

The Reality of Petroleum Resource Curse in South Sudan: Can this be avoided?

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Abstract

South Sudan is endowed with enormous petroleum resource (oil and gas) situated in Greater Bahr el Ghazal and Upper Nile Regions. Exploration Production Sharing Agreements (EPSAs) were signed between the Government of the Republic of South Sudan and the foreign contractors in July 2011, immediately after South Sudan attained her independence from the Sudan. Yet, with enormous oil and gas production, South Sudan has not realized any level of development and stability. Besides, oil companies have failed to adhere to the Petroleum Act 2012, Petroleum Revenue Management Act 2013 and Environmental Protection Regulations, leading to environmental degradation of oil-producing states. The paper used field interviews and secondary sources in tapping reality of petroleum resource curse in South Sudan. It combines case study, constructivist and process tracing methods to contextualize and validate causal chains and empirical casual processes. The key finding is that petroleum resource curse is manifested in the nascent State by the levels of poverty in the country, environmental degradation in the oil producing areas, deep-seated corruption by political and military elites and the protracted political conflicts tweaked on the availability of the petroleum resource revenues. Avoiding petroleum resource curse would require stricken adherence to Petroleum Act 2012 and Petroleum Revenue Management Act 2013.

Introduction

Petroleum¹ resource is as old as the creation. The first discovery was in Northwestern Pennsylvania before 1400 AD. Although no written accounts is available, it was well known that initial European explorers in the area found long, narrow troughs that had been dug along Oil Creek. Early use of this crude oil resource reveals interesting contrasts between Native American and European cultures. Sir Walter Raleigh is attributed to have been the first

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person to mention petroleum in the U.S. history in 1595. With Western discovery of the petroleum resource, the whole world, particularly, Middle East and North Africa discovered enormous quantities of crude oil. Petroleum is the world's largest industry. In 1999, \$2.3 trillion worth of oil and gas was pumped out of the ground; petroleum and its by-products made up of 14.2 percent of the world's commodity trade (Ignatius, 2000: 2). The global demand for petroleum will almost certainly continue to grow in the coming decades, despite overwhelming evidence that burning fossil fuels is destabilizing the planet's climate (Ross, 2009: 3). To meet this demand, petroleum production is spreading to the poorest countries. In 2015, the average globe crude production stood at 80.57 millions barrels per day² that bring enormous revenues to the world. However, Michael Ross provides distinctive qualities of petroleum revenues as being extremely large (scale), source, instable and secret (Ross, 2001: 5). Petroleum revenues are extremely large in scale, they tend to come as revenues from state-owned enterprises as opposed to taxes (source), they fluctuate a great deal as oil prices go up and down (instability) and they tend to be opaque so that citizens do not know how large they are (secrecy) (Morrison, 2013: 5).

Being part of northern Africa, Sudan first discovered the crude oil in Southern regions in 1979 (Grawert and Adra, 2012: 7). Thartjath in Bentiu and Melut in Upper Nile regions became the areas of discovery in Southern Sudan. Although the boom was palatable, it was not explored and produced given the civil wars in the Southern parts of the country. After the Comprehensive Peace Agreement of 2005 that shared power and resources with the Northern Sudanese Government, the exploration and production were activated that resulted to 350,000 crude barrels per day. With the secession and independence of South Sudan on 9th July 2011, 75% of the petroleum resource was carved to South Sudan territory leaving the North Sudan with 25% crude production. Given lack of capacity to explore and produce petroleum resource, like Sudan, South Sudan immediately after the independence contracted the old Asian operating companies that were exploring and producing oil in the greater Sudan. Greater Pioneer Operating Company (GPOC) was awarded a concession for 10 years to explore and produce crude oil in blocks 1,2, and 4 in Tharjath in Bentiu while Sudd Petroleum Operating Company (SPOC) was awarded 10 years to explore and produce crude oil in block 5A in Tharjath and Dar Petroleum Operating Company (DPOC) was given 10 years concessions in blocks 3 and 7 in Polioch in Melut County to explore and produce crude on behalf of the Government of Republic of South Sudan. While all these Asian based

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companies were allocated nominal shares in Exploration Production Sharing Agreements (EPSAs), South Sudanese national oil and gas company Nile Petroleum Corporation (Nilepet) was awarded shares to represent Government of South Sudan in commercial interest in oil and gas sector of South Sudan. The Ministry of Petroleum and Mining remains as the sole overall supervisor and policy coordinator in the oil and gas sector in South Sudan. With all these arrangements in place with EPSAs, South Sudan was producing 230,000 b/d. However, the 15th December 2013 political crisis seriously affected the Greater Upper Nile region where active explorations and productions are taking place, making the crude production stand at average of 122,000 b/d³.

Thus, from 2006-2014, South Sudan earned revenues of over 19.5 billions USD from petroleum resource (Sabuni, 2015). Yet, the country has not realized any meaningful development and alleviation of object poverty in the lives of her citizens. To be sure, there are roughly in average 200 km tarmacked roads in South Sudan, a country size of Kenya, Uganda and Tanzania put together. Environmental degradation in oil-produced areas has killed people from known and un-known diseases. Corruption has thrived with over 4 billions dollars stashed away by political and military elites of the country which the President Kiir publicly admitted and termed it as cancer. The economy is intensive care with South Sudanese Pound (SSP) weakening drastically against the United States dollar, causing hyperinflation and low peoples purchasing power. Conflicts, violence, rent seeking rebellions and insurgencies have tormented the country in all fronts resulting from 15th December 2013 political ignominy that turned the Dinka ethnic group against the Nuer. This begs questions. Why this bleak future with abundance petroleum resource that is supposed to spur development and stability? Could it not that the boom from this resource was supposed to be a success than a liability? Why a country rich in this petroleum resource turns out as curse turmoil than a blessing? Why is this the case?

Although numerous scholars have attempted to study petroleum resource predicament in relations to democracy, environment, female employment and conflicts, none of the political economy scholars has comprehensively studied a link between petroleum resource and poverty, environmental degradation, corruption and conflicts. Inspired by this pedagogy deficit, the paper shall fill this gap of knowledge. This paper shall argue that the petroleum resource in South Sudan is a curse rather than a blessing to the nascent country and people of South Sudan.

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In arguing the details of the reality of petroleum resource in South Sudan: the paper is organized as follows: Section one looks at the theory of petroleum resource curse focusing on oil and gas; Section two then argues poverty as an element of petroleum curse in South Sudan; Section three critically looks at environmental degradation in the nascent State resulting from the activities of petroleum operating countries; Section four tackles thriving corruption as recipe of petroleum resource curse; Section five argues conflicts and violence as emanating from petroleum curse of South Sudan; Section six provides solutions to petroleum curse and finally Section seven summarizes the key arguments and make critical conclusions to leap frog South Sudan from petroleum resource curse numbness.

Theorizing Petroleum Resource Curse

There has been no any scholarly consensus on the origin of petroleum resource curse. Political Scientists who study resource curse draw more approximately on the work of Middle East Scholars who, beginning in the 1970s, revived the concept of rentier state to explain peculiar qualities of the regions oil producing governments (Ross, 2013: 3). Hussein Mahdavy is widely credited with giving the rentier-state term its contemporary meaning: a state that receives substantial rents from foreign individuals concerns, or governments (Mahdavy, 1970: 428). Hazem Beblawi developed a more precised definition, suggesting that a rentier state was one where the rents are paid by foreign actors, where they accrue directly to the state, and where only a few are engaged in the generation of this rent (wealth), the majority being only involved in the distribution or utilization of it (Beblawi, 1987: 50).

David Ricardo also joins the bulwarks of originators of resource curse through his development of modern concept of economic rents. He saw few social and economic benefits from mining silver or gold (Ross: 2013: 3). On his seminal ground breaking work, *Principles of Political Economy and Taxation*, Ricardo notes that Spain and Portugal were Europe greatest producers of gold and silver, yet this did not help so far in economic boom of the two countries. He emphasizes:

This increase of the quantity of those metals, however, has not, it seems, increased that annual produce; has neither improved the manufactures and agriculture of the country, nor mended the circumstances of its inhabitants. Spain and Portugal, the countries which posses the mines are

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after Poland, perhaps, the two most beggarly countries in Europe (Ricardo, 1991:10).

David Ricardo, Hussein Mahdavy and Hazem Beblawi accounts culminate into single argument that governments funded through external rents tend to be less democratic and tolerant because they require less tax from the citizens making them to be less accountable and corrupt. This is a crystal clear trend in petroleum producing countries of the developing world where governments have consolidated grip of power, resources and turned repressive to the citizens. The outcome has been social, economic and political unrest and violence leading to deaths and economic meltdown.

During the 1980s through 1990s, the rentier state argument got gradually refined by scholars studying Libya (First, 1980; Vandewalle, 1998), Iran (Skocpol, 1982; Shambayai, 1994), Tunisia (Bellin, 1994), Saudi Arabia and Arab Gulf states (Crystal, 1990; Gause III, 1994; Chaudhry, 1997), the Congo Republic (Clark, 1997), Gabon (Yates, 1996), Indonesia (Tornquist, 1990) and other resource-wealthiest countries. For political economists, much of the resource curse debate commenced with Sachs and Warner working paper of 1995 that founded a negative correlation between a country dependence on natural resource exports in 1970 and its economic growth between 1971 and 1989 (Sachs and Warner, 1995).

Moreover, several studies report that too much natural resource wealth is harmful for developing countries⁴. This is because the developing world view natural resource as a gift from supernatural person, which they can abuse and misused hence creating precarious underdeveloped conditions. Thus, resource curse can be defined as the perverse effects of a country's natural resource on its economic, social or political well being (Ross, 2013: 1). The earliest published reference to the term *resource curse* appears in Richard Auty's seminal piece *Sustaining Development in the Mineral Economies: The Resource Curse Thesis* in 1993 (Auty, 1993: 6). The notion that natural resource wealth can have perverse consequences, however, has a long and distinguished intellectual history (Ross, 2013: 3). Early modern philosophers like Machiavelli, Bodin and Montesquieu argued when countries had favorable resource endowments, their citizens became myopic and slothful (Ibid). Adam Smiths in his highly celebrated work *The Wealth of Nations* stressed the dangers of pursuing mineral wealth, warning:

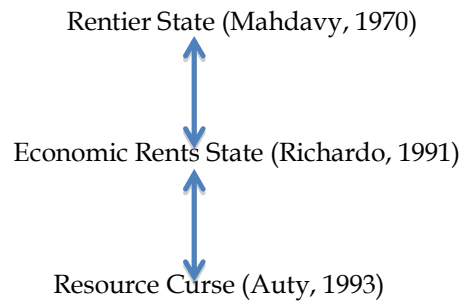
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Of all those expensive and uncertain projects, however, which bring bankruptcy upon the greater part of the people who engage in them, there is none perhaps more ruinous than the search after new silver and gold mines. They are the projects, therefore, to which of all others a prudent law giver, who desired to increase the capital of his nation would least choose to give any extraordinary encouragement (Smith, 1776 (1991, volume IV, chapter 7, section 18).

Although Auty's describes resource curse as a perverse effect of country's natural resource on its economic, social and political well being, Terry Karl is more specific and defines it as a negative growth and development outcomes associated with minerals and petroleum- led development (Karl, 2007: 1). In its narrowest sense, it is the inverse relationship between high levels of natural resource dependence and growth rates (Ibid).

With all theoretical underpinnings of natural and peculiar petroleum resource curse advanced by various political and petroleum economists scholars, Richard Auty's theoretical foundation guides the petroleum resource curse of South Sudan that shall be demonstrated through poverty, environmental degradation, corruption and conflicts.

Framing Resource Curse Theory



Petroleum Revenue and Poverty in South Sudan

Paradoxically, in what seems to be the midst of plenty, a high percentage of people living in oil-exporting countries tend to remain poor or suffer from dramatic shifts in their welfare that ultimately leave them in poverty (Karl,

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2007: 8). Thus, despite significant rises in per capita income, over the past several decades, all oil-dependent countries have seen the living standards of their populations' drop-and sometimes drop very dramatically (Ibid). In Saudi Arabia, for example, where proven reserves are the greatest in the world, real per capita income (measured in constant dollars) has plunged from \$6,800 in 2001 to \$ 4,500 in 2015 (Ibid). The fall of oil prices have deepened the poverty levels in the globe. Governments and oil producing companies tend to collude and neglect developing the oil producing regions and areas. This is often elucidated on the misappropriation of the regions entitlements contrary to stipulations in petroleum related laws.

But oil dependence is associated with more than sudden shifts in levels of poverty and exceptionally low living standards for much of the population in petro-states (Karl, 2007: 9). It is also linked to unusually high rates of child mortality, child malnutrition, low life expectancy, poor health care, and reduce expenditures on education. In countries dependent on oil and/or minerals, both infant mortality and life expectancy at birth is worse than in non-oil and mineral countries at the same income levels (ibid). Simply put, when taken as a group, the more countries are dependent on oil, children born in these countries will be less likely to live, will have poorer health care, nutrition and education than their resource poor counterparts.

Given the available resources, education also performs worse than expected, affecting future prospects for growth. Countries that are dependent on natural resources, inadvertently or deliberately, neglect the development of their human resources by devoting inadequate attention and expenditure to education (Karl, 2007: 10). Thus school enrolments tend to be lower than in their non-resource rich counterparts. In the Organization of Petroleum Exporting Countries (OPEC), for example, 57 percent of all children go to secondary school compared 64 percent for the world as a whole; OPEC spends less than 4 percent of the GNP on education compared with almost 5 percent for the world as a whole (Karl, 2007: 11).

With over 19.5 billions USD revenues from the crude production of South Sudan from 2006-2014⁵, South Sudanese have remained the poorest on the planet earth with scaring indicators. The human development indicator, at 0.467⁶is among the lowest in the world while access to basic social services remains a key challenge across the country. The total population, which was 8.26 million in 2008,⁷ is very young with 51.9% men and 48.1% women because of past conflicts and wars that displaced many women as refugees to

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the neighbouring countries. Twenty-seven percent of the adult population is literate⁸. Moreover, eighty-three percent of the population is rural based, with the majority depending on agriculture or animal husbandry as their primary source of livelihood⁹. Fifty one percent of the population lives below the poverty line and 90 percent of the population earn less than one US dollar a day¹⁰. Fifty seven percent of the population living in female-headed households is poor compared to 48 percent in male-headed households¹¹. Access to adequate health care remains a major challenge. Infant mortality is extremely high at 102 per 1,000 live births as is maternal mortality rate, which remains one of the highest in the world at 2,054 per 100,000 live births¹². South Sudan is in the bottom of five countries for 11 of the 22 Millennium Development Goals (MDGs) and 5 of the 17 Sustainable Development Goals (SDG) indicators for which there is data and therefore will not achieve Millennium Development Goals 1 to 6 and Sustainable Development Goals 1 to 5 specifically in reference to this piece, eradicating extreme poverty; achieving universal primary education; promoting gender equality and empowering women, and combating HIV/AIDS by 2020.

The contributions of deprivations in each dimension to overall poverty show that, in case of South Sudan, lowest living standards and education are the greatest sources of poverty and illiteracy. Deprivation of schooling is easily the most serious source of overall deprivation, with two schooling-related indicators accounting for 40 percent of the multidimensional poverty index (although not surprisingly, schooling is more readily available in urban areas)¹³. The indicators for health and education are scaring. The health index is 0.549; mean-year of schooling index is 0.360 with expected years of schooling index as 0.422 as well as education index with 0.391 and income index is 0.476 which remains the lowest in the world¹⁴. Yet, the Petroleum Revenue Management Act (PRMA) 2013 stipulates that oil money should be earmarked to the development of the critical sectors of the economy. Article 28 of the PRMA numerates that the Petroleum Producing States shall receive two percent of the Net Petroleum Revenue; and the Local Government Councils within the Petroleum Producing States shall receive three percent of the Net Petroleum Revenue¹⁵. Little has been seen in the socio-economic transformation of oil producing societies. The communities of Dinka Ngok, Dinka Panaruu and Adok Nuer have never realized any trace of development from oil revenues given that these revenues meant for community development are stolen and squandered by both political and military elites. Luke Patey reiterates this view:

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The Government of South Sudan (GoSS) itself largely squandered the opportunity of oil and did little to foster development in the oil-producing areas. Rather than prioritizing pro-poor growth, the GoSS started to build a reputation of mismanagement and fomenting local tensions not unlike the Government of Sudan (GoS), which had been notorious for embezzlement and politicizing ethnicity in the context oil exploitation. The GoSS spent the bulky of its oil-derived income on salaries for the central government (Patey, 2010: 68).

Besides, the future and oil stabilization accounts have not been operationalized in accordance with Petroleum Revenue Management Act (PRMA) 2013. PRMA 2013 article 13 stipulates that the Ministry shall establish at the Bank of South Sudan: the Oil Revenue Stabilization Account with 10% of total oil revenues, and the Future Generation Fund with 15%¹⁶. The purpose of the Oil Revenue Stabilization Account is to act as a financial buffer to cushion the economy against volatility in petroleum revenue and to finance any unexpected shortfall in Petroleum Revenue during a Financial Year¹⁷. Moreover, the purpose of the Future Generation Fund is to provide savings for the long-term and support the welfare of future generations.¹⁸ These two accounts don't have cash at the Bank of South Sudan given that oil revenues have been utilized outside the priorities of the government and the PRMA 2013. A lot of these monies have been misappropriated and lumped on the security sector budget on the pretext, leaving the critical sector of social services not attended to and this has contributed to poverty in South Sudan.

Therefore, once funded well, education and health sectors could have helped in alleviating poverty levels in the nascent State. However, they have been neglected in the South Sudan annual budget. These sectors have received little budget corresponding to other sectors. In 2014/2015, Education got 6 percent whereas Health ended with 4 percent¹⁹. See table one below for budget allocation to sectors in South Sudan:

Table 1: 2014/2015 Budget Allocations to Sectors (Total Funds- SSP Millions)

| Sector | 2014/2015 Plan | 2014/2015 % Share |
|--------------------|----------------|-------------------|
| Accountability | 302 | 3% |
| Economic Functions | 399 | 4% |

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| | | |
|---|---------------|-------------|
| Education | 622 | 6% |
| Health | 451 | 4% |
| Infrastructure | 393 | 3% |
| Natural Resources and Rural Development | 363 | 3% |
| Public Administration | 822 | 7% |
| Rule of Law | 1,573 | 14% |
| Security | 3,970 | 35% |
| Social and Humanitarian Affairs | 110 | 1% |
| Block Transfers | 964 | 9% |
| Interest Payments | 260 | 2% |
| Emergency Contingency Fund | 250 | 2% |
| Arrears Fund | 800 | 7% |
| | 11,279 | 100% |

Source: Ministry of Finance and Economic Planning Budget Booklet 2014/2015

The above skewed percentages showcase the depth of the petroleum resource curse, as far as poverty is concern in South Sudan.

Petroleum Exploration and Environment Degradation in South Sudan

There has been theoretical and empirical link between petroleum resource and environment degradation by the oil companies. This manifestation has been a curse to the communities living around the oil fields. The exploration, development and production of petroleum have profound international, regional and local impact. Rather than bringing prosperity to a region, as is often the claim, the boom-bust cycle associated with petroleum dependence is magnified. Localities where oil is actually located over time tend to suffer from lower economic growth and lower per capita incomes than the rest of the country, greater dislocations, higher environmental and health hazards, and higher levels of conflict (Karl, 2007: 24).

The environmental dimension of petroleum exploration is a sole cause of social dislocation. Hazardous wastes, site contamination, and lack of sufficient protection of surface and subsurface waters, biodiversity and air quality (both in the immediate vicinity of the oil project and in relation to global concerns such as ozone depleting substances and greenhouse gases) have endangered the health of local populations near oil installations and pipelines and destroyed local livelihoods such as farming and fishing (Karl, 2007: 26). This disruption is most profound among ethnic minorities and

indigenous peoples who live off the land and whose customs and traditions may also be threaten.

In Niger Delta for example, Shell was accused many times of collaborating with the government and supporting the brutal police force in secrecy against the host community. In corroborating such claim, a document alleged to be a leaked government memorandum from 1994 implicated Shell in what were described as “wasting operations”-a term understood to mean killings of community leaders-by the Rivers State Internal Security Task Force (Manby, 1999: 194). It can be argued that Shell colluded with Nigerian government’s security in quelling the protestations of the Ogoni people and later on supported the state’s hang of Movement for Salvation of Ogoni People (MOSOP)’s leader Ken Saro-Wiwa with eight others who became to be dubbed as “Ogoni Nine”. Many saw Saro Wiwa’s real crime as advocating the rights of the Ogoni people, who opposed Shell Oil’s operations on their land (Bennett, 2002: 10). Indeed, several witnesses at the trial of MOSOP leaders later alleged that they had been bribed to give evidence against Saro-Wiwa and others, and that the money had come from Shell (Manby, 1999: 294).

The case of Niger Delta environmental degradation went beyond oil spillages and oozing to gas flaring. Gas flaring has permanently scorched the earth, destroying food crops and rendering farmlands barren (Karl, 2007: 27). It is believed that incomplete combustion of the flares has resulted in acid rain that, in turn, has damaged crops and drinking water. Oil spillages (an average of three per month) and ruptured pipelines (either from improper maintenance or sabotage) have destroyed streams, farmlands and aquatic life (Ibid).

In South Sudan, the environmental degradation or environmental terrorism²⁰ is a common affair in the oil producing areas. In all the active blocks 1, 2, and 4 explored by GPOC, block 5A by SPOC and blocks 3 and 7 by DPOC, environmental concerns have been a curse to the populations living around the oil fields. According to the survey carried out by Mecalilie Bol, petroleum related activities disturbed and disrupted the life in more than two-thirds (325) of 476 villages in blocks 3 and 7 (Bol, 2012: 8). Geological surveys, excavation and the digging of ponds for polluted water, erection of rigs, digging of grounds and laying of pipelines together with the construction of roads and the airport near Poloch, all degraded the environment. Besides the erection of the oil plants and Operational Base Camps (OBCs) at Poloch and

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Adar affected local peoples' settlements and eradicated 36 villages so far (Bol, 2012; Moro, 2008). The tremendous changes through oil infrastructure are clearly visible on timeline satellite images (Mager, 2013: 8). With the activities of the oil companies concentrating on the plains mainly use by the local communities during the rainy seasons, the gravity of the displacement of the communities is an empirical curse. As this happen during the long civil war, the inhabitants of the areas were forcibly displaced and not compensated (Grawert and Christine, 2013: 34). Besides, encroaching on the land, trees were removed, regardless of their important of income-generating function through tapping and trading of gum Arabic and other cultural and social functions they had in the local social life²¹.

Clean and plentiful drinking water, sourced from rain and river water, is one of the most basic necessities of the local communities. Yet, water shortages²², water pollution and difficult access to water complicate peoples' livelihoods throughout Melut County (ECOS, 2008: 3, int. Bakheit, 2011) and the activities of petroleum companies have been blamed for this damage (Moro, 2008: 326). Ponds for bioremediation extend to huge areas near Poloch and Adar Bomas. DPOC used to pump the oil waste into a series of pools. Connected by floodgates and valves, the first pool is about seven meters deep, and the other pools are shallower ((Grawert and Christine, 2013: 40). DPOC claimed that, from pool to pool, the water became cleaner through evaporation, whereas the solid waste would settle on the ground. Reeds were planted in the last pond to absorb the remaining waste and from there the water was divided into the landscape (intl. Bakheit, 2011).

From the insight perspective of the local population, however, the "oil pools" cause illness and even death of people and cattle²³. Pollution and contamination as well as salinity of water sources present a problem. The community of Atieng, for example, used to have access to potable ground water in the 1960s, but in late 2011, their groundwater was salty (int. elders of Atieng, 2011). Many analysts as well as local inhabitants assume a casual link between DPOC activities, water pollution, and environmental and health problems of the communities (intl. chiefs of Poloich; Nyok, Chol, Thomas, Dau, 2011: Dutch Ministry of Foreign Affairs, 2010: 13). Yet, the exact amount of pollution caused by oil activities and the consequences of pollution for human as well as animal health has never been established (ECOS, 2011: 5; Pantuliano, 2010: 14). Nonetheless, the chiefs of Poloch further reported that the adjacent fields were flooded with oil-polluted water and that the bad water had destroyed the trees²⁴. The chiefs elucidated that people around the

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oil areas are very angry but did not show it²⁵. For example, the community of Gagbang is an example of how local communities deal with the water pollution. Depending on the direction of the wind, the local community always experience bad smell emanating from the oil pond ((Grawert and Christine, 2013: 53). A few persons believed that this had already caused health problems (intl. women's group of Goldora; Melut's Sons, 2015). Not only that, it has emanated that there exist deep mistrust of the oil company and local communities. According to Deputy Commissioner of Melut County, the county government had threatened DPOC to bring engineers from Europe and elsewhere for an independent investigation into the environmental pollution done to the local communities (intl. Nyok, 2015).

Further interviews of partners mentioned a study about impact of the wastewater ponds conducted by the Ministry of Petroleum and Mining (MPM) in Khartoum and the Ministry of Agriculture in 2012 (Intl. Thomas; Dau; Odwar, 2012) the results of which had not been disclosed to the public at the time of the interviews ((Grawert and Christine, 2013: 53). However, the alleged results had that the report found a lot of environmental destruction by the oil companies. Away from Melut County, other areas of oil production such as Parieng, El-Toor, Koch, Leer and Nyal of Unity region have been affected by the activities of the oil companies. A report authored by agencies and undertaken by a Klaus Stieglitz from German based Sign of Hope and published by the local newspaper-This Day has argued pollution as a threat to thousands in oil production areas in Unity region. Dangerous heavy metals used in oil production in war-torn South Sudan have leaked to drinking water sources used by 180,000 people with life-threatening health risks²⁶. German based researcher Klaus Stieglitz argues:

Toxicological tests carried out on hair samples from 96 volunteers living around the Tharjath oil processing plant in South Sudan's northern Unity region revealed they were "highly intoxicated with pollutants such as lead and barium". There is a direct link between the contamination of the people and the activities of the petroleum industry, working in this area, he said adding that the research built on six years of hydrological tests by the group in the region.²⁷

Stieglitz emphasizes on the extreme threats of pollution and contamination as he argues:

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“The total toxic stress- as found in the hair samples- of the human population of the area is life-threatening”, said Klaus-Dietrich Runow, from Germany’s Institute for Functional Medicine and Environmental Health, one of two separate independent toxicologists who assessed samples. Previous tests have shown “direct links” between oil drilling and drinking water contamination. Despite the small number of samples analyzed, the “homogeneity” of the results suggests they apply to “large sections” of the surrounding population, estimated at 180,000 people²⁸.

Apart from extreme contamination and environmental degradation, the people living around the oil fields constantly experience deformities. A study carried out by the honorable member of national assembly, Ajok Garang²⁹ in November 2013, revealed several children born with deformities as the result of oil contamination. This also applied to the adults. Officials interviewed admitted that petroleum-operating companies have caused pollution damage but they have not been held accountable (Tütmamer, 2015: 13).

To be certain, Petroleum Act 2012 stipulates the protection of environment by the petroleum producing companies. Article 48 (1) demonstrates that petroleum activities shall be conducted in a manner that will prevent waste of petroleum resources and promote the safety and protection of the environment, with due regard to the rights of neighbouring landowners, communities, occupants and others who have certain rights to peaceably enjoy their properties or other interests in land³⁰. Article 59 moreover stresses strategic Environmental Assessment, Environmental and Social Impact Assessments³¹ by the Ministry of Petroleum and the contractor so that the communities living around the oil fields are protected from pollution, contamination, harm and diseases. Besides, Article 60 stipulates Environmental Management Plan arguing prior to the commencement of petroleum activities, a license or a contractor shall prepare an environmental management plan for the systematic implementation of the environmental requirements for petroleum activities³². Petroleum Health, Safety and Environmental Management System and Plans Regulations, 2015 emphasizes the same. The Act further restricts flaring and venting yet the companies flare up gases on the ground. Although the ministry of petroleum through the national oil company, Nile Petroleum Corporation set up a joint venture with Niger Delta Company known as Nile Delta for purposes of preserving gases and other liquidified products from the fields in order to prevent environmental degradation, the result of this effort is yet to be seen. Thus, none of these comprehensive laws and regulations in South Sudan petroleum

sector has been implemented and this has led to the precarious lives of the citizens living around the oil producing areas.

Petroleum Wealth and Corruption in South Sudan

Higher levels of corruption present the most obvious political risk that can arise from large holdings of natural resources (Humphreys et al, 2003: 11). The short run availability of large financial assets increases the opportunity for the theft of such assets by political leaders (ibid). Those who control these assets can use that wealth to maintain themselves in power, either through legal means (e.g., spending in political campaigns) or coercive ones (e.g., funding militias). By some accounts, corruption is a hallmark of the oil business itself given the lucrative of the sector (Oil Firm ELF, 2001)³³. It is widely argued that the availability of a petroleum resource in a country produces weak state institutions that make corruption practices considerably easier for government officials. Luong and Weinthal (2010) study of five petroleum-rich states of the former Soviet Union (Russia, Azerbaijan, Kazakhstan, Turkmenistan, and Uzbekistan) concluded that oil wealth only leads to weaken state institutions when the government has a dominant role in the petroleum industry. When the private sector (especially foreign investors) has a dominant role, governments are likely to have stronger fiscal institutions (Ross, 2013, 12). Corruption in petroleum sector takes many forms; it is done through bribery, kickbacks and through mismanagement of the petroleum returns. Moreover, corruption takes place not only at the production and export stage through secret signature bonuses and opaque financial arrangements. Moreover, corruption is a result of extremely high and difficult to absorb investments at the 'upstream' stage as well as at the trading or 'downstream' stage, where massive resources tend to disappear through price transfers that are difficult to track (Karl, 2007: 19). In practice, the risks of corruption in resource-rich environments are very large and the costs of such corruption to the national economy are enormous (Humphreys et al, 2003: 12). By some accounts, for example, Nigeria's former president Sani Abacha was responsible for the theft of as much as 3 billion USD (Ayttey, 2006: 6).

Indeed, corruption contributes extensively to the petroleum curse. Rulers will support policies that produce personalized rents even if these policies result in lower overall social welfare and because they need to share these rents with supporters and subordinates, the level of distortion can be very great (Karl, 2007: 19). Terry Karl succinctly argues this as follows:

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Policy choices are deformed in a number of ways. First, where huge oil rents are present, officials tend to favour larger public sectors with overly excessive regulatory interventions that enhance opportunities for rent seeking. Second, policy choices are distorted towards the financing of mega projects in which payoffs can be more easily hidden and the collection of bribes is easier while productive long-term investment remains undersupplied. Economists estimate, for example, that Venezuela's average GDP growth rate would be raised by some 1.4 percent annually had it reduced its corruption to the level of Chile (ibid).

Between January 2006 and June 2014, South Sudan received a total of USD 19.5 billions in petroleum revenues, which is an average of USD 2.3 billions a year (Sabuni, 2015: 5). However, nearly the entire amount ended up in mismanagement and corruption. Since independence, a small rotating set of elites who move seamlessly between positions in government and the frontlines of the rebellion, as political situations change has controlled South Sudan.³⁴The country's elites have built a kleptocratic regime that controls all sectors of the economy, and have squandered a historic chance for the development of a functional state.³⁵These predatory economic networks play a central role in the December 2013 civil war, because much of the conflict was driven by elites attempting to re-negotiate their share of the politico-economic power balance through violence.³⁶

To be sure, political elites usurped petroleum resources for individual gains in tandem of political corruption. They have encouraged fragmentation of communities to create a phenomenon of community gurus as champions, protectors and philanthropists of their communities through looted resources. Nadir A. L. Mohammed once noted:

While it is true that the colonial administration and the first national government were to blame for the civil unrest in the South, it has to be said that the southern elite must also be held responsible. Southern leaders were disunited, many of their politicians were corrupt and their loyalties were constantly and still are, continuously conflicting (Mohammed, 1983: 3).

This state of South Sudan corruption came to limelight when the former Minister of Finance, Arthur Akuein Chol was accused of misappropriating millions of dollars through overpayment of contracts of first government's V8 cars from foreign company in 2006. Immediately, his successor Kuol

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Athian Mawein was accused for the disappearance of about USD 3.6 billion through payment of contracts of unsupplied grains to the ten states to curb catastrophic hunger, a malpractice that became famously known as “Dura Saga”³⁷. In addition, Wikileaks made public in 2012 an alleged corruption at the John Garang Military Academy. According to the report, the government allocated 30 million dollars for the construction of this academy, but only 2 million dollars was actually accounted for and the rest of the money was allegedly spent without a trace.³⁸ In March 2013, two successive thefts incidents schemed took place in the office of President (Oop). The total amount of money stolen in the two thefts is SSP 208,543 and USD 14,000³⁹. Although the investigation committee report termed the two thefts as a product of a combination of factors such as staff incompetence, gross negligence and lack of inter-departmental communications in the Oop, the action carries the intentional act of corruption. In June 2013, another corruption practice of USD 7.9 million came to the public domain. The two Cabinet Ministers of Cabinet Affairs and Finance were relieved by the President for allegedly authorizing the transfer of USD 7.9 million to Daffy Co-Ltd in Kenya to procure anti-fire safes without adherence to procurement regulations, and above all, without endorsement of the Council of Ministers and the National Assembly.

In the heighten of this den of corruption, President Salva Kiir Mayardit, courageously came out and accused 75 former and current government officials of stealing public funds to the tune of USD 4 billion and asked them to return the loots through specified bank accounts in Kenya (Awolic, 2013: 3). Ted Dagne, an expert, hired by the UN to advise Kiir on anti-corruption policy and international relations, played a key role in the preparation of the May 2012 letter, which was made public by President Salva Kiir to embarrass the officials who are accused of stealing four billion dollars.⁴⁰ No empirical evident can substantiate whether some of undisclosed government officials have either returned some money or not. However, the assumption is that no fund has been returned yet to the public coffers.

Although investigations were carried out in recovering these stolen funds, no single individual has been persecuted to face the law. But was South Sudanese political and military elites palatable greed just emerged from thin air? In their study of national corruption during these years, the Sudanese economists El-Wathig Kameir and Ibrahim Kursany note

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Against this background, the elite in the South wanted to enrich themselves as quickly as possible so as to be on a level with their colleagues in the North. This is why they have resorted to corruption as the quickest way of acquiring money (Kameir and Kursany, 1995: 26).

The result of the auditing of government of Southern Sudan accounts from 2005 to 2006, released by the Auditor General and presented to the parliament in February 2012 revealed that over \$1 billion US dollars 'disappeared' in that period alone and could not be accounted for.⁴¹ Corruption in the country was permeating in every spectrum of the society, causing global worries. J. Peter Pham, an analyst at the Atlantic Council and an adviser to the Defense Department's U.S. Africa Command would charge that: "Salva Kiir's government is notoriously corrupt."⁴²

Thus Kiir's dictum of "*Zero Tolerance*" and terming corruption as cancer has remained in speeches and the action is yet to be seen. Lacks of institutional and political will to punish the perpetrators set a precedence of usual business in South Sudan. It is only in October 2015 that several presidential aides who were accused of stealing more than USD 30 millions in the name of president through forgery of his signature and the seal of the republic have been arrested and facing the trial at the high court. It is yet to be seen whether the fourteen individuals are going to be convicted or set free. However, president Kiir has at least admitted that there is no cure for corruption. His strategy of rewarding loyalty with license to commit fraud also meant that South Sudan achieved independence as a kleptocracy. The nation entered the Transparency International corruption perception index almost at the bottom: 'Corruption permeates all sectors of the economy and all levels of the state apparatus and manifests itself through various forms, including grand corruption and clientelistic networks along tribal lines.'⁴³

Apart from corruption at the highest levels, corruption has featured at lowest echelons. The flows and utilization of the oil revenues has been done with ubiquitous corruption at the local government level. The streams of oil revenues from the state level stopped at the level of the commissioner and were embezzled for private enrichment and redistribution with a separate patronage network (Grawert and Andra, 2013: 55). According to paramount chief of Melut, Geith Deng, the GoSS did not let the communities benefit from the petroleum resources but has used the revenues for military corruption (statement during the workshop in Juba, 2012). Related to this military background is an attitude that justifies personal enrichment using

state funds as a private compensation for the hardship of the war (Grawert and Andra, 2013: 55). It is not surprising that distrust of higher state officials is high in Melut and Maban counties (Ibid). In the National Oil and gas Company (Nilepet), some officials associated with sales and marketing at pump stations corrupted sales of petro and diesel creating what is called ‘oil black market’ and selling petro and diesel through ‘kirisalt’ (bottle). The ‘kirisalt’ become known as *nom de guerre* ‘cleto’ named after the former Managing Director/Chief Executive Officer of Nilepet Joseph Cleto Kuel Deng during his tenure May-November 2015. This practice has metamorphosed to the public selling liters of diesel and petro along roadsides at exorbitant prices. Hence it is so difficult for a mere citizen to get diesel or petrol at the pump stations given that little is sold there and much is channeled through the illegal markets and sold through the bottles at the streets.

Petroleum Wealth and Conflicts in South Sudan

An old adage had it that where a petroleum resource has been discovered, conflicts and civil wars ensued. Conflict is another symptom of the petroleum curse. Globally, oil-producing countries spend three times more on their militaries than developed countries and ten times more than underdeveloped countries (Hickel, 2012: 7). This is the curse the sweet-bitter petroleum has inflicted on the people of South Sudan. The 60 percent of annual revenue that South Sudan allocated to military spending in the 2014-2015 budgets is a testament to this fact (Nield, 2014: 2). When the history of decades of civil wars and violence are factored in, the risk of protracted conflict increases. Studies have shown that countries in which resource exports constitute 33 percent or more GDP have a 22 percent risk of conflict, compared to 1 percent risk for countries with no such exports (Collier and Hoeffler, 2000: 13). The conflict and violence that begun as a political power struggle in the SPLM party has made everything worse as far as petroleum resource is concern. Reports from the Ministry of Petroleum and Mining indicate that petroleum production fell by 50 percent of its pre-conflict levels in 2014, before increasing to 164, 000 barrels per day, or 70 percent of pre-conflict levels, by the end of the year⁴⁴. At the same time, oil prices on international markets have dropped 60 percent since June 2014⁴⁵. South Sudan has no stabilization mechanism to protect her oil from fluctuations in international markets, and the drop in oil prices has had a devastating impact on the economy (Deng, 2015: 2).

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Like other oil-producing African countries, petroleum investment brought familiar types of conflict to South Sudan. While the majority of the local inhabitants remained inactive and tried to maintain their livelihoods within the imposed constraints, some local inhabitants took the conflicts to the operating companies. For instance, the local inhabitants threw stones on the vehicles of DPOC staff and equipment, insulted the DPOC staff (int. Bakheit, 2011), blocked roads (int. Fengzang, 2011) and cut cables (Int. Zhangming, 2011). Such conflicts transcended to the killing of the DPOC field manager in 2006 in Melut County at Upper Nile Region (Grawert and Andra, 2013: 47). The grievances related to the local conflicts include lack of compensation for land appropriation and infrastructure, lack of development for the population around the oil fields, little employment opportunities, and pollution (Cf. ECOS, 2006). Some confrontations occurred due to the entanglement of the oil-related grievances with the untreated wounds of the war history and new political mobilization along ethnic lines (Grawert and Andra, 2013: 47).

Apart from local conflicts around the oil fields, petroleum wealth has contributed to conflicts and violence amongst the South Sudanese at the national level perpetrated by the political and military elites. In South Sudan, the security sector budget has been ballooned to 60% making military spending the top expenditure of the country. This due to kleptocratic practices pursued by the leaders in the throne as well as accommodating various belligerent groups to buy peace. Due to reward of wrong doings, some political and military elites have taken violence form in what Alex de Waal termed in Small Arms Survey as “rent seeking rebellion”, namely the mutiny of army commanders or local political leaders with armed constituents, seeking a larger share of the resources dispensed by the government.⁴⁶ Today, to think of various security institutions in South Sudan as subordinate appendages to the State is to fundamentally misunderstand the country (D’ Agoot, 2013: 10). In essence, South Sudan is not a country with a military- rather; it is a military with a country.⁴⁷

Members of the South Sudanese political elite, in their desire to acquire wealth as fast as possible, and determination to prevent the northern government from renting the allegiance of southern militia and thereby jeopardizing the SPLM’s secessionist project, created a governing system even less regulated and no less brutal than its northern counterpart (De’ Waal, 2014: 350). One of the most troubling characteristics of government is that contending elites use of violence as a means of bargaining. A

commander or a provincial leader can lay claim to a stake of state oil resources (rents) through mutiny or rebellion permitting members of elite to view it as instrument of governance and thus join the kleptocratic club (ibid, 351). The country achieved independence after a confused security situation in which various wartime militia groups engaged in agitation as a strategy for integration into the government machinery (Wassara, 2015: 6). As a result, security sector swelled in size and became top-heavy at the command level and underscored by shaky loyalties, which often followed ethnic fault lines (De' Agoot, 2013: 9). South Sudan military has over 1000 generals, more than U.S and Russia and second to none. Each of these generals has a generous salary, a bodyguard, vehicles and a luxurious house. This has meant that control of oil revenue has become a means to control the army and, by extension, the state.⁴⁸ Alex De' Waal argues that President Kiir was at the top of the system but not in control of it, and, as he later noted, 'once there is a conflict, there is insecurity'.⁴⁹

In hatching conflicts, President Kiir through the influence of his closed political and military advisors announced the postponement of elections in May 2013 arguing that Peace and Reconciliation were to be prioritized amongst the South Sudanese citizens. These elections were supposed to take place on 9th July 2015 as spelt out in the transitional constitution 2011. As if this was not enough, President Kiir having been challenged by Dr. Riek Machar, Pag'an Amum and Rebecca Nyandeng De' Mabior to contest the SPLM Chairperson elections turned to his executive power, with an implicit threat of coercion to these aspirants. In July 2013, he relieved his long serving Riek Machar and the majority of his cabinet and brought in others who were not very ambitious. Alex De' Waal argues that the political dissenters refused his invitation to form different political party to contest elections, well aware that SPLM membership was the only guaranteed ticket to being a member of the ruling club (De' Waal, 2014: 365). A second reason for staying in the SPLM was that they hoped to manage internal elite political competition in non-violent way (ibid).

However, each side knew that it would need to threaten through the use of force, at the minimum, to maintain its leverage. But President Kiir political management was inept. By dismissing all his challengers at one time he pushed them together into a single bloc that putatively commanded a majority in the SPLM Political Committee. He then declared his intention to suspend all SPLM organs other than the Chairman's office (his own position), but partially reversed this by agreeing to a meeting of the National

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Liberation Council (NLC), the SPLM quasi-Legislature body (in which he would win a majority) (De' Waal, 2014: 366). In NLC, differences were poorly managed; President Kiir acting on the advices of coterie of political and military elites at his backyard gave a threatening speech and assigned Mr. Michael Makuei Lueth (the Minister of Information) who moderated the NLC meeting meant to pass SPLM Constitution, Manifesto and Code of Conduct. As the meeting began, members of NLC were not given adequate time to deliberate on the documents, instead, acclamations were exposted by allied political apologists to the President. This strategy failed as Machar's camp left the meeting and later on around 9:00pm, 15th December 2013 fighting amongst the Presidential Guards ensued leading to the sporadic rebellions.

The scale of the rebellion was very spontaneous and wider in the scale covering the Greater Upper Nile Region. Over 100,000 people have perished and millions displaced. The regime sustenance of conflict and violence was possible through the proceeds of oil sales. China, the big brother, and closed shred ally was advanced various barrels of crude oil in form of loan in exchange of military hardware. According to the Ministry of Finance, the Government owed 200 millions USD worth crude to buyers of such advance sales as of March 2015⁵⁰. This kind of borrowing is high risk, especially when debt is used to finance conflict⁵¹. This enabled the regime to quell the rebellion till the signing of Agreement of Resolution of Conflict in South Sudan (ARCISS) on 26th August 2015. Although the peace deal was signed, a lot of other conflicts and violence continued in rent seeking manner championed by both political and military elites in acquisition of petroleum money.

Can South Sudan avoid Petroleum Curse?

Like other countries that have moved from petroleum resource bust to boom, South Sudan can leap frog from the curse to the prosperity when the political leaders implement the Petroleum Act 2012, the Petroleum Revenue Management Act 2013 and the peace deal of August 2015. Critical inferences in escaping petroleum curse from petroleum regulations and the peace deal can be argued as below:

Single Petroleum Revenue Account

The Petroleum Revenue Management Act 2013 requires that all revenues from petroleum be deposited in a single revenue account situated at the Bank of South Sudan (BOSS). Transfers are then required to be made from the Petroleum Revenue Account (PRA) to the two accounts: a consolidated fund,

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from which the national budget is drawn, and reserve fund, consisting of an oil revenue stabilization account and the future generation fund⁵² According to the Act, 10 percent of annual revenue is supposed to be allocated to the stabilization account, the purpose of which is to act as a 'financial buffer' to cushion the economy against volatility in oil revenue⁵³. The Government can only draw funds in the stabilization account if quarterly revenue falls below 25 percent of what is required to fund the national budgets⁵⁴.

Moreover, the purpose of the future generation funds (account) 'is to provide savings for the long-term and support the welfare of future generations'.⁵⁵ The law requires that 15 percent of annual revenue to be allocated towards the future generations fund⁵⁶. The Act further stipulates that the revenue in the future generation account shall be accessed after five years beginning when the Petroleum Revenue Management Act was signed. After five years, the government could withdraw up to five percent of the fund balance per year to invest in 'capital investment that shall benefit future generation projects'⁵⁷.

Institutionalization of Transparency and Accountability

Petroleum resources are non-renewable. A study has demonstrated that South Sudan petroleum will be depleted by 2032 unless new technology and fields are discovered. This means that instilling sense of transparency and accountability in this sector is cardinal to eschew corruption, environmental degradation, poverty and conflicts. Building public confidence on the discovery of petroleum, its exploration and production, revenues received and their usage is critical for South Sudan escaping the curse. The Petroleum Act 2012 required that the Ministry of Petroleum should publish all exploration and production sharing agreements (EPSAs), and all licenses online by any other appropriate means (Deng, 2015: 5). The Petroleum Act 2012 further requires that the national oil company (Nilepet) make public annual audited accounts, assessed by an independent international firm, for the period since its establishment⁵⁸. Joint Operating Companies (JOCs) should play a critical role in ensuring that they are making payments into the legally mandated account, controlled by the Ministry of Petroleum and Bank of South Sudan. Thereafter the JOCs should disclose their payments as well as the government to the third party as required by the Petroleum Revenue Management Act 2013. Besides, reporting publicly, on quarterly basis, the amount of petroleum revenues earned, how much has been transferred to the main budget, the saving funds, and to communities in oil producing areas is equally vital in enhancing effective accountability. This requires the

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participation of the parliament in spending decisions through budget process, that communities affected by the oil production receive additional funding from the Government, and that the oil money is not used as collateral for loans⁵⁹.

The law requires that this information is available online and in at least two national newspapers to ensure wide dissemination⁶⁰. The legislation calls for a Petroleum Registry to be established within the Ministry of Petroleum and Mining, which would maintain all agreements, licenses and authorizations and make them available for public review, but for more than four years after the law was passed, the Registry has not yet been established. There is need for operating companies to adhere to the good practice of environment management to avoid environment degradation as spelt out in Petroleum Act 2012 and in Health, Safety and Environmental System Regulations 2015. The Petroleum Act 2012 is quite explicit in that it requires the Ministry of Petroleum to initiate and coordinate a Strategic Environmental Assessments (SEA) before opening an area for petroleum activities. SEA is usually carried out before an Environmental Impact Assessment (EIA), which deals with environmental impacts of projects (Tiitmamer, 2015: 5). The Act restricts flaring and venting actions, which if properly controlled can lessen the emissions of gases, which cause pollution and climate change.

In addition to the opportunities to promote transparency and accountability through national petroleum laws in South Sudan, there are other international initiatives that could help support these efforts (Deng, 2015: 5). In December 2011, shortly after the independence, the president of South Sudan declared that South Sudan would be seeking membership in the Extractive Industries Transparency Initiative (EITI)⁶¹. Based on the current experience, it would take many years for South Sudan to comply with EITI standards; however, this direction suggests that the government acknowledges its responsibility to make data available on petroleum sector to the public. In the meantime, as the government works towards EITI compliance, the requirement set forth in the Petroleum Act 2012 and the Petroleum Revenue Management Act 2013 provide a strong foundation on which to begin building a transparent and accountable petroleum sector.

Establishment of Revenue Oversight Mechanisms

The Government of the Republic of South Sudan has been receiving enormous revenues from petroleum produced in the country for nearly eleven years. However, for all these years, it has not managed to put in place

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sound revenue management culture. The conundrum has been designing a mechanism with comparative 'good practice' to learn lessons from. Iraq's oil-for-food program, for example, was established through a series of UN Security Council resolutions and a memorandum of understanding (MOU) between the UN and the government of Iraq in the 1990s.⁶² Revenue from the sale of Iraqi oil was paid into an escrow account managed by the French bank, BNP Paribas (Deng, 2015: 7). A portion of the revenue was used to pay for UN operations and coalition in Iraq as well as war reparations to Kuwait. The remainder was given to the Iraqi government to purchase food and other items that were not restricted under the existing sanctions regime.⁶³ Despite the good intentions, throughout its existence, the oil for food programme was dogged by allegations of bribery, corruption and kickbacks involving thousands of companies and a number of high profile international politicians (Volcker, et al, 2005: 2).

What is more, the World Bank and Chad government developed a revenue management scheme in the late 1990s and early 2000s which gave rise to a similar set of complications as Iraq's case. In 1999, as a requirement for World Bank financing of oil pipeline to Cameroon, the government of Chad enacted a Revenue Management Law, which required 10 percent of oil revenue to be deposited in a future generation fund, and channelled the bulk of the remainder to priority sectors such as public health, social welfare, education, infrastructure, rural development and the environments (Garry and Riesch, 2005: 6). Oil revenue was deposited in an escrow account at Citibank in London and expenditures were placed on revenue under the supervision of a joint government and civil society revenue-oversight committee (Deng, 2015: 7).

In 2005, amid allegations that revenue was being channelled towards arms purchases rather than investments in priority sectors, the government of Chad decided that the arrangements was too restrictive and eliminated the future generation funds. The World Bank responded by suspending the disbursement of development funds to Chad and placing an automatic freeze on the escrow account.⁶⁴ As the result, the Chadian president closed the escrow account and channelled oil future funds into the Bank of Central African States, out of reach of World Bank. South Sudan can draw great lessons from the experiences of Iraq and Chad. August 2015 IGAD Plus peace accord has elaborated chapter on reforms on the petroleum sector including injecting fresh breath in revenue oversight mechanisms.

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Allocation of Revenues to Petroleum Producing Areas

The Petroleum Revenue Management Act 2013 provides allocation of 5% of the petroleum wealth in form of dollars to the petroleum producing areas. 2% will go to oil producing provinces/states and 3% will go to the local communities which petroleum is being extracted. The practice in South Sudan is that none of 5% community entitlement has trickle down to the petroleum producing areas. Current practice has not enhanced proper accountability on the funds earmarked for the disbursement in the petroleum producing areas (Deng, 2015: 8). Thus to avoid, petroleum curse, the provision of the legislation should be implemented in later and spirit so that the revenue allocation spur growth and development in South Sudan.

Moratorium on Petroleum Contracts

In order to eliminate or minimize the curse, South Sudan should consider putting in place a moratorium on oil contracts⁶⁵. A moratorium would send a signal to regional and international capital that South Sudan is committed to putting its house in order, and creating an environment that appeals to serious businesses interested in socially responsible investments (Deng, 2015: 8). The moratorium would also demonstrate to the people of South Sudan that the next transitional government is going to break free from the corrupt and inefficient practices of the past. Therefore, a strong petroleum industry is the key to sustainable peace and long-term prosperity, but South Sudan cannot build such industry if it enters into long-term obligations based on the short-term demands with which the transitional government will be anchored.

Conclusion

The paper has advanced argument of the reality of petroleum curse in South Sudan. Reviewed empirical literature demonstrated a strong correlation between petroleum resource curse and absolute poverty levels, environmental degradation, corruption and widespread conflicts and violence in the nascent State. The paper deployed Richard Auty's constructive theory of resource curse that has analyzed the situation of petroleum resource in South Sudan. Although the petroleum curse is a grave matter to the government and people of South Sudan, the piece argues that this is an avoidable phenomenon. South Sudan can leap frog from this natural resource malaise when the political class implement the Petroleum Act 2012, Petroleum Revenue Management Act 2013, regulations associated with petroleum, health, safety and environment. This can be done through establishment of single petroleum account to be situated at the Central Bank

of South Sudan as well as institutionalization of transparency and accountability. Moreover, establishment of revenue oversight mechanisms can easily jump-start South Sudan from petroleum curse to boom as well proper allocation of revenues to petroleum producing countries. Furthermore, moratorium of petroleum contracts will help to assess the operating companies as well as government commitment on the impact of petroleum resource and the revenues to the citizens of South Sudan. Lessons drawn from this can be used to improve the extraction of the hydrocarbon resources for prosperity. As the paper argues the reality of petroleum and the remedies in the context of South Sudan, a lot more research need to be done in this area. The paper recommends further research on oil fields blocks of Poloch and Tharjath to quantify or not the severity of the resource curse on the people of South Sudan.

Notes

1. It is mixed of hydrocarbons and water. It is also referred to oil and gas combined to together.
2. World Crude Production Report December 2015
3. DPOC Daily Crude Averaged Production Report for January 2017
4. See Forthcoming in the Handbook on the Politics of Development (Carole Lancaster and Nicholas Van de Walle, ed.), Oxford University Press.
5. Tisa Sabuni, 2015
6. South Sudan Human Development Report 2015, page 32
7. 5th Sudan Population and Housing Census 2008
8. 5th Sudan Population and Housing Census 2008
9. South Sudan statistical yearbook 2011
10. National Baseline Household Survey 2009
11. 5th Sudan Population and Housing Census 2008
12. National Baseline Household Survey 2009
13. Human Development Report 2015, page 44
14. Human Development Report, 2015, page 47
15. Petroleum Revenue Management Act 2013, page 18
16. Ibid, page 10
17. Ibid
18. Ibid
19. South Sudan Budget 2014/2015, page 14
20. A word borrowed from Dr. Bior Kuer's coinage during a presentation on Oil Environmental Degradation by GPOC in Tharjah and El-Toor

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Oil fields of Parieng area at Ebony Centre for Strategic Studies in Juba, October 2015.

21. Statements from Mohammed Lino, Director of Petroleum, MPM Juba, 2012 and Geith Deng in 2012
22. Water sources, which peter out during the dry season, are the reason why communities in Melut County have long led a transhumant (moving with the seasons) lifestyle. However, at least one study claims that seasonal water shortages have increased in recent years (ECOS, 2006: 7).
23. Interview statements from chiefs of Paloich, Nyok and Chol in October 2015
24. Interview with Paloich chiefs in 2015
25. Ibid.
26. This Day Newspaper, Tuesday, March 2016, Vol. 2, Issue 133
27. Klaus Stieglitz, from the German-based Sign of Hope Organization on South Sudan Oil Production 'Pollution Threatens' Thousands published by This Day Newspaper, 8th March, 201
28. Ibid
29. A view sourced from Hon. Ajok Garang on her research on November 2013
30. Petroleum Act 2012, page 45
31. Ibid.
32. Petroleum Act 2012, page 57
33. In one testimony before French magistrates, the former Africa Manager of ELF Aquitaine argues "All international oil companies have used kickbacks since the first oil shock of the 1970s to guarantee the companies' access to oil".
34. See *The Nexus of Corruption and Conflict in South Sudan*. (Washington, Sentry Report, An Initiative of Enough Project, July 2015).
35. Ibid, 2
36. Ibid, 2
37. See <http://www.sudantribune.com/spip.php?article46716> (Accessed on 14th January 2017)
38. http://www.wikileaks.org/plusd/cables/08KHARTOUM345_a.html (Accessed on 29th August 2015)
39. Press release on the thefts in the office of the President, Juba, 14th June 2013
40. Sudan Tribune, "Foreign advisor to South Sudan's President flees Juba after disclosure of corruption letter",

- <http://www.sudantribune.com/splp.php?article43641> (Accessed on 10th April 2015)
41. Sudan Tribune, "SPLA top generals asked by anti-corruption to declare their assets",
<http://www.sudantribune.com/spip.php?article41727> (Accessed on 10th April 2015)
 42. Oren Dorell 'Corruption at root of South Sudan Violence: Analysts', USA TODAY, 27 Dec.2013,
<http://www.usatoday.com/story/news/world/2013/12/27/south-sudan-government-agreement/4218073> (Accessed on 10th April 2015)
 43. Transparency International, 'Overview of corruption and anti-corruption in South Sudan', 'Anti-Corruption Resource Centre: U4 Expert Answer 371', 4 March 2013, <<http://www.u4.no/publications/south-sudan-overview-of-corruption-and-anti-corruption/>> (3 May 2014), p. 1
 44. Revenue Watch, *supra* note 1.
 45. Oil: The Big Drop, Financial Times (3 Feb. 2005), available at <http://www.ft.com/indepth/living-with-cheaper-oil>.
 46. Small Arms Survey, *Pendulum Swings: The Rise and Fall of Insurgent Militias in South Sudan*
 47. (Small Arms Survey, *Human Security Baseline Assessment, Issue Brief No. 22, Geneva, 2013*), 14
 48. See Astill-Brown (2014) 9.
 49. Global Witness Report "Turning the Tide", January 2016
 50. Salva Kiir, remarks at the Tana High Level Forum on Security in Africa, Bahir Dar, Ethiopia, 27 April 2014
 51. Republic of South Sudan, Ministry of Finance and Economic Planning, 2014/2015 third Quarter Macro-Fiscal Report's accessed at <http://bit.ly/1jQxz5F>. SSP to US\$ exchanged at Government rate-2.7 SSP to 1 US\$.
 52. Global Witness Report "Turning the Tide", January 2016
 53. The two reserve funds were initially called for in the transitional Constitution. Articles 76 states: (1) The National Government petroleum revenue shall derive from net oil and gas revenue after payment to the Oil Revenue Stabilization Act and the two percent payment to the oil producing states in accordance with this constitution. (2) An Oil Revenue Stabilization Account shall be established from government oil net revenue derived from actual export sales above as an agreed benchmark price. The benchmark price will be established annually as part of the national budget

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54. Petroleum Management Act 2013, article 14.
55. Ibid, article 15 (1).
56. Ibid, article 13 (5).
57. Ibid, article 14 (4).
58. Ibid, article 15 (4) d.
59. Best practice for the management of state owned petroleum companies can be found in the Natural Resource Governance Index's Natural Resource Charter: The Natural Resource Charter, November 2012, Precept 6.
60. Petroleum Revenue Management Act 2013, Chapter 1, Section IV; Chapter III, Section 10 (1); Chapter VIII, Section 29; Chapter VII, Section 28 (3) respectively.
61. Petroleum Revenue Management Act 2013, Chapter 1, Section 7 (1)
62. Revenue Watch, *supra*, note 1 available at <http://www.revenuewatch.org>
63. United Nations, Office of the Iraq Programme, About the Oil-for-Food Programme, available at <http://www.un.org/Depts/ip/background/>.
64. Revenue Watch, *supra*, note 1 available at <http://www.revenuewatch.org>
65. Global Witness, South Sudan: The Call for a Moratorium on New Oil Contracts (June 2014), available at <http://www.globalwitness.org/library/South-sudan-call-moratorium-new-oil-contracts>

References

- Auty, R .1993. Sustaining Development in the Mineral Economies: The Resource Curse Thesis, London Routledge
- Awolic, A, (2013) South Sudan's Fight against Corruption: Are We Winning? Weekly Review: Sudd Institute.
- Ayittey, G. 2006. "Nigeria's Struggle with Corruption", Testimony Before the Committee on International Relations" Sub-Committee on Africa, Global Human Rights and International Operations House Subcommittee on Africa, U.S. House of Representatives, May 18, Washington, DC.
- Beblawi, H. 1987. The Rentier State in the Arab World; In the Rentier State, ed, Hazem Beblawi and Giacomo Luciani. New York: Croom Helm: 49-62

Resource Curse in South Sudan

- Bellin, E.1994. "The Politics of Profit in Tunisia: Utility of the Rentier Paradigm?" *World Development Journal* 22 (3): 427-436
- Bennett, J.2002. "Multinational Corporation, Social Responsibility and Conflict", *Journal of International Affairs* 55 (2): 393-410
- Bol, M. 2012. "Oil Industry's Social Impact on Land Use. Patterns in Northern Upper Nile State, South Sudan", Presentation on the Occasion of the Workshop in Juba
- Chaudhry, K. 1997. "The price of Wealth: Business and State in labour Remittances and Oil Economies", *International Organizations* 43 (1): 101-145
- Clark, J. 1997. "Petro-Politics in Congo", *Journal of Democracy* 8 (3): 62-76
- Colier, P and Hoeffler, A. 2000. "Greed and Grievance in Civil War", Policy Research Working Paper 2355, The World Bank Development Research Group
- Crystal, J. 1990. *Oil and Politics in the Gulf: Rulers and Merchants in Kuwait and Qatar*. New York: Cambridge University Press
- Deng, D. 2015. *Oil and Sustainable Peace in South Sudan*, A working Paper of South Sudan Law Society.
- D' Agoot, M. 2013. 'Dynamics of Political Risks in Fragile Environments: Lessons from South Sudan'. *Journal of Risks Management*
- De Waal, A "When Kleptocracy Becomes Insolvent: Brute Causes of the Civil War in South Sudan", *African Affairs: 113/452 (2014): 349 (347-369)*
- Dorell, O. 2013. "Corruption at root of South Sudan Violence: Analysts". USA TODAY, 27 Dec. 2013, <http://www.usatoday.com/story/news/world/2013/12/27/south-sudan-government-agreement/4218073> (Accessed on 10th April 2015)
- European Coalition on Oil in Sudan. 2011. "Briefing Note: Instruments to Address South Sudan's Petroleum Legacy Issues", Utrecht: ECOS
- European Coalition on Oil in Sudan. 2006. "Oil Development in Northern Upper Nile, Sudan", Utrecht: ECOS
- European Coalition on Oil in Sudan .2008. "Sudan Oil Industry-Facts and Analysis, Utrecht: ECOS
- First, R. 1980. "Libya: Class and State in an Oil Economy. In *Oil and Class Struggle*, ed. Peter and Terisa Turner. London: Zed Press: pp. 119-142
- Gausa H and Gregory, F. 1994. 'Oil Monarchies: Domestic Security Challenger in Arab Gulf States'. New York. Council on Foreign Relations Press
- Gary, L and Riesch N. 2005. "Chad's Oil: Miracle and Mirage? Following The Money in Africa's Newest Petro-State", Catholic Relief Services (CRS) and Bank Information CBIC).

J.D. Chol

- Grawart, E and Andra, C.2013. "Oil Investment and Conflict in Upper Nile State, South Sudan", BICC Brief 48
- Hickel, J. 2012. "Consulting The Commons: Oil and Development in Post-Independence South Sudan". In Winderquist Karl and Howard, Mike (eds), *Exporting The Alaska Model: Adapting the Permanent Fund Dividend for Reform Around the World*.
- Humphreys, M, Sachs, J and Stiglitz, J .2003. "What is the Problem with Natural Resource Wealth?" In *Escaping The Resource Curse*. New York, Columbia University Press
- Ignatius, D. 2010. "Oil and Politics Mix Suspiciously Well in America". Washington Post, USA
- Kameir, E and Kursany, I. 1995. "Corruption as the 'fifth' factor of production in Sudan, Nordiska Afrika Institute Research Report No. 71, Uppasala.
- Karl, T. 2007. "Oil-Led Development: Social, Political and Economic Consequences", DDRL Working Paper No 80.
- Mahdavy, H. 1970. "The Patterns and Problems of Economic Development in Rentier States: The case of Iran; In *Studies in Economic History of the Middle East*", ed. M. A Cook. London: Oxford University Press: 428-467
- Manby, B .1999. "The Role and Responsibility of Oil Multinationals in Nigeria", *Journal of International Affairs* 53 (1): 281-381
- Mager, A .2013. "Spatial Impacts of Oil Exploration in Melut County, South Sudan. Presentation at BICC in Juba
- Mel, A .2013. "Corruption: The Untold Facts of South Sudan's Dura Scandal <http://www.sudantribune.com/spip.php?article46716> (Accessed on 14th December 2016)
- Ministry of Finance and Economic Planning Budget Booklet 2014/2015
- Morrison, K .2013. "Whither The Resource Curse?" Essay Review, American Political Science Association.
- Moro, L. 2008. "Oil, Conflict and Displacement in Sudan". Unpublished Thesis
- Nadir A. L. Mohammed on Review of Mansour Khalid's Book .1983. "The Government They Deserve: The Role of the Elite in Sudan's Political Evolution", Kegan Paul Publishers: London
- Nield, R.2014. "South Sudan Draws Up War Budget, But Oil Production Targets Unlikely to be reached". *African Arguments*
- Panttulliano, S.2010. "Oil, Land and Conflict: The Decline of Misseriya Pastoralism in Sudan". *Review of African Political Economy*, 37 (123): 7-23.

Resource Curse in South Sudan

- Patey, L.2010. "Crude Days Ahead? Oil and the Resource Curse in Sudan", *African Affairs*, 37 (123): 7-23.
- South Sudan Petroleum Revenue Management Act 2013
<http://www.eisourcebook.org/cms/February%202016/South%20Sudan,%20draft%20Petroleum%20Revenue%20Management%20Bill%202012.pdf> (Accessed on 18th December 2016)
- Ricardo, D.1911. Principles of Political Economy and Taxation. London: J.M. Dent and Sons.
- Ross, M.2013. "The Politics of Resource Curse": *Annual Review of Political Science*, 9: (265-300)
- Ross, M. 2011. "Does Oil Hinder Democracy", *World Politics*, 53: 325-61.
- Ross, M.2009. The Paradoxical Wealth of Nations, Burnside Printers, USA
- Sabuni, A.2015. "Essential Economic Management Reforms in South Sudan", Presentation During Economy Policy Workshop in Juba, May 2015.
- Sach, J and Warner, A.1995. 'Natural Resources Abundance and Economic Growth'. New York Press.
- Shambayati, H.1994."The Rentier State, Interest Groups and The Paradox of Autonomy: State and Business in Turkey and Iran". *Comparative Politics* 26 (3): 307-331
- Skocpol, T. 1982. "Rentier State and Shia Islamic in Iranian Revolution", *Theory and Society* 11: 265-283.
- Smith, A .1991. An Inquiry into Nature and Causes of Wealth of Nations, New York: Prometheus Books
- Sudan Tribune, "Foreign advisor to South Sudan's President flees Juba after disclosure of corruption letter",
<http://www.sudantribune.com/splp.php?article43641> (Accessed on 10th April 2015)
- Sudan Tribune, "SPLA top generals asked by anti-corruption to declare their assets",
<http://www.sudantribune.com/spip.php?article41727> (Accessed on 10th April 2015)
- South Sudan Petroleum Act 2012
<http://www.mpmisouthsudan.org/docs/Petroleum%20Act,%202012%20-%20Signed%20-%20July%206.pdf> (Accessed on 18th January 2017).
- The Nexus of Corruption and Conflict in South Sudan. (Washington, Sentry Report, An Initiative of Enough Project, July 2015)
- Tiitmamer, N.2015. Understanding the Enforcement of Environmental Provisions of Petroleum Act 2012 and Environmental Ruin Continue. Sudd Institute Policy Brief

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- Tornquist, O.1990. 'Rent Capitalism, State and Democracy: A theoretical Proposition in State and Civil Society in Indonesia, ed. Arief Budiman-Monash papers on South East Asia 22: 29-49
- UNDP Human Development Report, 2015
- Vandewalle, D.1998. Libya Since Independence: Oil and State-Building. Ithaca: Cornell University Press
- Volcker, P et al., .2005. "The Management of The United Nations Oil for Food Programme: Vole 1-The Report of the Committee, The Independent Inquiry Committee.
- Yates, D. 1996. The Rentier State in Africa: Oil Rent Dependency and Neo Colonialism in the Republic of Gabon. Trenton: Africa World Press