent investments in basic infrastructure and public services, leading to a significant loss in human resource development, and which in turn has made these countries completely dependent on foreign aid at all times.

According to the UN Security Council, it is from Angola, Sierra Leone, and Congo, that the conflict primarily diamonds originate. All the three countries are rich in natural resources yet show poor economic growth. In the 2010 GDP list provided by the World Bank, we find that Sierra Leone ranks 164<sup>th</sup>, and the DRC ranks 112<sup>th</sup> (World Bank, 2011). From these figures, it is quite clear that the two countries, Sierra Leone and the DRC, have failed to use the earnings from their natural resources in developing their social infrastructure and economy, alleviating poverty, and creating a sustainable development trajectory. Yet other countries like Botswana have proven beyond doubt that diamonds can help in economic growth and development and poverty alleviation. For the last 25 years Botswana, has persistently recorded high growth rates that is almost comparable to the growth rates seen in the some of the emerging economies in East Asia, like China and India.

# 2 Methodology

Any research work is actually a procedure of various systemic enquiries on a certain chosen problem that ultimately leads to the conception of new knowledge on that particular subject (Graziano & Raulin, 2009: 26). Since my topic deals with diamonds and the associated conflicts and instabilities, along with the issues of poverty and poor socio-economic conditions in the Resource Rich (RR) countries of Africa, it seeks to explore an area that is complex and highly problematic in nature. It will thus be a 'systematic inquiry whose objective is to provide the information that will allow...problems to be solved' (Blumberg, Cooper, and Schindler, 2005: 20). Here the problem is related to the misuse of the natural resources, specifically diamonds and the revenues earned from them. This misuse is mostly associated with criminalisation of the state authorities, widespread corruption, and a general ineffectiveness of the governing bodies and the law enforcement agencies. However there are some deviations, where we find that some of the African countries have indeed managed to control their natural resources quite effectively, leading to elevation of their economic conditions and general elevation in the socio-economic welfare.

In order to arrive at a workable solution for the above stated problem issues, my paper will follow the research process methodology as outlined by Graziano & Raulin, which is represented in the flow chart given below in Figure 1. Their procedure is based on observation and rationalism, or reasoning through analysis. Here the whole systemic enquiry starts with the generation of idea (the management question), which is often initiated through personal experiences (me being an avid internet user) or other's research work (studying books, magazines or articles on the subject of web marketing and the social media platform). Once the problem has been defined and the research questions framed, the procedure design starts. Under this section many journals, books, articles, and governmental publications, will be studied to comprehend the intricacies of the African diamond trade, and the fallacies that are associated with it which leads to

widespread poverty and poor social conditions despite having extensive natural resources. Various data will be collected and analysed from the different governmental and other organisational websites, e.g. the UN and the World Bank to understand the scope and nature of the diamond trade, and also the nature of the various problems faced in this process, in the context of the African continent.

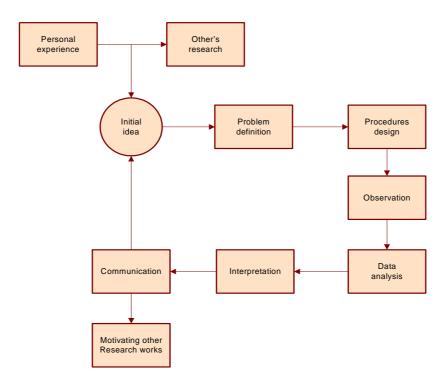


Figure 1: Research process

Source: Graziano & Raulin (2009: 40)

As for the research process shown by Graziano & Raulin, where interpretation of collected information and data plays an important role in the research process methodology, this paper will be qualitative in nature. Mariampolski in 2001 had observed that qualitative methodologies in the context of social research papers could be both, probationary and discursive in nature. He said, "It is best suitable when little is known about a product, category or respondent group or when the researcher wishes to expand the current state of knowledge..." (Mariampolski, 2001: 23-24). Therefore, this paper is best suited to be qualitative in nature, since I wish on the 'current state of knowledge' to further develop on it. Data collection from the various books, journals

and websites, will show the empirical or inductive nature of the research methodology. Using the inductive or empirical line of reasoning one can easily derive "conclusions from one of more particular facts or pieces of evidence. The conclusion explains the facts, and the facts explain the conclusion" (Blumberg, Cooper and Schindler, 2005: 23). The research makes use of secondary data which include various strategies and approaches used in diamond mining and trade, study reports tables, and survey reports, the qualitative approach for the reason for the study as it best ensembles for the aims and objectives of the research.

#### 2.1 Problem statement

The poor socio-economic growth and development in most of the resource rich African countries has been mainly stemming from mismanagement of the natural resources, corruption and ineffective governance. Thus a majority of the sub-Saharan nations, especially the ones that are rich in natural resources, suffer poor economic growth and poverty with low GDP, and fall in the ranks of the low-income countries group by World Bank ranking (Charts bin, 2011). The health and education in these countries continue to reflect extremely poor standards, while basic public services like availability of clean potable water and electricity remain poor or are sometimes completely lacking; while unemployment also remains high, forcing many of these countries to face the humiliation of surviving on international aid (AlGathafi, 2005: 30-37). Many experts contend that years of colonial rule and slave trade created a situation that marked the beginning of poverty and underdevelopment for the African nations. However, a look at the world around shows that many countries like Australia, New Zealand, and India that have been subjected to centuries of colonial rule have moved far ahead of these African countries, despite some of them gaining independence quite late in the twentieth century (Oluwatuyi, 2004). There are no doubts that colonial rule and slave trade did work towards destroying the wealth and human resources of Africa, the actual reasons for the present state of affairs lies elsewhere. A closer look reveals that the institutional deficiencies in the present economic and regulatory machineries in many of the African countries promote incompetency in the leadership that tends to become more predatory in nature. Such conditions have inadvertently proven to fertile breeding grounds for corruption, lack of transparency and accountability, weak governing bodies and social structure and a complete lack of any rule of law (Blustein, 2006). Thus, here the main problem question is: despite the presence of large revenue earning natural resources (like diamonds) in the African countries, why are there perceivable differences in the economic growth and social development of the nations, with some countries showing poor growth (Sierra Leone), while other countries (Botswana) showing significant improvement in their economy indicators, using the same natural resources?

# 2.2 Aims and objectives

It is certainly not acceptable that the African nations should persistently depend on assistances from the international community to keep a sustained economic development and alleviate poverty, and sustain the economic growth in the continent, while the revenues accrued from its own natural resources are constantly mismanaged and looted, by the corrupt political leaders and other criminals. The present crisis demands that the African nations and their leadership establish astringent policy framework where it can use the natural wealth into viable economies, with specific objectives of poverty alleviation, and human resource development. This paper explores the above issues in the context of the diamond trade in the African states (focusing on Botswana and Sierra Leone) and their failures and successes. The study aims at providing a groundwork for the framing of more effective policies on good governance, monitoring, accountability, transparency, and the management of the natural resource (diamond) generated revenue. The paper aims to provide a direction in the arena of the

diamond trade that would facilitate to find measures for the optimal use of the revenues generated from the diamond industry and achieve social development and justice, while ensuring long-term economic growth, decrease in poverty and political stability of the African nations.

In order to achieve the aims and objectives of this study it was necessary to conduct literature review. This was undertaken in order to facilitate a deeper understanding of the topic itself and of all the issues relating to this matter. A study of the existing body of work was carried out via on-line computerized library catalogues, several on-line search engines, reputable journals and conventional texts.

## 3 The world of diamonds

"Diamonds are forever" it is often said. But lives are not.

"We must spare people the ordeal of war, mutilations and death for the sake of conflict diamonds."

Martin Chungong Ayafor, Chairman of the Sierra Leone Panel of Experts (United Nations, 2001)

#### 3.1 What are diamonds?

The life on Earth was still in its infancy, when tens of kilometers deep in the active volcanoes, under unimaginable pressure, in temperatures exceeding thousands of degrees Celsius a small miracle began to form. The volcanic eruption spewed it out onto the Earth's surface, where it quietly slept for millions of years. Until one day a scraping was heard – at first, irregular as people were trying to dig it up with grazed hands and primitive tools, later on regular as the excavators were biting into the land. And then, when this miracle of nature glittered in the sun's rays for the first time, the first thing it could 'see' was a beaming human face. Come and meet the *diamond*.

Exotic and rare, diamonds are perhaps the most treasure gemstones on Earth. Diamonds glitter and dazzle with its exquisite beauty. But what exactly is a diamond and why is it so special? American Museum of Natural History defines diamond as: "Carbon in its most concentrated form. Except for trace impurities boron and nitrogen, diamond is composed solely of carbon, the chemical element that is fundamental to all life." In mineralogy, "diamond is the allotrope of carbon where carbon atoms are arranged in an isometric-hexoctahedral crystal lattice."

But diamond is distinctly different from its close cousin the common mineral graphite, which is also composed of carbon. Why is diamond the hardest surface known while graphite is exceedingly soft? Why is diamond transparent while graphite is metallic black? What is it that makes diamond so unique? The key to these questions

lies in diamond's particular arrangement of carbon atoms or its crystal structure, the feature that defines any mineral's fundamental properties.

Today diamonds symbolize wealth, durability, status and peerless quality. Across time and cultures diamond has also been associated with wealth, power, healing, protection as well as conflicts and wars.

Diamonds are carbon derivatives formed by geological processes taking place within the Earth's mantle almost 150 kilometers below the surface. The molten lava or magma carries the diamonds to the surface as it rises, and erupts in small volcanoes. Beneath such volcanoes are 'pipes' (carrot like in shape) that are filled with pieces from the earth's mantle, volcanic rocks, along with the embedded diamonds (Tamm, 2002). These pipes are known as 'kimberlite pipes' after Kimberley in South Africa, a city where the volcanic 'pipes' were first discovered. Diamonds are usually found in nature in two basic forms. They are either found as kimberlite pipes which are excavated by digging a hole into the pipe's mouth and then boring the shafts near the pipes; or they are found as alluvial diamonds, that is, in deposits formed when the 'pipes' erode. Alluvial deposits of diamonds are found in the form of surface scatterings generally located near a pipe, in river channels, and in draughts coming in from the rivers that are moved by the waves along the seacoasts. Such alluvial diamond deposits, especially the ones found in the riverbeds, are very easily obtained, and need almost no investments and no mining techniques (ibid). Until the nineteenth century, diamonds were primarily found in the riverbeds in Brazil and India, thus giving a monopoly to these countries in the global diamond trade. However, with the discovery of the diamond deposits in South Africa in the year 1866 changed the entire scenario while also increasing the world's total diamond supplies.

#### 3.2 The diamond industry

#### 3.2.1 The DeBeers cartel

In the history of the diamond industry, one company has persistently maintained its top position, is the De Beers, which was founded in 1880 under the co-ownership of Cecil Rhodes. In 1881, Rhodes managed to procure a monopoly on the Kimberley pipe way of diamond production and soon a kind of syndicate, comprising of ten of the largest diamond traders in South Africa, was formed. These traders received a certain percentage of the De Beers' diamonds in exchange for market data to ensure that the company maintained a constant yet controlled supply. In the subsequent years, though, De Beers maintained this system; more than a hundred diamond merchants and manufacturers from all parts of the world, with specific objectives of matching the supply and demand global score, later replaced the original ten members of the syndicate. Even at the turn of the twenty first century, we find that De Beers is at the helm of the global diamond trade, with nearly two-thirds of the average annual supply of the rough diamonds coming through them (Goreux, 2001).

The rough diamonds that come from the mines passes through the five processing steps. The first stage, which is the mining and the buying of the rough diamonds, the "De Beers plays a dominant role. It owns some 40 percent of diamond mines and regulates world prices with a large buffer-stock of unpolished diamonds. This buffer-stock is managed by the Central Selling Organization (CSO), which purchases approximately 70 percent of the world gem mining output" (Goreux, 2001: 2). During the next step, the rough diamonds are sorted according to their qualities and sizes in the various diamond centres, before being bought by the diamond manufacturers. Nearly 50 percent of the polished stones and 80 percent of the rough diamonds pass through the diamond centres located at Antwerp (Belgium), while other diamond centres are located in Mumbai, Lucerne, London, Tel Aviv, New York, Dubai, and Johannesburg. During the third stage, the rough natural diamonds are cut according to the desired sizes and

later polished. The natural diamonds that are more expensive are generally polished in New York, while the other diamonds are sent to Mumbai and its adjoining areas to be cut and polished accordingly (ibid). The fourth stage is the setting of the stones in jewellery; while the fifth stage is the marketing and selling of the diamond jewellery.

A rough estimate as given by Goreux (2001) shows us the huge profits that can be made in the diamond trade. He states that in "1999, rough gem diamonds purchased at mine gate were valued by the Mining Journal at \$7.3 billion. Diamonds sorted and polished were sold to jewellers for \$14 billion. The value added by jewellers in the form of labour, gold, platinum and stones other than diamonds was estimated at \$14 billion, bringing total production costs to some \$28 billion. With a 100 percent retail margin, the value paid by consumers for diamond jewellery was estimated at \$56 billion" (ibid: 2). Therefore, we find that large-scale profits that can be made from the diamond trade, most of which comes in at the last or the fifth stage that is the marketing and selling of diamond jewellery.

An estimated 41 percent of the total world diamond production originates from the African nations like Namibia, South Africa and Botswana, Figure 2, where De Beers, is once again the major market player. Another 33 percent of the world's diamond production takes place in Australia, Canada and Russia. In the aforementioned six nations that account for nearly 74 percent of world diamond production, the stone extractions take place from the kimberlite pipes. In these countries the technology for diamond extraction is highly mechanized, the mines are well protected, with high end security. The De Beers Company holds a large share of the kimberlite mines, especially in Africa, and a large share of diamonds is sold via the Central Selling Organization (CSO), another segment within the De Beers Corporation.

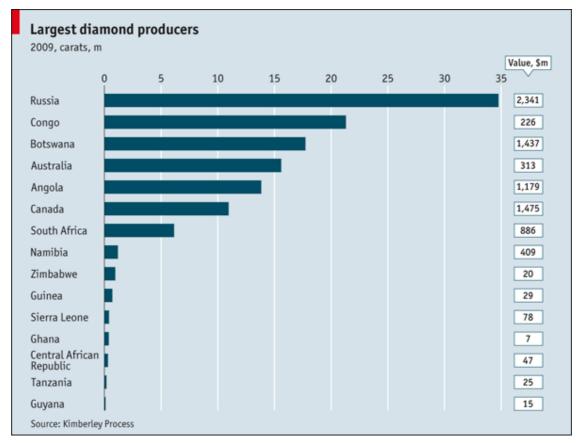


Figure 2: List of top diamond-producing countries worldwide.

Source: http://www.economist.com/node/16758216, (5 Aug 2010).

It is clear that De Beers has created a strong cartel within the diamond industry monopolizing the trade which carried on for 70 years, and which finally broke in 2000 when the diamond producers in Australia, Russia, and Canada decided to sell diamonds outside the De Beers cartel. For years before the monopoly was broken, the diamond producers preferred using the De Beers channel as it created price stability and hence decreased any investment related risks, while De Beers always supported exploration in new arenas. This suited the cartel, as it was able to control the diamond prices at favourable rates owing to their monopoly over the diamond supply route, and the consumers with a lack of other alternatives, were forced to buying from the cartel members. Edward J. Epstein's in his article, "Have You Ever Tried to Sell a Diamond?" gives a detailed insight into the De Beers marketing and advertising campaign that over the years managed to convince the US consumers that the small carbon bits are actually

"inseparable part of courtship and married life" (1982: 25). Epstein contended to hold on to its monopoly De Beers decided to create an illusion that signified that the diamonds were 'forever'. In a 1938 a strategy was created where it was decided, "That through a well-orchestrated advertising and public relations campaign it could...strengthen the association in the public's mind of diamonds with romance. Since "young men buy over 90% of all engagement rings," it would be crucial to inculcate in them the idea that diamonds were a gift of love: the larger and finer the diamond, the greater the expression of love. Similarly, young women had to be encouraged to view diamonds as an integral part of any romantic courtship" (ibid: 28).

By the late 1990s, it was seen that De Beers managed to stock diamonds that were almost equal to one year's worth global diamond production. Holding this large stock as buffer and promoting the sales by the effective marketing strategy "A Diamond Is Forever" (created effectively in 1947) was successful, but it proved to be too expensive for De Beers, while also acting beneficial for the some of the free riders that soon turned into rival organisations (Kretschmer, 1998). This forced De Beers to change their strategy recently where they shifted away to vertical integration (from the mines to the diamond jewellery segment that are being sold under De Beers name) from the previous strategy of horizontal integration that aimed at complete market control through monopoly of diamond production, and strong marketing (Goreux, 2001). Consequently, De Beers let go of its monopoly over the global prices of the rough diamonds, and their buffer stock was decreased from "\$5 billion in 1998 to \$4 billion in 1999 and to less than \$3 billion by June 2000, which is close to the \$2 billion needed as working stock. With this new strategy, De Beers has to project a different image and the cartel manager is now called "the Supplier of choice" (ibid: 4).

The other form of diamond extraction is the alluvial form of mining which is generally artisan in nature. Artisan mining is typically a small-scale mining more in vogue in the rural and remote location sand practiced by "a largely itinerant and poorly

educated population with few other employment alternatives" (Goreux, 2001). Without any legally defined or state authorised regulatory framework to enforce guidelines, a major part of this form of diamond mining is conducted illegally. Presently at an average count almost "13 million people in about 30 countries across the world are small-scale/artisan miners, with about 80 million to 100 million people depending on mining of gold and precious stones for their livelihood" (ibid). The miners along with their families, owing to the illicit nature of their operations, get minimal salaries while working under harsh conditions. Here the diamond extraction, processing, and selling methods are completely basic, while working conditions tend to be unhealthy, dangerous, and unpredictable, with very low wages. Besides, these poor working conditions the living standards of the workers and their community hygiene standards are extremely poor, and this small-scale form of diamond mining is often seasonal in nature, yet some of the workers that reside in these remote and backward areas are forced to view it as their source of life-long income. During the off-season period, some of the agricultural labourers turn into mineworkers, in hopes of getting some relatively expensive minerals, like diamonds and gold (ibid).

Such form of seasonal mining leads to an accumulation of a large number of artisan miners in particular zones which however is not long lasting, and the already existing population is further supplemented with the new arrivals that come for a temporary time-period. Since the new immigrants live and work for short-term periods, their mining processes often lead to serious damages to the surrounding environment, and a large part of the real economic potential of that area is actually destroyed, owing to a lack of governmental supervision, and absence of a regulatory and legal framework (Goreux, 2001). There is no appropriate enforcement of the labour laws, and often there are rampant instances of child labour; and owing to the low salaries the civil servants (if present), kept for regulating and supervising the mining processes, quickly fall prey to corruption. In the conflict diamond zones 'law enforcement' is completely under the rebels, as they take charge of the diamond trade. Thus, under the present scenario we

find that in the diamond trade, in one hand there is the strong cartel of the DeBeers (though now much weaker) corporation that decides the diamond prices mostly in their own favour; and on the other hand, some of the diamond mines are under the control of the rebels that majorly constitute the trade in 'blood diamonds'.

#### 3.2.2 Debswana

Debswana Diamond Company Ltd., in short Debswana, is a giant mining company located in Botswana and is the world's leading producer of diamonds by value. Debswana is a joint venture between the government of Botswana and the South African diamond company DeBeers. Each party owns 50 percent of the company. Debswana was formed as the DeBeers Mining Company on June 23 in 1969, after DeBeers geologists identified diamond deposits at Orapa in the 1960s. Over the next years, the government of Botswana increased its ownership stake from an original 15 percent to a full 50 percent. In 1991 the company changed its name to Debswana Diamond Company Ltd. and moved its headquarters to Gaborone, the capital city of Botswana. (Debswana, 2011)

Debswana owns and operates four diamond mines in central Botswana as well as a coal mine. There are no private diamond mining operations in Botswana. All diamond mining in the country is controlled by Debswana. The diamond mines are:

- Orapha diamond mine, opened in 1971.
- Letlhakane diamond mine, opened in 1975.
- Jwaneng diamond mine, opened in 1982.
- Damtshaa diamond mine, opened in 2002.

Diamond mining activities have fueled much of the growth in Botswana's economy, allowing it to grow from one of the poorest countries in the world after its independence in 1966 to a "middle income" nation, with \$13,604 per capita income in

2009 (Human Development Report, 2009). Debswana is a key player in the national economy of Botswana, producing in excess of 70 percent of Botswana's export earnings, 30 percent of GDP and 50 percent of government revenue. Debswana is the largest non-government employer in the country, employing approximately 6,300 people (Debswana, 2011).

The markets showed great improvement in 2010 after the production almost halved in 2009. "In 2010, Debswana production increased to about 22.2 million carats from 17.7 million in 2009. Carats sold were 23.9 million, with total sales of \$2.68 bn. The revenue improvement was a result of the increase in prices after the 2009 downturn" (Debswana, 2011). The high value per weight of diamonds mined by Debswana has made the company the leading producer of diamonds by value in the world.

## 3.2.3 Secrecy in diamond trade

The worth of a diamond is characterised by the so called "the four Cs" – cut, colour, clarity, and carat (Smillie, 2002). Another very important characteristic of a diamond is the secrecy that shrouds its origin and other processes within the entire diamond industry. As Smillie frames it, "Almost everything about the diamond industry is secretive, from the agreements between De Beers and African governments at one end of the spectrum, to the movement of a few stones across Hoveniersstraat in Antwerp at the other. At the high end of the chain, De Beers and other mining companies make their profit on the mystique and mystery of diamonds, and the detailed workings of a cartel are, by its very nature, secretive" (ibid: 26). It is for this very reason that De Beers has been barred by the US Justice Department under anti-trust laws in the US as there are charges of illegal underhand price-fixing against the company.

Within the diamond industry security has always been at forefront, there are innumerable cases of pilferage diamond thefts from the mining sites, while organised and large scale theft and cases of violent acts are also not very rare within the industry. So to deal with these dangers, especially in cases of small companies, the movement of diamonds is kept as much as secretive as possible. Here some of the major transactions are conducted simply of the basis of trust, and diamonds worth millions of dollars are transferred from one agent to another, without any kind of paper work. De Beers shows the boxes of the diamonds (preselected and with prefixed prices) to the 'sight holders' and the 'sight holders' abstain from bargaining, simply by putting in their trust on De Beers, as regards the price and quality of the stones. If they did not like it they had to find some other diamond sources (this being unlikely as De Beers owned most of the mines, or were in some sort of understanding with the other owners) and this system was in vogue, until recently, when De Beers finally lost its monopoly (Smillie, 2002). In fact, until recent years, there were no available printed price lists for diamonds, and in 1978, when Mr Martin Rapaport, created a diamond price list and got it published for the first time, it created a huge storm of debates in the world of diamond industry (ibid). The lack of transparency in the diamond industry makes it exceedingly difficult for one to know the exact business volume and value of a company or differentiate between the conflict and non-conflict diamonds. Many of the diamond dealers are well-established in Africa for many generations, and with a lack of effective governmental regulation in some of the African countries, they have managed to form their own routes and connections that allow them to easily mix the conflict diamonds with the legitimate ones (ibid), and owing to the secret nature of the trade, later identification of the conflict diamonds is almost impossible for the law enforcement agencies in other countries.

#### 3.3 Inadequate government control

As we have seen in the previous section a lack of adequate government regulation facilities in the illegal diamond trade. This is very evident in the Congo-Brazzaville areas where the lack of governmental authority has facilitated in the illegal diamond trade. It has been seen that for many years the Zaire/DRC diamond trade was determined by the amount of diamond exports made possible via the Congo-Brazzaville route. Congo-Brazzaville is a country that has no diamond mines of its own, yet it determined the fate of the Zaire/DRC diamond trade. In July 2000, the DRC gave an Israeli firm, International Diamond Industries (IDI) the right to monopoly on the diamond exports, 30 days after the signing of the agreement. In August, just prior to monopoly coming into effect, practically no diamonds were imported from Congo-Brazzaville to Belgium. However, from September, the figures suddenly skyrocketed and almost 427,000 carats were exported, and within the next few months, almost 2 million carats were exported from Brazzaville to Antwerp. The norms and regulations for diamond export are less stringent in the Republic of Congo that has no diamond mines, thus making the export duties on the diamonds to be much less here than in the DRC, and allowing the diamond merchants in the Republic of Congo to pay more prices for the rough diamonds. After the monopoly came into effect, the diamond exports form Brazzaville to Antwerp shot up rapidly and went up from \$1.5 million each month prior to the formations of the IDI-Congo monopoly to \$25 million each month, once the IDI-Congo monopoly came into effect. This is owing to the fact that failed efforts by the Kinshasa government to bring under control the diamond trade have resulted in the diamonds being smuggled into the neighbouring Brazzaville (Smillie, 2002).

There is another illegal route, which takes the diamonds to the Central African Republic from the DRC, however, in this case, the former country has diamonds of its own, and these are mostly conflict diamonds or 'blood diamonds'. From here the DRC

diamonds are then sold along with the Central Africa Republic diamonds as local stones, thus, we find that the conflict and non-conflict diamonds are mixed without any traces of their actual origin (UN Security Council Report, 2001: par. 119: 23). In this context, Smilie tells us that the "importers from Brazzaville, Gambia and other non-producing transit countries, so the industry argument goes, are not breaking any law – at least not any Belgian law. While the diamonds might not be clean, there is no embargo on Gambian or Congolese diamonds, so at the very worst, these are simply goods whose origin cannot be determined" (Smillie, 2002: 28).

In addition to the fact that a high value is generally associated with these stones, and there is a lack of accessibility of these stones in some countries, the diamonds are also highly portable in nature, therefore, making it even easier for smuggling across borders. Diamond are small, can be easily hidden and cannot be detected by any metal detector and many diamonds at one go can be carried in small pouch. The customs section in most non-mining countries do have a diamond expert in their customs departments, and even there is one for the purpose of the stone valuation, and not for the sake of identification, thus allowing for the diamonds to pass on, unchecked, for their conflict status (Smillie, 2002). Though some of the diamond producing African countries like Namibia, South Africa, and Botswana, have stringent regulations and norms for licensing the products, most of the consumer nations like US, lacks any kind of regulations for identification of the conflict stones, in reality there is no supervision over what a dealer actually buys and later sells (ibid).

There are three dimensions in the matter of control over the diamond trade.

1) The issue of control in the diamond producing countries: In most of the diamond producing nations, especially the ones in Africa, there are almost no checks on the trade. In the case of Sierra Leone, there are some regulations in place, yet the government cannot guarantee that the rebel group Revolutionary United Front (RUF) are not mixing or laundering the conflict diamonds into the legal channel. There is also no guarantee

that some of the 'blood diamonds' are not being smuggled into legal channels of the Guinean diamond trading system. There are also enough evidences that the conflict diamonds are mixed into the Liberian and Gambian channels, and Gambia, is a country with no diamond production of its own, yet with a high diamond export records, and no legal controls to check the system (Smillie, 2002). As regards management and control of diamonds Congo-Brazzaville, Liberia, the DRC, Sierra Leone, Guinea, and Gambia, and many others have been facing issues in diamond management and probity.

In this African scenario, South Africa reflects another side of the coin, where we find that the country has stringent diamond trade regulations in place. As Smillie (2002: 29) tells us, "There are, on average, a thousand arrests each year under the South African Diamonds Act, and virtually none – where diamonds are concerned – under the criminal code. Illicit diamonds have always entered the country, however, from other places. All that is needed, it seems, is a small plane and a dummy South African mine, for South Africa to constitute a ready opportunity for laundering another country's diamonds. Smuggling diamonds into and out of South Africa is not new." Thus, we find that even though the regulations are in place the smugglers have found out ways to bypass the legal systems. In 2001, a UN Expert Panel Report states, "Coltan, diamonds and gold from the Democratic Republic of Congo are being smuggled into South Africa, either through its porous northern border or through its 4,000 unmonitored airstrips" (UN Security Council Report 2001: par. 109: 21).

2) <u>Controls while exporting diamonds</u>: Until recently, one could never be sure whether the stones that were sent out as export products from a diamond producing country are the same as the ones that arrive in a consumer based country. Thus, there were no guarantees that the conflict diamonds could not be amalgamated with the legitimate diamonds travelling on the ship en route to a destination country, especially the ones that are not guarded well. One major window of opportunity exists in transit countries. As Smillie furthermore tells us that "Until 2001, parcels of diamonds could be opened,

mixed and re-invoiced in Swiss free trade zones, without any government oversight or documentation" (2002: 29-30). Even though Switzerland has modified the regulation related to this particular issue in diamond trade with a better system for keeping a tab on the diamonds, still the packets can be opened, conflict diamonds added and a new invoice tagged, and it can take pace almost anywhere in the world. Since there are no international treaties on these matters, any one with bad intentions of hiding the origin of the conflict diamonds can do so with almost no hassles.

There are at present three certification systems that offer a part solution to the issue of re-mixing of the conflict diamonds while being exported. Belgium's Diamond High Council has devised a measure with the governments of Sierra Leone, Guinea, and Angola, where it ensures that the diamond packages being exported are the same ones that come into Belgium, and function as voluntary bilateral treaties among the three African countries and Belgium. Another certification is the Kimberley Process which seeks to curb the illegal trade in diamonds, will be discussed in detail in a later section. In July 2001, the Guinean Delegation produced its new certificate of origin, and has requested other countries to block the importation of Guinean diamonds that do not have the certificate. The EU countries have, however, not taken this certificate into consideration, therefore the Guinean certificate of origin has no backing by the present trade related treaties and regulations as are framed by the WTO, thus making the certificate almost meaningless within the arena of international law.

3) Controls after reaching the first point of destination: the third area that lacks a stringent government regulation is in the consumer countries, once the rough diamonds have reached from the diamond producing nations. As we have already seen, it is extremely difficult for the governments to ascertain whether the rough diamonds that are being imported into their country are the ones that had been actually sent by the producer countries. Belgium, with its stringent diamond controls norms, has seen the entry of conflict diamonds that are worth billions of dollars, falsely declared as

"Liberian" diamonds (Smillie, 2002), where the authorities ignorant of their actual origin simply let them pass. Once having crossed the point of import entry, the next steps are easier and there are always takers for diamonds, even after knowing that they are conflict diamonds. Journalists that researched into cases of conflict diamonds within the US and UK always have some person who is ready to buy the 'blood diamonds,' even the stolen ones. Except for South Africa that makes it necessary for anyone possessing rough diamonds to have a permit, most of the countries do not have any law that is so stringent. Most countries, have no tracking system for diamonds, have no legal requirements for keeping written records for trading in diamonds, there are no systems audit, and very few specialized units of law enforcement agencies to tackle diamond smuggling. There is a complete lack of statistical data related to the international trade on diamonds. Though Belgium "produces summary import and export data, and some statistics are available for other countries, but for many producing countries, there are no public statistics whatsoever" (ibid: 31). Those trying to research on conflict diamonds are usually faced with a dilemma where they have to depend on basic and crude data type that is unreliable, thus showing the difficulties in the nature of conducting primary researches in this line. Here Smillie gives an example that shows the unreliability of the available data. He states that the "Belgian statistics show imports from many countries that do not produce many diamonds (or in some cases, any at all): e.g. Congo-Brazzaville, Gambia, Uganda, Zambia, Rwanda. In other cases, they show imports that are far in excess of official production statistics - from Guinea, Cote d'Ivoire and elsewhere. In the worst case, Liberia, a country that at the best of times has never produced more than \$10 or \$15 million worth of low quality diamonds in a year, was shown as exporting \$2.2 billion in rough diamonds to Antwerp between 1994 and 1999" (2002: 31). Thus the statistics, which are limited in nature, also tend to be unreliable revealing the large-scale disparities and anomalies within the global diamond trade.

#### 3.4 Conflict diamonds (also known as 'blood diamonds')

"It has been said that war is the price of peace... Angola and Sierra Leone have already paid too much. Let them live a better life."

Ambassador Juan Larrain, Chairman of the Monitoring Mechanism on sanctions against UNITA (United Nations, 2001)

Diamonds, which had been always marketed as representing purity, now have a rather tarnished image by news that reveal that trading in diamonds is being used to create, sustain, and finance various violent conflicts in Sierra Leone and Angola. According to United Nations "conflict diamonds are diamonds that originate from areas controlled by forces or fractions opposed to legitimate and internationally recognized governments, and are used to fund military action in opposition to those governments, or in contravention of the decisions of the Security Council" (United Nations, 2001). UN further acknowledges the fact that conflict diamonds play the primary role in funding and extending the violent conflicts in some of the diamond producing countries of Africa, while it also emphasizes the fact that legitimate and well controlled trading in diamonds has brought prosperity and development in other countries, like Botswana, and South Africa, all within the same continent. In Sierra Leone and Angola, conflict diamonds are still financing and sustaining the rebel organisations, like the Revolutionary United Front (RUF) in Sierra Leone, and National Union for the Total Independence of Angola (UNITA) and both the groups are acting against the international community's efforts towards bringing back peace and order in these two countries.

In Africa, some of the diamond producing countries like Botswana, Namibia, and South Africa, are peaceful and politically stable nations that have judiciously used their reserves of natural resources to develop on their socio-economic conditions. However, the parts of the diamond trade that is controlled by the rebel groups in Sierra Leone, the Democratic Republic of the Congo (DRC) and Angola, form the conflict

diamond trade, where we find the country's natural resources being used for funding terror and anti-state activities, instead of being used for national development and progress. Presently, diamonds form to be one of the most highly valued and concentrated form of wealth in any part of the world. As we have already seen, the difficulty in tracing the origin of the stones, their unreasonably high value, the techniques that are used in mining processes, the small sizes, and the secrecy shrouding the diamond industry, all together make the stones vulnerable for exploitation by the rebels that seek to sell the stones in order to make money for buying arms. UN defines the term 'conflict diamonds' as "rough diamonds that are used by rebel movements to finance their military activities, including attempts to undermine or overthrow legitimate Governments" (United Nations General Assembly Resolution 55/56, 2000: 1). Recently there were certain allegations that hinted at a close linkup between the conflicts diamonds and the terror activities of the Afghanistan-based terror group, al Qaeda (Douglas, 2001).

The African conflict diamonds are known to have fuelled rebel activities, violent conflicts, and civil war, owing to which the subject of war economics has started receiving attention from the academic world. In this context, Paul Collier, director of the World Bank's Development Economics Research Group has written, "Rebellions either have the objective of natural resource predation, or are critically dependent upon natural resource predation in order to pursue other objectives. These, rather than objective grievances, are the risk factors which conflict prevention must reduce if it is to be successful (Collier, 2006: 2). In his paper, Collier suggested that majority of the civil wars are initiated and aggravated when the rebel groups compete with the legitimate state governments for the power and control of the valuable natural resources, than by any ethnic or ideological reasons or from differences in religion. Here in case of the African conflicts the diamonds are the valuable natural resources or the primary commodity that can be easily moved and sold by the rebel groups. Here Tamm suggests that "the role of rebel movements in their trade is integral to the definition of

conflict diamonds; rebel movements in Sierra Leone, Angola, and the Democratic Republic of the Congo have put the 'conflict' in 'conflict diamond'." A look at the estimated figures that portray diamond revenues for the rebel groups, shown in Table 2, reveal that around 3 and 4 percent of the global total supply of rough diamonds is under the control of the African rebels in Angola, Sierra Leone and the DRC (Tamm, 2002).

Table 2: Diamond output by country in US \$ million, 1999-2000

	<u> 1999</u>	2000
Botswana	1,800	2,200
Russia	1,600	1,600
South Africa	800	900
Angola	600	750
Of which: UNITA	150	75 (estimates range from 75-10
Namibia	400	500
Canada	400	400
Australia	400	300
Other	800	900
Of w hich: RUF	70	70 (estimates range from 35 –1
Of which: DRC rebels (Kisangani)	35	35 (estimates range from 35-70
Total	6,800	7,500

Source: Tamm (2002, 6).

The table above shows a summary of the approximate levels of diamond production for 1999 and 2000, which includes estimates of diamond revenues for rebel movements. Estimates of diamond production and value vary widely, especially in countries where conflict diamonds are mined, due to differing methodologies and lack of data.

In the UN Security Council's Panel of Experts report on Sierra Leone (2000) it is stated that the conflict diamonds, "are, in essence, illicit diamonds that have gone septic" (cited in Tamm, 2002: 7). The UN Security Council was first involved in the issue of conflict diamonds during the Angolan peace process, which took place after the

Angolan 1992 peace accords failed to work out. In 1993, it placed certain embargoes on the diamond export and arms imports and created a sanction committee, which was later supported by the panel of experts created in 1999. In Sierra Leone, the army coup of 1997 and with the May 2000 breakdown of the 1999 Lomé peace led to similar developments. The sanctions on arms imports in 1998 were soon followed by sanctions on diamond exports from Sierra Leone in July 2000. On 1<sup>st</sup> December 2000, the United Nations General Assembly further adopted a resolution on the conflict diamond where it aimed at breaking the link between the illicit trade in rough diamonds and the various armed conflicts, in order to work towards the prevention of conflict and peace settlement of wars (United Nations General Assembly Resolution 55/56, 2000).

In order to stop the illegal diamond trade a gradual improvement must be made in the field of job opportunities, especially for the young rural labour, which may prove to be a long-term solution for the conflict-affected African nations dealing with issues of illegal alluvial diamond trade. One important prerequisite for bringing in growth and development is to destroy the vicious circle of the lack of governance, poverty, and lawlessness, within these conflict countries. For Sierra Leone, Angola, and the DRC, the present challenge is to somehow end the civil war, and bring in peace that is long term and sustainable. Here Goreux states that merely the "restoration of state control over diamond sites will not be sufficient in itself. The ultimate utilization of diamond resources for development ends will require the elaboration of effective and transparent governance systems to regulate their exploitation, protect the labour rights of diggers, encourage investment, limit damage to the environment and facilitate appropriate taxation" (Goreux, 2001: 22).

# 4 Efforts to curb the illegal trade in diamonds and to find alternative income source for a more sustained future growth of the African economy

## 4.1 United Nations

The various UN Security Council sanctions until today have been the most effective, as regards alerting the consumer-based countries to the issue of conflict diamonds. The present sanctions on the diamonds from Liberia have effectively helped in blocking a channel that was being used widely for laundering the illegal proceeds of the conflict diamonds. However, the sanctions have not been able to stem the flow of the conflict diamonds that come from Sierra Leone. The RUF has continued in its illegal diamond mining and trading with greater pace since the 2001 peace agreement came into effect (Smillie, 2002). In fact, Smilie further adds, "Their goods are now being laundered into the legitimate stream in other ways. This could be through Liberia – without formal government sanction – or through any one of several neighbouring countries. Or the goods could be moved to Belgium or another major centre without any paper work" (Smillie, 2002: 42). Owing to small size and portability of the stones, the secrecy of the diamond industry, and the lack of statistical data makes the disposal of the conflict diamonds absolutely of no difficulty.

## 4.2 The Kimberley Process

By the turn of the century, in and around 1999, the terms 'conflict diamond' or 'blood diamond' were well known to the public, and it worked towards changing the diamond industry forever. Reports by the various governmental, international bodies, nongovernmental organizations and the UN monitoring bodies that recorded the open violations against the applied sanctions on the diamond trade, in African countries like Sierra Leone or the DRC were regularly published. The situation became even more worrying for the diamond industry, when media started investigating the links between

civil conflicts in Africa and the trade in diamonds. To avoid consumer boycotts the diamond industry after meeting with the various nongovernmental organizations issued various proposals that aimed at creating a process for systematic diamond certification, and gave its support for creating national level laws that aimed at blocking diamond exports from the conflict zones. Taking a cue from this, the various country governments soon came together to take part in a process for international diamond certification negotiation that was known as the "Kimberley Process" in November 2001. This repository was made with the aim of stemming the trade in conflict diamonds and South Africa's Minister of Minerals and Energy started a process that was later known as the Kimberley Process. The basic elements under the Kimberley process included:

- "the creation and implementation of a simple and workable international certification scheme for rough diamonds;
- a system based primarily on national certification schemes;
- the need for national practices to meet internationally agreed minimum standards;
- the need for the widest possible participation;
- the need for diamond processing, exporting and importing states to act in concert;
- the need for appropriate arrangements to ensure compliance;
- the need for transparency" (Smilie, 2002: 47).

The Kimberley process at present comprises of a series of recommendations that are expected to be voluntarily accepted as norms within the diamond trade, by the participating UN member countries and is the only set of regulatory and supervisory norms in place that works towards curbing the illegal diamond trade.

Map 1: World map – participants of the Kimberley Process



The following countries and regional economic integration organizations with the exception of those indicated with an asterisk (\*), meet the minimum requirements of the Kimberley Process Certification Scheme:

Bangladesh Belarus Botswana Brazil Canada Central African Republic of Congo, Democratic Republic of Côte d'Ivoire** Croatia European Union Ghana Guinea  South Africa Sri Lanka Switzerland Tanzania Thailand Togo Turkey Ukraine United Arab Emirate United States of Am Venezuela* Vietnam Zimbabwe
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NOTE: The rough diamond-trading entity of Chinese Taipei has also met the minimum requirements of the KPCS.

Sierra Leone

Guyana

Source: http://www.kimberleyprocess.com/structure/participants\_world\_map\_en.html

<sup>\*</sup> Venezuela has voluntarily suspended exports and imports of rough diamonds until further notice.

<sup>\*\*</sup> Cote d' Ivoire is currently under UN sanctions and is not trading in rough diamonds.

## 4.3 Reforms to curb the illegal trade in diamonds are regards to the African countries

- 1) Effective governance: removing smuggling and laundering of diamonds is not an easy task if one takes into context the high value associated with the stones. Here Goreux presents a picture, which shows the difficulty in removing the illegal diamond trade. He informs, "In 1999, one kilogram of rough diamonds from Sierra Leone sold on average for \$1.15 million, which was the market price for 135 kilograms of gold and represented the earnings of two thousand Sierra Leonean civil servants in a full year. Given these magnitudes, corruption cannot be eliminated and embargoes on neighbouring countries may not prevent smuggling, since rebels can modify their routing of smuggled diamonds" (Goreux, 2001: 11). Thus, it would be more effective if one aims at decreasing the smuggling incentives by bringing in basic and uniform norms for the countries that export diamond and if the smuggling costs could be increased and made almost equivalent to that of the legal trading route costs, then automatically smuggling would be reduced.
- 2) Levying taxes and export regulations: if export taxes are levied they must be kept low as diamonds are very easy to smuggle. However, export taxes are not the only costs that an exporter using legitimate trade routes must bear, and the cost of financial intermediation is also a problem. Here Goreux again gives an example where he states that "After certificates of origin became available in Sierra Leone, exporters came out with sizable supplies; but they had to wait for weeks before shipping their stones waiting for an agreement with the central bank to be worked out" (ibid: 11). Therefore, we find there are intermittent delays in the process in case an exporter chooses the legal route, so timely communication is an essential criteria, however the most difficult challenge in the entire process would be to check that no stones from the RUF controlled mines are being made a part of the parcels that have valid certificate of origin.

- 3) Transparency in the diamond prices: the prices of the diamonds being exported must necessarily be publicized to the importing countries and there must regular audits in the accounts of the diamond exporting agencies and there must be a cross-check of the treasury reports with the central bank data. There must also be workshops held on the correct valuation of the stones in various mining areas in order to make the artisan miners aware of the exact value of the stones, and provide them with an improved knowledge base as regards the correct value of diamonds and to strengthen their power of bargaining which at present is very weak, owing to lack of knowledge (Goreux, 2001).
- 4) Enforcement of the rights of mining: for the kimberlite pipe mining type, that needs highly mechanized technologies, the foreign investors can be attracted by presenting a transparent, secure, sustainable, and stable economy for investments, which may be achieved by bringing in reforms in the present mining legislations of the various conflict ridden countries. As regards the alluvial diamonds mining Goreux suggests that "transparent, market-based allocation and enforcement of mineral rights would contribute to increasing production and reducing smuggling" (ibid: 12). The government must also provide for the social and economic rights of the miners, especially those in the alluvial type of mining with micro financing made available for an alternative livelihood, if the alluvial type of miner chooses so.

## 5 Case study analysis

The aim of the case study analysis is to examine and compare the countries of Botswana and Sierra Leone. There are two main reasons for selecting these two countries. Firstly, both Sierra Leone and Botswana were colonized by the British imperial powers. Secondly, both countries are abundant in natural resources, above all in diamonds, which present them with a great opportunity for economic growth and development. Botswana and Sierra Leone, respectively, set a good and a bad example of how the revenues are used.

Resource-dependence is generally characterized by poorer economic growth and lower standards of living, higher levels of inequalities and corruption, as well as authoritarianism. "Mineral and oil dependence is correlated with lower social levels of development, for example, child mortality of UNDP's Human Development Index, then seen in resource poor countries" (cited in Le Billon, 2003: 10). "Oil dependence is also associated with high rates of child malnutrition, low health-care budget; low enrolment rate in primary and secondary education, and low adult literacy rates. Higher levels of mineral dependence are strongly correlated with higher poverty rates and lower life expectancy" (Le Billon, 2003: 10). Even in the case of a 'success story' like Botswana, which has benefited from sustained high levels of economic growth, significantly better governance than in most sub-Saharan countries, and a per capita GDP of \$13,604, prominent inequalities have left about 49.4 percent of the population living on less than \$2 a day (Human Development Report, 2009). The minerals, especially diamonds represent a curse for many countries. According to the Oxford economist Paul Collier (2006), the minerals are the main factor increasing the risk of civil wars outbreak. However, not all resource-dependent countries are equally exposed to the risk of war and not all wars are resource-related. Undeniably, history and the economic development of a country as well as its political culture, institutions and its leaders are determining factors in addition to natural resources. Such a scenario can be seen in Botswana in comparison to Sierra Leone. Although, Sierra Leone has not always been a country of conflict. It was around the time of the country's independence in 1961 that Sierra Leone began to see the onset of conflict. Later on the rebel groups took control of the diamond mines in Sierra Leone which led the United Nations Security Council to impose an 18 months ban on diamond exports from Sierra Leone, recognizing that diamonds have been fueling the conflict. Since the RUF has been mining diamonds and selling them to fund their weapons purchase and other activities, including human rights abuses. These diamonds have been sold around the world sometimes unwittingly, sometimes knowingly by various diamond corporations. Why on the contrary have the diamonds become the basic element of economic growth in Botswana? On one hand, Botswana gained independence quite late and could learn from the mistakes other countries made and also because Botswana could prepare for the problems which the post-colonialism brought about. On the other hand, Botswana had a double luck. After the independence the country had honest, uncorrupted and good politicians, unlike Sierra Leone where the government corruption and the mismanagement of diamonds and mineral resources continued to grow. Essentially, illicit mining, smuggling and exploitation hinder revenue generation that is needed for economic growth and development in Sub-Saharan countries heavily reliant on resources, mainly minerals.

## 5.1 Botswana

"The diamond mines were a Godsend, and rapidly transformed the economy, increasing the revenue of the country from less than P10 million a year at Independence to over a billion today."

The then Honourable Minister of Mineral Resources and Water Affairs, Mr A.M Mogwe (1990)

Map 2: Map of Botswana

Botswana is located in southern

Africa bordering Zambia, Zimbabwe,

Namibia and South Africa. Botswana, formerly
called Bechuanaland, gained independence from

Britain in 1966. It has a population of 1.9 million,
even though it is a similar size to France which has a
population of 61.7 million (Human Development
Report 2009). Botswana has a dynamic economy
due to four decades of sustained civilian leadership,
progressive social policies and significant capital

ANG.

Caprol Cornel sing)

Kasana

Teodilo

Hills

Teodilo

Hahaladingas

Selebi-Phikwe

Sorowe

Mahalapye

KALAHARI

DESERT

Molepolole

GABORONE

Kanye

Tshabong

SOUTHAFRICA

O 50 100 km

O 50 100 mi

Source: https://www.cia.gov/library/publicat ions/the-worldfactbook/maps/maptemplate\_bc.html

investment. Mineral extraction, principally diamond mining dominates the economy.

English is the official language of Botswana although 78 percent of the population speaks Setswana, 82.9 percent of the citizens are literate. In 2007 the average life expectancy was 53.4 years. Botswana has high rates of HIV/AIDS infection, the prevalence reached 23.9 percent in 2007, but it also has progressive and comprehensive programs for dealing with the disease. Botswana is a middle-income country with a per capita GDP of \$13,604 in 2007. Botswana ranked on 125<sup>th</sup> place out of 182 countries with medium HDI of 0.694 in 2007 (Human Development Report 2009).

## 5.1.1 Botswana and diamonds

After geologists discovered diamonds in Botswana in 1967, the De Beers Botswana Mining Company was established in 1969. The Orapa Mine and the Jwaneng Mine are the richest diamond mines in the world. The Government of Botswana increased its shares in the company to 50 percent by the time the Letlhakane Mine opened in 1975. The De Beers Botswana Mining Company was renamed to Debswana Diamond Company (Pty) Ltd. The Debswana mines have boosted economic growth in Botswana through direct foreign investments, government revenues from diamonds (30 percent of GDP), taxes, employment and improved infrastructure in remote areas. In 2010, 23.9 million carats of diamonds were produced (Debswana, 2011).

Diamonds have never been used in Botswana to fund conflict. Botswana is a founding member and participant of the Kimberley Process. As a member of the Kimberley Process, customers can rest assured that the diamonds mined in Botswana are from conflict free sources.

## 5.1.2 Botswana case study

Despite initial success, that took place just when the post-colonial era started in African continent during the 1960's and 1970's, in the modern context, Africa is on an economic down slope where poverty and hunger is persistently increasing in many of its countries, with a universally accepted pessimism regarding its future economic prospects (Easterly and Levine's, 1997). Various reports show that the general sub-Saharan countries are turning poorer at a faster rate, than any low-income country worldwide (ibid). The average economic growth rate has been persistently negative from round 1965, with an average 35-times difference in US and the African per-capita income level (ibid). However, amidst this depressing picture of low economic growth one African country has performed better than any other nation in the world, in the span

of the last 35 years, it is Botswana. Botswana "had a PPP-adjusted income per capita of \$5,796 in 1998, almost four times the African average, and between 1965 and 1998, it grew at an annual rate of 7.7 percent" (Acemoglu, Johnson, and Robinson, 2001: 2). In 2002, we find that Botswana "exported some US \$2 billion of diamonds, nickel, copper, gold, and other resources - over 80 percent of its total exports" (Iimi, 2006: 6).

Botswana has one of the highest amounts of natural resources in the world, and we see in the above-mentioned figures that it had been experiencing significant growth in economy and infrastructure for several decades. The presence of diamonds had significantly backed Botswana's strong economic growth, until the late 1990s, after which the average growth rate has fallen slightly owing to recent diversification of economy, where we find Botswana is now not dependant purely on the revenues that it earns from its natural resources, see Figure 3.

25
20
15
10
1980/81 1985/86 1990/91 1995/96 2000/01
Source: Botswana authorities.

Figure 3: Botswana: Growth Contribution by Mining 1980/81–2003/04 (Percentage chase)

Source: Iimi (2006: 3).

It is a general belief that economies that are wholly dependent on natural resources, tend to have a slow economic growth, which is often referred to as the 'resource curse'. Botswana however did not have a favourable start right after its independence, and was considered a poor country with little chances of elevation in their economic conditions. It is here that diamonds have played an important role and currently account for almost 40 percent of the country's natural resource output (Acemoglu, Johnson, and Robinson, 2001). Even though we find that Botswana had in the past experienced strong growth owing to its rich natural resources, however such growth, as predicted by many economists, is not sustainable for a long-term basis (Sachs and Warner, 1995). This is owing to the fact that the mining industry does not offer too many job opportunities. Figures show that in Botswana while the mining sector contributed almost 40 percent to the total national GDP, it created only around 4 percent employment opportunities (Iimi, 2006). The present economic diversification has already started showing a negative impact on the national economic, and it is as Iimi framed it " a specific and intensified capital investment in the primary sector that has restrained Botswana from benefiting from forward and backward linkages and labour market externalities" (2006: 8). Besides this factor, it has been contended by many experts that geographical location where a country is far from the sea, makes it difficult to create strong economy that is based only on the abundant natural resources. Products from the natural resources are generally exported to other countries by the sea route, thus leading to very high shipping charges. A look at the African resource rich countries will show us many of them are landlocked, including Botswana (Sachs and Warner, 1995).

Almost all experts universally acknowledge the fact that Botswana achieved this unprecedented economic growth and development by adopting effective management policies, and with a stable basic legal system that functioned reasonably well, shown in Table 3. "State and private predation have been quite limited. Despite the large revenues from diamonds, this has not induced domestic political instability or conflict for control

of this resource. The government sustained the minimal public service structure that it inherited from the British and developed it into a meritocratic, relatively non-corrupt and efficient bureaucracy. The parastatal sector has never been large and to the extent it has existed, it has faced hard budget constraints. Although there was a government marketing board, usually an institution employed by the urban interests to exploit farmers in Botswana the board was not used to extract resources from the rural sector. Moreover, the government invested heavily in infrastructure, education and health. Fiscal policy has been prudent in the extreme and the exchange rate has remained closely tied to fundamentals" (Acemoglu, Johnson, and Robinson, 2001: 2). The institutions of Botswana have always encouraged participation from all segments of the society, with constraints on the political leaders. There is a universal belief that Botswana achieved rapid economic growth owing to the adoption of sound policies. With the "government appear[ing] to have pursued relatively sound economic policies, and there is little evidence of infighting across different tribes or groups for control of the state apparatus. Therefore, in Botswana good economics appears to have been good politics" (ibid: 4).

Table 3: Governance Research Indicator Country Snapshot (GRICS), 2002

	Botswana	Lesotho	Namibia	South Africa	Swaziland	Sub- Saharan Africa	Low- income countries	Middle- income countries	High- income countries
Voice and accountability	0.75	0.53	0.66	0.75	0.28	0.42	0.38	0.57	0.82
Political stability	0.78	0.57	0.69	0.52	0.64	0.45	0.40	0.59	0.82
Government effectiveness	0.66	0.40	0.48	0.59	0.36	0.30	0.27	0.42	0.77
Quality of regulation	0.72	0.44	0.59	0.66	0.50	0.38	0.34	0.51	0.85
Rule of law	0.67	0.48	0.60	0.53	0.34	0.33	0.29	0.47	0.84
Control of corruption	0.62	0.39	0.47	0.51	0.36	0.29	0.25	0.39	0.76

Source: Iimi (2006, 9).

According to the Governance Research Indicator Country Snapshot database we find that Botswana shows comparatively good governance, as per the international, national and regional standards. The GRICS indices indicate six different aspects of governance: voice and accountability, political stability, government effectiveness,

regulatory quality, rule of law, and control of corruption. Here, each index is normalized between zero and one (Iimi, 2006: 9).

Despite this strong economic growth, for past many decades and a stable political condition, Botswana is recently facing some serious social issues that if unattended, may seriously attenuate the achieved development. One major issue that Botswana currently faces is from HIV/Aids. The HDR 2009 a report by the United Nations estimated that the incidence of HIV/Aids in Botswana in 2007 reached 23.9 percent of those aged 15-49 years - the highest rate in the world. The Economist Intelligence Unit estimates that Botswana has the highest death rate from natural causes in the world (Nkala, 2003: 53-54). From these figures, it is evident that the country is facing a large-scale social crisis. The second issue faced by Botswana is the increasing instances of organised crime in the country, and for a country that was seen as the hallmark for all other African nations epitomising strong economy and democracy, corruption and organised crime poses to be major risk. This has been primarily caused by the immigration of people from other countries into Botswana, attracted by its prosperity, and the "influx of people into Botswana has unfortunately exposed the country to the hazards of organised criminal activity, which transcend boundaries" (ibid). It has also been opined that the landlocked position of the country has turned into a haven for the organised criminals that mainly use the country "as a transit point for conveying illicit commodities from sources to markets. [with] South Africa, the largest source and the biggest regional market for a variety of criminal enterprises [as its neighbour], Botswana is naturally vulnerable. Illegal drugs, mostly acquired in the East, are transported to South Africa along routes that sometimes include Botswana, and stolen goods from South Africa destined for countries to the north occasionally pass through Botswana with the aid of local criminal syndicates" (ibid: 54).

Various reports have clearly shown that corruption and criminal activities are fast turning into a major problem for the Botswana government, and if not handled with

urgency the criminal industry would continue to flourish and adverse effects on the economy of the entire region. If the entire region of southern Africa turns into a hub of criminal activities then inevitably it "would lead to erosion and dissipation of investor confidence" (Nkala, 2003: 67). It has been established beyond doubt that organised criminal groups are increasing their hold in Botswana. In July 2001, Interpol emphasised on the necessity to elevate the present information and technological systems in the country for a better-coordinated fight against the organised criminal groups (ibid). Even though the criminal groups in Botswana are not as sophisticated and technologically oriented, as their European or American counterparts, they still pose a grave danger and a strong potential to disrupt the country's socio-economic order.

From a study of the various African nations that are RR and a comparative study of the effectiveness of their governing bodies in using the revenues accrued from the resources being used for economic development, it was derived that abundant natural resources cannot guarantee socio-economic growth (Iimi, 2006). Good governance, strong judiciary, well planned policies with their stringent implementation, and strong law enforcement bodies, determine the level to which a country can effectively use its natural resources towards creating strong socio-economic growth. Thus, "good governance - specifically a strong public voice with accountability, high government effectiveness, good regulation, and powerful anticorruption policies - tends to link natural resources with high economic growth. The last two dimensions of governance are especially important for natural resource management in developing countries" (ibid: 24).

#### 5.2 Sierra Leone

**Map 3:** Map of Sierra Leone

Koidu

Kailahi

LIBERIA

Kenema

GUINEA Sierra Leone is located in western Africa, bordering the North Atlantic Ocean, between Guinea and Liberia. A former British colony Lungi Pepel with population of 5.4 million (Human Development FREETOWN Report 2009), Sierra Leone gained independence in 1961. Between 1991 and 2002, Sierra Leone descended into civil war. Ernest Bai Koroma became the president following elections in September 2007. Source: https://www.cia.gov/library/publi The economic and social infrastructure of Sierra Leone cations/the-worldfactbook/maps/maptemplate\_sl.ht is underdeveloped. Nearly half of the population

survives by subsistence agriculture, although alluvial diamond mining accounts for nearly half of the country's exports and is the most significant source of earnings. In addition to diamonds, the country also has several other natural resources - titanium ore, bauxite, iron ore, gold and chromium.

English is the official language of Sierra Leone but only 38.1 percent of its citizens are literate. In 2007 the average life expectancy was 47.3 years and AIDS/HIV prevalence was 1.7 percent. Sierra Leone is a low-income country with a per capita GDP of \$679 in 2007. Sierra Leone ranked on 180<sup>th</sup> place out of 182 countries with low HDI of 0.365 in 2007 (Human Development Report 2009).

#### 5.2.1 Sierra Leone and diamonds

Diamonds were first discovered in Sierra Leone in 1930. In 1935 the first marketing contract was set up between the Diamond Corporation and the Sierra Leone Selection Trust Ltd. The Government Diamond Office of Sierra Leone opened in 1959 and managed all diamonds produced under the Alluvial Diamond Mining Scheme. A year later, the Diamond Corporation agreed to provide technical assistance to the Sierra Leone Government in the search for mineral deposits. Conflict disrupted the industry when rebels attacked diamond mining operations in Sierra Leone in 1994. In 2000, the United Nations Security Council banned both direct and indirect imports of rough diamonds from Sierra Leone to all member states. Since the end of the civil war, the diamond industry has provided technical assistance and training to Sierra Leone's Ministry of Mines in setting up the Government Diamond Office.

Companies mining diamonds in Sierra Leone include Koidu-Sefadu mines, Diminco Mine, Magna Egoli alluvial mine (aka Zimmi property mine), Koidu Open Pit Mines and African Diamonds plc. (African Diamond Mines, 2011)

During the civil war in Sierra Leone, rebel groups traded diamonds to fund armed conflict (known as conflict/blood diamonds). In response, the UN applied sanctions to ban the rebels' trade in 'blood diamonds'. Today, conflict diamonds are no longer traded in Sierra Leone. Sierra Leone is a participant of the Kimberley Process, a unique joint initiative by government, the diamond industry and non-governmental organizations, to prevent conflict diamonds from entering the legitimate diamond supply chain and provide an assurance that the diamonds mined in Sierra Leone are from conflict free sources.

## 5.2.2. Sierra Leone case study

For the first time in January 1999, Sierra Leone, a small country in the remote west corner of Africa came into the headlines for all the wrong reasons. The news came out that an armed rebel group had attacked the capital city Freetown, and there were "media reports of civilians raped, mutilated, and murdered by rebels who horrified the international community. The rebels' use of child soldiers also came to light: after the January 1999 attack, over 3,000 children were reported missing — abducted by the rebels for brutal induction into their army" (Tamm, 2002: 10). Almost six months later,

in July 1999 the Organization of African Unity (OAU), the UN, and the West African regional security organization ECOWAS managed to arrive at a peace deal between the Sierra Leone government and the rebels, after which the UN peacekeeping force was placed in Sierra Leone in October 1999. In July 2000, the UNSC passed certain stringent sanctions against the mining of diamonds that were taking place under the chief rebel group the Revolutionary United Front (RUF). Later in-depth supervision and detailed reporting on the situation in Sierra Leone showed how the issue of rebel activities that were being financed by the diamond trade came into existence; these researches also showed how the sanctions were easily evaded to carry on with the illegal diamond trade. The diamonds, which formed an important source of foreign currency and revenue for Sierra Leone during the 1970s, failed completely under the management of the National Diamond Mining Corporation (NDMC). By the 1980s, only a small percentage of the diamonds mined was actually exported through the legal channels, and this corrupt management became a source of ire for the local population, prior to the rebellion that started in 1991.

A look at the history shows us that Sierra Leone became free from the UK in 1961, after which the civic populace suffered terribly until 1996, under an abusive and corrupt army leadership. Later in 1996, a member of the civic populace, Ahmed Tejan Kabbah, an ex-UNDP worker, became the President; however he failed to bring in complete state control owing to the consistent attacks by the RUF and other dissident soldiers. Earlier during the late 1980s, a radical group comprising of young men, rebelled under the army authoritarian rule, went to Libya, and received full military training. This group had a former army colonel named Foday Sankoh, and under Sankoh they turned to become the main part of the RUF leadership, and in 1991 rebelled against the Sierra Leone military government. The RUF made their attacks on Sierra Leone from Liberia, a neighbouring country that was then under a RUF sympathiser Charles Taylor. This movement spread through the entire Sierra Leone, where there were seen child soldiers fighting battles against the government. A coup

was staged in 1992 by a group of young soldiers that were disillusioned with the government and the rebel activities and displaced Momoh. Soon the country was placed under confusion and chaos, as both the army and the rebels started plundering. Under pressure for the international community in 1996 Kabbah was elected the President in a democratic election, however proved to be a weak leader and made only slow changes in the country's route to progress and development. Another coup in May 1997 by the soldiers again brought power into the hands of the military that was now known as the Armed Forces Revolutionary Council (AFRC), and counted RUF as its ally. Soon there were violent conflicts within the country with rampant looting that forced the West African regional security organization in 1998 to send in their soldiers and defeat the AFRC and they reinstalled Kabbah, however the RUF and AFRC still posed a serious challenge and threat to the erstwhile government. In 1994, the rebels captured the Sierra Leone's diamond mines, and it was this wealth that financed and sustained the rebel war, and allowed them to buy arms from the Eastern European countries and as well as neighbouring countries, like Liberia, while also helping them to create links with various criminal organizations. On 7<sup>th</sup> July 1999, the RUF and the government of Sierra Leone finally came to peace deals and signed the Lomé Peace Accords, where they agreed to commit themselves to stopping all violent acts and the RUF changed itself into a political party, which led to the creation of the Government of National Unity, under coalition. Here the rebels were given various kinds of "incentives that included full amnesty, legalized control of diamond resources, and senior positions in the government. All of this was achieved despite the rebels' role in a war that between 1991and 1999 claimed over 75,000 lives, caused 500,000 Sierra Leoneans to become refugees, and displaced half the country's 4.5 million people" (Tamm, 2002: 10). The various international human rights groups expressed their deep anguish at such terms and conditions of the peace deal. The Human Rights Watch stated, "The willingness of all international parties to the accord to accept the inclusion of a general amnesty stood in sharp contrast with the standards of justice enforced in other conflicts, such as

Kosovo and East Timor" (cited in Tamm, 2002: 11). In May 2000, we find that the rebels violated the peace deal and took 500 UN Mission peacekeepers in Sierra Leone (UNAMSIL) as hostages and finally the British army had to be called in to diffuse the situation. After this incident the UNSC declared a diamond embargo on Sierra Leone, and under the Security Council Resolution 1306 from 5<sup>th</sup> July 2000, a ban was imposed on all kinds of imports of rough diamonds from Sierra Leone that did not have the certificate of the Government of Sierra Leone. Within the next three months the Belgium's Diamond High Council and the government of Sierra Leone established a system that had a certificate of origin which "involved a numbered confirmation certificate printed on security paper, electronic databases of exports with electronic confirmation at destination, and electronic transmission of digital photographs of the diamond packages being exported" (Tamm, 2002: 11).

However there were many loopholes in the system and soon Liberia's alliance with the RUF was made open in the reports of the Panel of Experts in December 2000 that was examining the sanctions made against the rebels in Sierra Leone. The Panel report noted that "diamonds far in excess of those available in Liberia were imported by Belgium as 'Liberian'. In effect, these 'Liberian' exports served as a cover for the export of RUF diamonds from Sierra Leone (although much of the 'Liberian' production was in the larger illicit category; for example, there are rumours that Russian and Brazilian dealers falsely declared 'Liberian' to disguise their origins in order to evade official contracts)" (Tamm, 2002: 11). This report then led to a series of sanctions against Liberia by the UNSC in May 2001, which included rough diamond export, which finally saw a decline in the Liberian diamonds within the market. Nevertheless, many of the diamond mines in Sierra Leone are still under the RUF control and there are speculations that the rebels may be channeling the diamonds masked through the official Sierra Leonean route or may be taking routes of other neighbouring countries. After the November 2000 ceasefire and "Disarmament, Demobilization, Reintegration" the UNAMSIL presence has been expanded within Sierra Leone, with the exception of the eastern areas that still remain under RUF (Tamm, 2002). The RUF diamond mining operations remain active in the Kono Tongo Field regions, despite the UNAMSIL being present there. It is Tamm who opines, "Ironically, UNAMSIL's presence may have granted the rebels a respite from battle and time to regroup and rearm: they may be stockpiling diamonds in order to build up their weaponry. As a recent report by the International Crisis Group has noted, "this would be consistent with the rebels' track record of using peace agreements tactically to gain strategic advantage" (ibid: 12). Various members of the UN and the peace keeping bodies who have travelled to Sierra Leone and Liberia have reported that RUF was still continuing with their diamond mining. Furthermore, other reports in the Washington Post claimed that the al Qaeda network was also profiting from the RUF diamond sales. As per this report the "diamonds are smuggled through Liberia, where Ibrahim Bah, the RUF's principal diamond dealer, acts as a conduit between senior RUF commanders and the diamond buyers from al Qaeda and Hezbollah" (Washington Post, 2001). Therefore, we find that in Sierra Leone, even though there multiple the peace processes, the link between war, terror activities and diamonds, remains incomplete.

## 5.3 Summary of case studies

The ineffectiveness of national mining laws and policies has created conditions that are exploited by local and international actors in the diamond industry. Therefore, from the above two case studies it stands out clearly that effective management of the natural resources by the government is necessary to curb illegal diamond trade. The governments must make reforms to curb internal corruption and make the diamond processes more transparent while they have to make reforms to make the effective use of the revenues earned from the diamond sales through socio-economic developments. Till date the local residents of Sierra Leone, Angola, and the Democratic Republic of Congo have not earned any benefits from the revenues earned through their countries' rich natural resources. To end a conflict the government must also make measures for arranging an alternate route for livelihood in order to keep the youth from straying into the illegal diamond business, while making sure that the rebels do not get easy access to illegal weapons. As the executive director of Human Rights Watch has written, "For all its flaws, an international certificate scheme for diamonds is a good place to start. But more important is to ensure that abusive forces never get weapons in the first place" (cited in Tamm, 2002: 30).

## 6 Recommendations

- While framing the African resource management policies and legal mechanisms there should be an overall regional based approach with a geographical outlook, in order to deal effectively with the illegal exploitation of the natural resources, like diamonds or oil. The geographical outlook would facilitate to help focus on the cross border exploitation and help to acquire co-operation at the state, national, and international level amongst the different African countries in order to improve the standards of border control (Office of the Special Adviser on Africa, 2006).
- The regional approach in order to stop the illicit exploitation of natural resources
  must focus on developing the current initiatives in this regard, as well as
  bringing in new initiatives in concordance with regional bodies like the African
  Union, the Southern African Development Community (SADC), and the
  Economic Community of West African States (ECOWAS) (ibid).
- There must be a body of experts, which would focus on engaging itself on conducting a comprehensive analysis of the various conflicts arising from the natural resources (diamonds, as per this thesis) management in the African continent (ibid).
- The civil society must be allowed to take part in conducting research work and
  consultancy practices on the effective management and governance of the
  natural resources governance in order to bring the issue of the proper use of the
  revenues earned from the natural resources into the public sphere (ibid).
- There must greater cooperation and information sharing between the Kimberley
  Process and the Extractive Industries Transparency Initiative (EITI), which
  would help to focus on and tackle the exploitation of natural resources, taking
  place both legally and illegally (ibid).
- To constructively commission the nations that fail to adhere to the existing policies and regulations, instead of threatening them with expulsion or even

- suspending from the signed agreements (Office of the Special Adviser on Africa, 2006).
- The management and governance of the natural resources, in order to bring in accountability, transparency, and the appropriate use of proceedings from the natural resource exploitation, must be nationalised largely (ibid).
- The countries, of which the MNCs operating in the natural resources belong, must be kept involved in the African natural resource sector, so that the corporations can be held accountable for their global level business ethics in Africa, as in their home countries (ibid).
- There must be a program and package for Special Assistance directed towards the nations that are newly coming out from the violent conflict and war (ibid).
- There must be special initiatives and financing to advocate, train, and assist in the proper development of the management of natural resources in countries newly emerging from violent conflicts, as well as the countries that are at present facing issues of illegal resource exploitation (ibid).
- Efforts must be directed at improving the standards of management and governance as regards natural resource control, while also focusing on the improvement of other national conditions, like abolishing all forms of human rights abuse, taking care of the minority rights, and dealing issues of unemployment factors that tend to drive the young population towards taking part in the pilfering of natural resources (ibid).
- Placement of natural resource management technical experts within the peace missions, aimed at stopping the resource based conflicts and wars in Africa (ibid).
- A joint body of the 'UN-AU natural resource governance unit' can be formed
  which can take part in various theoretical and policy-based researches on matters
  associated with effective management and governance of the natural resources in
  Africa (ibid).

## 7 Conclusion

A closer look at all the above-mentioned anti-blood diamond trade measures when taken separately will show that they are not adequate enough to sufficiently solve or remove all issues related to conflict diamonds. However, if these measures are appropriately combined and well integrated into a framework that is supported by diamond trading community, the governments, and the global community then they can work effectively in curbing the issue. Since 'blood diamonds' are associated with violence and conflicts, there must be persistent efforts towards peace keeping that must be necessarily complemented with military interventions along with nation building in the form of social and economic development. Nation building translates into better governance, with improved public services and facilities, greater opportunities for employment, poverty alleviation, and an overall strong economic growth. However, for a sustained socio-economic growth there must be a condition where the country gets to enjoy a long-term period of peace and security, thus, showing us that solving the problem of 'blood diamonds' is a multidimensional issue, and just curbing the trade in diamonds is not enough. There must an overall phase of growth and development in the African socio-economic scenario with greater choice in employment in order to deflect the young population away from the attraction of the lucrative financial returns that the illegal diamond trade offers.

Amalgamating the socio-economic factors into the process of peace-making, as regards curbing the violence associated with the conflict diamond trade, holds the chief key in creating more suitable conditions for longer period of sustainable peace and helps in breaking the so called 'conflict trap' comprising of ineffective state governance, widespread poverty, and violence. However, in this context it is difficult to seek exact answers to the questions as how, when, and by whom, should the measures be addressed and the various activities latent to the economies of war be best commingled into the

peace efforts. Bringing directly into the negotiation talks, the issue of appropriate resource uses, as one discusses the matter of power sharing with the rebels, the terrorists, or any other detractors that form part of the illegal diamond trade, may help in bringing long-term peace in some cases. In other cases, however, the idea of decreasing the detractor's reach towards the resource wealth that had been made available by the conflict or war may attenuate the efforts towards working out a peaceful solution, thus often leading to mediators removing the economic clauses from the negotiation talks. Nevertheless, this exclusion does not help in achieving a long-term solution, since records show that even after the combatants are rewarded, the conflicts continue to remain. Thus, it makes it imperative for the policy makers, that even though there are challenges in including the socio-economic aspects within peace talks, it is also essential to stop the functioning of the war economies, or else the future chances for having long-term sustained peace within the country, remain quite remote.

It is quite evident that the challenges associated with overcoming the barriers in improving the sub-Saharan African socio-economic scenario are quite large. Nonetheless, the African national leaders in order to release the continent from years of weak economic growth, poverty, political and ethnic conflicts must integrate the existent measures and find out new ones to make appropriate use of the large natural resources that abound in the continent. This is achievable only through a change in the present perspective, modifications in the policies and legal provisions for fighting against the illegal trade and exploitation of the resource yields. The government must make provisions to oversee the proper social use of the revenue proceedings that come from the resources, and there must be the necessary political determination to allow the transparent and accountable function of the government, with the chief objective of transforming the landscape that at present, is dotted with poor economic growth and extreme poverty.

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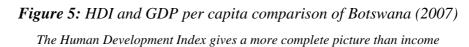
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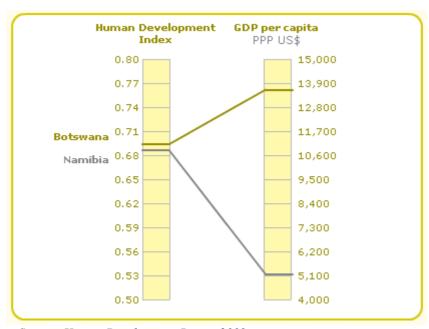
## 9 Annexes

HDI 1.0 OECD 0.9 CEE and CIS Latin America and Caribbean 0.8 Botswana East Asia and Pacific Arab States 0.7 South Asia 0.6 0.5 Sub-Saharan Africa 0.4 0.3 0.2 1980 1985 1990 1995 2000 2005

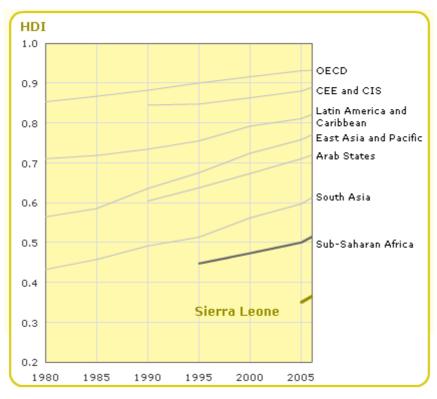
*Figure 4: Botswana HDI trends* (1980 – 2005)

Source: Human Development Report 2009





Source: Human Development Report 2009

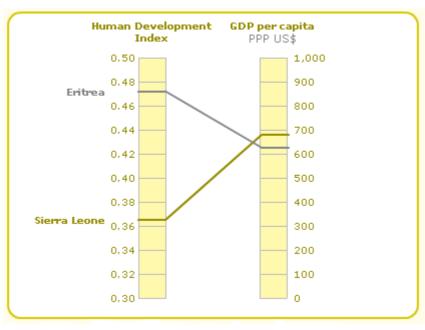


*Figure 6: Sierra Leone HDI trends* (1980 – 2005)

Source: Human Development Report 2009

Figure 7: HDI and GDP per capita comparison of Sierra Leone (2007)

The Human Development Index gives a more complete picture than income



Source: Human Development Report 2009

Table 4: Botswana's Human Development Index (2007)

Botswana´s Human Development Index 2007					
HDI value 2007	Life expectancy at birth (years) 2007	Adult literacy rate (% ages 15 and above) 2007	Combined gross enrolment ration (%) 2007	GDP per capita (PPP US\$) 2007	
1. Norway (0.971)	1. Japan (82.7)	1. Georgia (100.0)	1. Australia (114.2)	1. Liechtenstein (85,382)	
125. Botswana (0.694)	154. Botswana (53.4)	93. Botswana (82.9)	107. Botswana (70.6)	60. Botswana (13,604)	
182. Niger (0,340)	176. Afghanistan (43.6)	151. Mali (26.2)	177. Djibouti (25.5)	181. Congo (Democratic Republic of the) (298)	

Source: Human Development Report 2009

 Table 5: Selected indicators of human poverty for Botswana (2007)

Selected indiators of hum	an poverty for Botswana			
Human Poverty Index (HPI-1) 2007	Probability of not surviving to age 40 (%) 2007	Adult illiteracy rate (% ages 15 and above) 2007	People not using an improved water source (%) 2007	Children underweight for age (% aged under 5) 2007
1. Czech Republic (1.5)	1. Hong Kong, China (SAR) (1.4)	1. Georgia (0.0)	1. Barbados (0)	1. Croatia (1)
81. Botswana (22.9)	134. Botswana (31.2)	93. Botswana (17.1)	<b>42.</b> Botswana (4)	<b>70.</b> Botswana (13)
135. Afghanistan (59.8)	153. Lesotho (47.4)	151. Mali (73.8)	150. Afghanistan (78)	138. Bangladesh (48)

Source: Human Development Report 2009

Table 6: Sierra Leone's Human Development Index (2007)

Sierra Leone's Human Development Index 2007						
HDI value 2007	Life expectancy at birth (years) 2007	Adult literacy rate (% ages 15 and above) 2007	Combined gross enrolment ration (%)	GDP per capita (PPP US\$) 2007		
1. Norway (0.971)	1. Japan (82.7)	1. Georgia (100.0)	1. Australia (114.2)	1. Liechtenstein (85,382)		
180. Sierra Leone (0.365)	170. Sierra Leone (47.3)	144. Sierra Leone (38.1)	165. Sierra Leone (44.6)	175. Sierra Leone (679)		
182. Niger (0,340)	176. Afghanistan (43.6)	151. Mali (26.2)	177. Djibouti (25.5)	181. Congo (Democratic Republic of the) (298)		

Source: Human Development Report 2009

 Table 7: Selected indicators of human poverty for Sierra Leone (2007)

Selected indiators of human poverty for Sierra Leone						
Human Poverty Index	Probability of not	Adult illiteracy rate	People not using an	Children underweight for		
(HPI-1)	surviving to age 40	(% ages 15 and above)	improved water source	age		
2007	(%)	2007	(%)	(% aged under 5)		
	2007		2007	2007		
1. Czech Republic (1.5)	1. Hong Kong, China (SAR) (1.4)	1. Georgia (0.0)	1. Barbados (0)	1. Croatia (1)		
128. Sierra Leone (47.7)	133. Sierra Leone (31.0)	144. Sierra Leone (61.9)	138. Sierra Leone (47)	114. Sierra Leone (30)		
135. Afghanistan (59.8)	153. Lesotho (47.4)	151. Mali (73.8)	150. Afghanistan (78)	138. Bangladesh (48)		

Source: Human Development Report 2009

Table 8: Botswana – HDR 2009

Part	Human Development Report 2009				
Total population (millions), 2007   1.9   Total population (millions), 2007   2.2   Than share of the population (%), 2010   41.9   Than share of the population (%), 2010   1.3   Total population (Pol.), 2010   1.3   Total population (Pol.), 2010   1.3   Total certifity rate of natural increase of the population (%), 2005-2010   1.3   Total Certifity rate of population (Pol.), 2017   2.9   Total Certifity roll (Pol.)   2.9   Total Certifity roll (Pol.)   2.9   Total CERTIFICATION (Pol.)   2.9   Tota	BOTSWANA				
1.9     Total population (millions), 2007   2.2     Lichan share of the population (%), 1990   41.9     Lichan share of the population (%), 2010   61.1     Annual rate of natural increase of the population (%), 2005-2010   1.3     Total Carolity rate (trints per woman), 2005-2010   2.9     S. Ecenomy and inequality   2.9     S. Ecenomy and inequality   2.9     Total CDP USS billions), 2007   2.5     S. Ecenomy and inequality   2.9     Total CDP USS billions), 2007   2.5     S. Ecenomy and inequality   2.9     Total CDP USS billions), 2007   2.5     S. Ecenomy and inequality   2.9     Control CDP USS billions), 2007   2.5     S. Ecenomy and inequality   2.9     Control CDP USS billions), 2007   3.3     S. Ecenomy and inequality   2.9     Control CDP USS billions), 2007   3.3     S. Ecenomy and inequality   3.9     Control CDP USS billions), 2007   3.3     S. Ecenomy and inequality   3.9     Control CDP USS billions), 2007   3.9     Control CDP USS billions   3.9     Control CDP USS billions   3.9     Control Contr	HDI Rank - 125 (out of 182 countries)				
Feat   Population (millions), 2020   41.9	A. Demographic trends				
Lithan share of the population (%), 2090         61.1           Lithan share of the population (%), 2010         61.1           Annual rate of natural increase of the population (%), 2005-2010         1.3           Fotal Certility rate (births per woman), 2005-2010         2.9           S. Economy and inequality         12.3           Fotal GDP (USS billions), 2007         25.6           EDP per capita (USS), 2007         4.3           Annual growth rate of GDP per capita (%), 1990-2007         4.3           Simi index, 1992-2007         4.3           Sovernment expenditure on health per capita (PPP USS), 2006         487           Sovernment expenditure on health as a percentage of total government expenditure, 2006         17.8           Public current expenditure on primary education per pupil (PPP USS)         1.158           Public current expenditure on primary education per pupil (PPP USS)         1.158           Public current expenditure on primary education per pupil (PPP USS)         1.158           Public current expenditure on primary education as a percentage of total government expenditure, 2000-2007         7.2           Fearly life expectancy at birth (years), 2007         48           Do International Immedia How: reminance of total government expenditure, 2000-2007         7.2           Teamly Immedia (PPP USS), 2007         5.6           Eliminal deve					
Jehan Jake of the population (%), 2010         1.3           Annual ration facinease of the population (%), 2005-2010         2.9           Deal fertility rate (births per woman), 2005-2010         2.9           Descenoin and incepatify         12.3           Total GDP (USS billions), 2007         6.34           Total GDP (PPP USS billions), 2007         6.10           1.30 pper capita (USS), 2007         6.10           James (PP) (USS), 2007         4.3           Jovernment expenditure on health per capita (PPP USS), 2006         487           Jovernment expenditure on health per capita (PPP USS), 2006         17.8           Public current expenditure on education as a percentage of total government expenditure, 2000-2007         2.10           Percentage of total aid allocated to social sectors (gross disbursements), 2007         2.2           Jealty life expectancy at birth (years), 2007         2.0           Journal and Journal of Contract (Contract)         1.0           Journal and Journal of Contract, 2007         1.0           Committance inflows (USS millions), 2007         1.0           Di Jacci (SS), 2007					
Amular for on antural increases of the population (%), 2005-2010 2, 9 B. B. Commy and Inequality Foral GDP (USS billions), 2007 2, 6, 100 Commy and Inequality Foral GDP (USS billions), 2007 3, 100 Control GDP (PP USS billions), 2007 3, 100 Control GDP (PP USS billions), 2007 4, 3 100 DP per capita (USS), 2007 4, 3 100 DP per capita (USS), 2007 4, 3 100 Index, 1992-2007 4, 3 100 Index, 1992-2007 4, 8 100 Control GDP (PP USS billions), 2007 100 Comment expenditure on health per capita (PPP USS), 2006 100 Covernment expenditure on health per capita (PPP USS), 2006 100 Covernment expenditure on health as a percentage of total government expenditure, 2006 17, 8 18					
Food Fertility rate (births per woman), 2005-2010   3.9					
1.2.3   Formal GPP (USS billions), 2007   1.2.3   5.2.6   5.		2.7			
Carl GDP (PPP USS billions), 2007	Total GDP (US\$ billions), 2007	12.3			
Amual growth rate of GDP per capita (%), 1990-2007         4,3           Jimi index, 1992-2007         81           C. Health and education         87           Covernment expenditure on health per capita (PPP USS), 2006         17.8           Public current expenditure on braith as a percentage of total government expenditure, 2000-2007         12.0           Pablic current expenditure on primary education per pupil (PPP USS)         1,158           Public current expenditure on primary education as a percentage of total government expenditure, 2000-2007         12.0           Percentage of total aid allocated to social sectors (gross disbursements), 2007         12.0           Percentage of total aid allocated to social sectors (gross disbursements), 2007         12.0           D. International financial flows: remittances, 000         12.0           D. International financial flows: remittances, 000         12.0           D. Application of the property of the prope	Total GDP (PPP US\$ billions), 2007				
Simi index, 1992-2007   3487   361.0	GDP per capita (US\$), 2007	6,544			
C. Health and education	Annual growth rate of GDP per capita (%), 1990-2007	4,3			
Secons   1978	Gini index, 1992-2007	61.0			
17.8	C. Health and education				
Public current expenditure on primary education per pupil (PPP USS)   1.158					
Public current expenditure on education as a percentage of total government expenditure, 2000-2007 72.2 Percentage of total aid allocated to social sectors (gross disbursements), 2007 72.2 Percentage of total aid allocated to social sectors (gross disbursements), 2007 72.2 Percentage of total aid allocated to social sectors (gross disbursements), 2007 72.2 Percentage of total aid allocated to social sectors (gross disbursements), 2007 72.2 Percentage of the sector of the se					
Percentage of total aid allocated to social sectors (gross disbursements), 2007         48           48         48           Penelty life expectancy at birth (years), 2007         141           Remnittance inflows (USS millions), 2007         120           DDA per capita (USS), 2007         56           E. Human development index trends.         0.539           Human development index trends.         0.673           Human development index trends, 2005         0.673           Human development index trends, 2007         0.694           Revised HDI rank, 2006         126           F. Human development index 2007 and its components         126           E. Human development index 2007         0.694           Aluman development index 2007         0.694           Child itieracy rate (% aged 15 and above), 2007         0.694           Combined gross enrolment ratio in education (%), 2007         70, 6°           Combined gross enrolment ratio in education (%), 2007         22           Deprecapita (USS), 2007         22           Human poverty index (HPI-1) rank, 2007         22           Human poverty index (HPI-1) value (%), 2007         22           Probability at birth of not surviving to age 40 (% of cohort), 2005-2010         31, 2           Population inving below \$1, 25 a day (%), 2000-2007		*			
Healty life expectancy at birth (years), 2007   141					
D. International financial flows: remittances, ODA and FDI   141					
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orien in ministerial positions (% of positions), 2006	Population not using an improved water source (%), 2006 Children underweight for age (% under age 5), 2000-2006 Population living below \$1.25 a day (%), 2000-2007 Population living below \$2 a day (%), 2000-2007  H. Gender-related development index and its components GDI rank, 2007 GDI value, 2007 Female life expectancy at birth (years), 2007 Male life expectancy at birth (years), 2007 Female adult literacy rate (% aged 15 and above), 1997-2007 Male adult literacy rate (% aged 15 and above), 1997-2007 Female combined gross enrolment ratio (%), 2007 Male combined gross enrolment ratio (%), 2007 Male estimated earned income (PPP US\$), 2007 Male estimated earned income (PPP US\$), 2007 M. Gender empowerment measure and its components Gender empowerment measure (GEM) value, 2006 Seats in parliament (% held by women), 2008	31.2 <sup>5</sup> 49.4 <sup>5</sup> 105 0.689 53.3 53.2 82.9 82.8 71.3 <sup>6.7</sup> 70.0 <sup>6.7</sup> 9,961 <sup>8</sup> 17,307 <sup>8</sup> 65 0.550 11 <sup>9</sup> 0.58			

### Notes:

- 1 UNESCO Institute for Statistics estimates based on its Global Age-specific Literacy Projections model, April 2009.
- 2 Data refer to a year other than that specified.
- 3 UNESCO Institute for Statistics estimate.
- $4-UNESCO\ Institute\ for\ Statistics\ estimates\ based\ on\ its\ Global\ Age-specific\ Literacy\ Projections\ model,\ April\ 2009.$
- ${\bf 5}$  Data refer to an earlier year outside the range of years specified.
- 6 Data refer to an earlier year than that specified.
- 7 UNESCO Institute for Statistics estimate.
- 8 No wage data are available. For the purpore of calculating the estimated female and male earned income, a value of 0.75 was used for the ratio of the female nonagricultural wage to the male nonagricultural wage.
- 9 Countries with established quata systems for women. Quota systems aim at ensuring that women constitute at least a 'critical minority' of 30 or 40 percent. Today women constitute 16 persent of the members of parliaments around the world.

Table 9: Sierra Leone - HDR 2009

Human Development Report 2009 SIERRA LEONE	
HDI Rank - 180 (out of 182 countries)	
A. Demographic trends	
Total population (millions), 2007	5.4
Total population (millions), 2020	7.3
Urban share of the population (%), 1990	32.9
Urban share of the population (%), 2010	38.4
Annual rate of natural increase of the population (%), 2005-2010	2.4
Total fertility rate (births per woman), 2005-2010	5.2
B. Economy and inequality	
Total GDP (US\$ billions), 2007	1.7
Total GDP (PPP US\$ billions), 2007	4.0
GDP per capita (US\$), 2007	284 - 0.3
Annual growth rate of GDP per capita (%), 1990-2007 Gini index, 1992-2007	42.5
C. Health and education	42.3
Government expenditure on health per capita (PPP US\$), 2006	20
Government expenditure on health as a percentage of total govenrment expenditure, 2006	7.8
Public current expenditure on primary education per pupil (PPP US\$)	
Public current expenditure on education as a percentage of total government expenditure, 2000-2007	
Percentage of total aid allocated to social sectors (gross disbursements), 2007	28.7
Healty life expectancy at birth (years), 2007	37
D. International financial flows: remittances, ODA and FDI	
Remmittance inflows (US\$ millions), 2007	148
Remmittance outflows (US\$ millions), 2007	136
ODA per capita (US\$), 2007	91
E. Human development index trends	
Human development index trends, 1980 Human development index trends, 2005	0.350
Human development index trends, 2007	0.365
Revised HDI rank, 2006	180
F. Human development index 2007 and its components	100
Human development index value, 2007	0.365
Life expectancy at birth (years)	47.3
Adult literacy rate (% aged 15 and above), 2007	38.1 1
Combined gross enrolment ratio in education (%), 2007	44.6 <sup>2</sup>
GDP per capita (US\$), 2007	679
G. Human and income poverty	
Human poverty index (HPI-1) rank, 2007	128
Human Poverty Index (HPI-1) value (%), 2007	47.7
Probability at birth of not surviving to age 40 (% of cohort), 2005-2010	31.0
Adult illiteracy rate (% aged 15 and above), 1999-2007	61.9 <sup>3</sup>
Population not using an improved water source (%), 2006	47
Children underweight for age (% under age 5), 2000-2006	30
Population living below \$1.25 a day (%), 2000-2007	53.4
Population living below \$2 a day (%), 2000-2007	76.1
H. Gender-related development index and its components	152
GDI rank, 2007	152
GDI value, 2007 Female life expectancy at birth (years), 2007	0.354 48.5
Male life expectancy at birth (years), 2007	46.0
Female adult literacy rate (% aged 15 and above), 1997-2007	26.8
Male adult literacy rate (% aged 15 and above), 1997-2007	50.0
Female combined gross enrolment ratio (%), 2007	37.6 <sup>4,5</sup>
Male combined gross enrolment ratio (%), 2007	51.7 <sup>4,5</sup>
Female estimated earned income (PPP US\$), 2007	577 <sup>6</sup>
Male estimated earned income (PPP US\$), 2007	783 <sup>6</sup>
I. Gender empowerment measure and its components	, 03
Gender empowerment measure (GEM) rank, 2007	
Gender empowerment measure (GEM) value, 2006	••••
Seats in parliament (% held by women), 2008	13 7
Earned income (estimated), ratio of female to male, 2007	0.74
Year woman received the right to vote	1961

## Notes:

- .... Data not available
- $1-UNESCO\ Institute\ for\ Statistics\ estimates\ based\ on\ its\ Global\ Age-specific\ Literacy\ Projections\ model,\ April\ 2009.$
- $\boldsymbol{2}$  Data refer to a year other than that specified.
- 3 UNESCO Institute for Statistics estimates based on its Global Age-specific Literacy Projections model, April 2009.
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- 7 Countries with established quata systems for women. Quota systems aim at ensuring that women constitute at least a 'critical minority' of 30 or 40 percent. Today women constitute 16 persent of the members of parliaments around the world.