

The Paradox of Oil

How Oil causes instability: The case of Nigeria

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Introduction

On the night of the 25th of May, a report came in on a huge blast from the Niger Delta area in the south of Nigeria (The Guardian 2016). The following morning, one of the largest producers of global oil, Chevron, confirmed that all their onshore activities had been halted due to a damaged main electricity power line. Claiming responsibility for this attack was the newly formed militant group calling themselves the Niger Delta Avengers (NDA). The apparent instability in Nigeria has once again fallen under the spotlight, with this being part of a string of numerous attacks from the NDA, and the militant group being one of many that are currently and historically active in the Niger Delta. They all have one factor in common: Oil. Another common activity of these militant groups is the blowing up of oil pipelines, with the NDA being responsible for one of the latest instances causing the daily production of Nigerian oil to be reduced from 2.2 million barrels per day to 1.5 million (The Economist 2016). Not only is this damaging for the revenues of multinational oil companies and the Nigerian government, but the subsequent destruction of the environment also has become a major issue. An important reason for writing this thesis is the initially apparent paradox represented by high levels of oil production and relatively low measures of standards of living.

Since crude oil was discovered in the Niger Delta in 1956 and the first oil production site was established in 1958, production of oil has risen dramatically from 5100 barrels a day to 2.43 million barrels a day in 2014 (Adekola, Mitchell & Grainger 49; EIA 2016). At these levels of output, Nigeria has been ranked 13th in the world in terms of the production of barrels per day. An important reason for conducting this thesis is the initially apparent paradox represented by high levels of oil production and relatively low measures of standards of living. The Human Development Index (HDI), a parameter developed by the United Nations (UN) to measure levels of social and economic development, demonstrates that Nigeria ranked 152nd in the world at a score of 0.524 out of 1 (UNDPa 5, 54; UNDPb 161; UNDPc 15).

It seems that the presence of oil in the Niger Delta has not led to the wealth and prosperity one might expect, but instead to a situation of instability. Therefore, this research will revolve around the paradoxical question: *What role does oil assume in the stability of Nigeria, and to what extent?* The role of oil comprises different components entrenched within the local, national and international scopes in which a wide range of stakeholders are involved. To attain a *more comprehensive understanding* of this complex question, it is of importance to gain knowledge from different disciplines that need to be integrated to achieve this. In this thesis, three disciplines will delve into the Nigerian oil issue: Economics (EC), Environmental Studies & Social Geography (ESSG) and Conflict Studies (CS). Each discipline will elaborate on its own definition of stability and will describe the relationship of this stability to oil in Nigeria and the Niger Delta. Chapters 1 to 3 will contain the disciplinary results, leading to the subsequent integration in chapter 4. EC will start off with a broad international scope, slowly narrowing it by continuing with ESSG and CS. In Chapter 4 the disciplinary results are synergized through the appliance of a interdisciplinary thesis as formulated by the integrative model of Repko (2012). Therefore, a redefinition of the concept of stability is made, which enables a complete assessment of the role that oil assumes in the stability of Nigeria. The conclusively apparent instability in Nigeria will be shown to be intertwined with numerous factors from the three different disciplines. These invariably affect one another to such an extent that a *more comprehensive understanding* of the selected issue is made possible.

1 Economics

1.1 Introduction

Oil prices recently plummeted from around 115 USD per barrel (Crude Brent Oil) in June 2014 to a 10-year low of 27.88 USD in January of 2016 (Investing.com 2016). Although prices have seen a reasonable recovery since then, they are currently nowhere near the previous highs. The extensive dependence of the Nigerian economy on oil would logically make the economic stability susceptible to these highly volatile price movements. Among other reasons, oil should assume an essential role in the assessment of economic stability in Nigeria. Which leads us to the main question this chapter will attempt to answer: what role does oil assume in the economic stability of Nigeria, and to what extent? A country's economy is deemed stable when certain requirements are met on a macroeconomic level. This means that constant economic growth, as well as a low and stable inflation rate, are crucial for a country's economic stability (IMF 2016). Ideally, there should be an absence of excessive fluctuations in important macroeconomic elements such as the Gross Domestic Product (GDP), inflation rate and economic growth (Krugman 678). Avoiding excessive volatility in the foreign exchange market and financial market is vital for sustainable trade with other countries, which in turn promotes economic growth and stability for the economy as a whole. In the case of Nigeria, there has been little success in achieving most of these necessary conditions over the past couple of decades (World Bank 2015). A popular theory behind the economic weakness in Nigeria is that of the Resource Curse, which will be used in part to assess economic stability, and further to examine the proposed mechanisms through which resource abundance and subsequent dependence harms economic growth (Sachs & Warner 1999, 10).

To assess whether or not the Resource Curse is a sufficient explanation for the specific case of the Nigerian economy, an analysis of the country's economic performance relative to other countries is necessary. Due to the magnitude of declining oil prices, exposure to volatility in oil prices would currently appear to be the most direct threat to economic stability and sustainable growth. Having said that, corruption and rent-seeking behaviour have found to be significantly correlated with the presence of oil in Nigeria, which theoretically should also have a negative bearing on economic growth (Sala-i-Martin & Subramanian 14). Therefore, it becomes interesting for our research to investigate the current effect of Nigeria's exposure to oil price movement on the country's economic stability, while taking into account the historic rent-seeking behaviour and corruption which have arguably created an unstable financial system in Nigeria due to ineffective fiscal policies. But before we divulge the analytical assessment of economic stability, an economic and theoretical background is supplied to create a better insight into the case of Nigeria.

1.2 Economic and Theoretical Background

Since the discovery of vast oil reserves in 1956 and subsequent exploitation, Nigeria's economic performance has become increasingly dependent on the world demand for oil. Previous to the country's independence in 1960, and subsequent economic transition, the agricultural sector dominated the economy; contributing for about 70 percent to GDP and 90 percent to government revenues (Ukwaba 515). In contrast, the oil industry has almost completely replaced the agricultural sector in terms of government revenue, accounting for about 80 percent in 2014. In 2015 however, oil production was only 15 percent of GDP. In this sense, Nigeria has become what is commonly known as a rentier state. A

rentier state describes a country which has chosen to “rent out” the land it owns to foreign companies in exchange for a share of the revenue that land will produce (Ebohon, p. 203). So although the oil reserves are owned by the Nigerian government, multinational petroleum companies such as Royal Dutch Shell have been licensed to control most of the production and export of Nigerian oil while paying taxes to the Nigerian government. Despite significantly high oil related government revenues, mismanagement of oil wealth has proven to be a likely reason for economic instability. (Ebohon 217). It is not unusual for countries like Nigeria to experience rent seeking behavior as a result of becoming a rentier state (Sachs & Warner 1999, 9). This behavior describes the motivation of all actors within an economy to conglomerate around the potentially large revenue stream originating from the source of rents. Corruption in such cases becomes almost inevitable; as has been the case in Nigeria (Sala-i-Martin & Subramanian 5).

Returning to the theory of the Resource Curse, a country is generally described as suffering from the curse when it experiences three important negative consequences (among others) as a result of substantial resource dependence (Sachs & Warner 2001, 833). In turn, this negatively affects the long-run economic performance of a country which is mainly measured by GDP growth (Sachs & Warner 2001, 827). These consequences are:

- 1) Rent-seeking behaviour and corruption
- 2) Exposure to volatility in commodity prices.
- 3) The Dutch Disease.

The first two factors have been explained, so we turn to concept of the Dutch Disease as is presented by Sachs and Warner. The main assumption of the model is that an economy contains three sectors, of which manufacturing and the natural resource sector are categorized as tradable. The other category consists of non-tradeable goods. Capital and labour are assumed to be used only in manufacturing and the non-tradeable sector. The process of the Dutch Disease comes as a result of positive price shocks of the resource which is in abundance, all tradable goods become more expensive because of an increase in the real exchange rate. This means that the Nigerian currency, the Naira, has become more expensive and effectively raises prices of traded goods for other countries. Subsequently, the non-traded sector becomes more attractive, causing labor to be redistributed from manufacturing to industries producing non-traded goods such as the agricultural sector. Why this is so important in the case of Nigeria is because oil wealth mismanagement has arguably prohibited the development of the manufacturing sector. Maybe to the contrary in the case of the Dutch Disease model, the agricultural sector has arguably also suffered from the production of oil (Ebohon, p. 202). Due to the limitations of the scope of this research, we cannot include the Dutch Disease in our technical analysis. It can however be said that Sala-i-Martin and Subramanian failed to see the relevance of the Dutch Disease with regard to the case of Nigeria.

1.3 Assessing the Resource Curse

Although the Resource Curse is commonly measured on the basis of GDP growth exclusively, an initial assessment of Nigeria’s economic stability will be done on the basis of a variety of economic indicators. Without dwelling too much on the extensively discussed issue of what factors affect economic growth, we argue that economic stability as a whole factor’s into the Resource Curse discussion. Accordingly,

evidence for the Resource Curse is examined after we establish Nigeria’s relative economic strength. For our analysis of the Nigerian economy compared to other countries, specific samples were selected on the basis of their perceived relevance in the case of the Resource Curse. First and foremost, a decision was made to examine certain combinations of economic indicators for each country, which are listed in Table 1. All data was retrieved from the World Bank database.

World Bank Indicator	Relevance
Total natural resources rents (% of GDP)	National revenues derived from natural resources, as a percentage of total GDP. The computation of oil rents as a percentage is to be able to compare with other oil producing countries in the world.
GDP per capita (constant 2005 USD)	To account for the different population sizes per country, as well as adjusted for inflation by taking 2005 as the base year in United States Dollar (USD) terms.
GDP growth (annual %)	This is the primary indicator for examining the Resource Curse in the traditional sense. It can also be used to examine the volatility in growth which is assumed to prohibit sustainable economic stability and growth at higher levels.
Inflation, consumer prices (annual %)	High inflation hurts economic stability and development.
Fuel exports (% of merchandise exports)	Export-led growth has arguably become a primary economic strategy for developing countries since the 1980s (Krugman, 2010, p. 314-316). Somewhat to the contrary, Sachs & Warner claim a negative correlation between exports and growth with regard to the Resource Curse (Sachs, Warner, 1995).

Table 1. World Bank Economic Indicators (Source: <http://data.worldbank.org/>)

Next, a sample of 40 African countries (excluding Nigeria) was taken and divided into two categories based on the level of total natural resource rents (as % of GDP). It should be made clear that this indicator consists of rents derived from oil, natural gas, coal (hard and soft), minerals, and forests. This deviates from the original Resource Curse theory in excluding agriculture in the composition of natural resources. A general separation of resource rich and resource poor countries was made where the former consists of countries where economic rents originating from natural resources are more than 10 percent of their total GDP, while the latter receives less than 10 percent natural resource rents. The justification of comparing Nigeria to other African countries relies on the similarity in economic development since their comparable timing of political and economic independence, and subsequent

liberation from colonialism (Mazrui ed. 776-779). Supplementing that argument is the fact that the available data, starting in 1961, indicates that GDP and inflation figures for Nigeria compared to the two categories showed a remarkable closeness. Due to a lack of data it was not possible to include Sudan, South Sudan, Sao Tome and Principe, Eritrea, Djibouti, Tanzania, Angola and Libya. Sudan, South Sudan and Tanzania deserve special mention in regard to their considerable size regarding populations. On that note, Equatorial Guinea, Seychelles and Gabon were excluded because of the data distortion they caused, which can be partly attributed to their relatively small population sizes.

The formed categories enabled an analysis of the respective GDP per capita averages in relation to Nigeria. What immediately became apparent is the fact that from 1975 onwards, African countries where natural resources are not in abundance have increasingly outperformed resource rich African countries, including Nigeria. Moreover, from 1982 till 2003 Nigeria had 21 consecutive years of slight underperformance relative to African resource rich countries (ARRCs), after which it has slightly outperformed these countries till 2014 (see Figure 1). During this time period Nigerian GDP per capita averaged about 694 USD per year, being about two-thirds of the 1066 USD average GDP per capita of the African resource poor countries (ARPCs) in the continent. Other ARRCs managed to only marginally perform better than Nigeria at 734 USD. Continuing with the same resource-based categories we measured GDP growth and inflation rates. To gain an insight on the GDP growth trends during the past four decades, a moving average of 10 years (MA10) was constructed for Nigeria and the two categories (see Figure 2). This extended the results from the GDP per capita analysis, with an additional indication that ARRCs in general have started to gain on ARPCs since 2004. Nigeria in particular showed a tremendous increase in growth trend from 2000 till 2012, when the trend suddenly reversed to a more 'natural' growth rate of around 6 percent in 2014. These fluctuations in the trend were caused by a sudden surge of GDP growth of 32 percent in 2004. For a measure of volatility, the standard deviation on the MA10 (STDEV10) was taken; which concluded that Nigeria has experienced an above average volatile GDP growth compared to the average volatility of both ARRCs and ARPCs. The volatility trend steadily decreased from 1975 till 2002 when it reached a historic low and dipped below the averages of both ARPCs and ARRCs. The aforementioned spectacular growth in 2004 caused volatility to once again attain relatively high levels. Inflation has undoubtedly been a historic problem for Nigeria, averaging at about 16% annually for the last fifty years with two extreme cases of more than 50 percent in 1988/89 and from 1992 till 1995. The recent inflation rate has been kept relatively stable since 2008, but continues to be higher on average than African countries both rich and poor in natural resources.

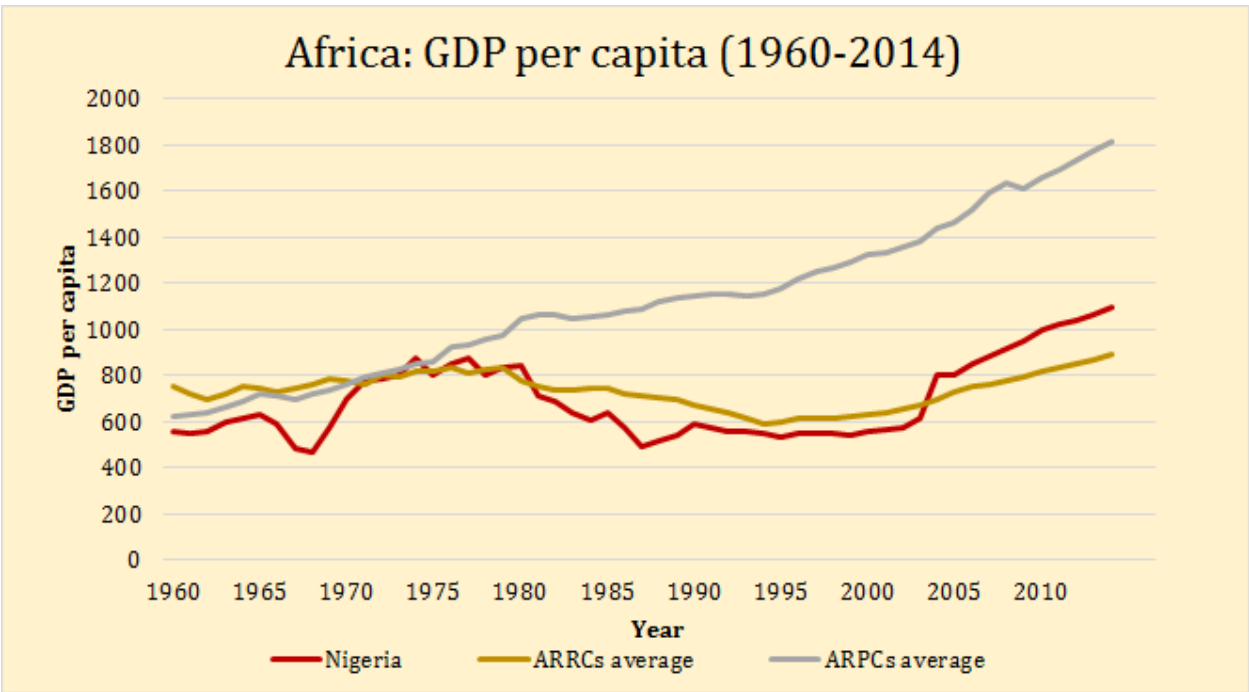


Figure 1: Africa: GDP per capita (1960-2014)

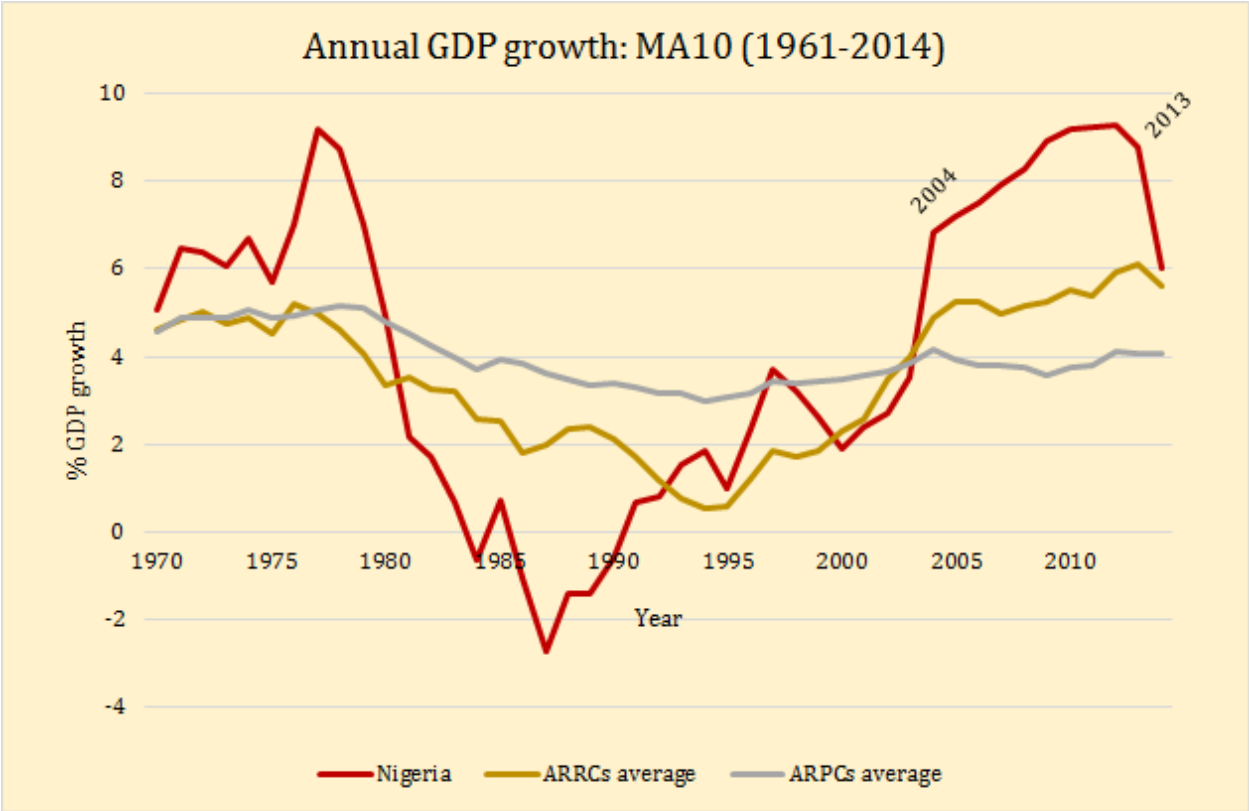


Figure 2: Annual GDP growth: MA10 (1961-2014)

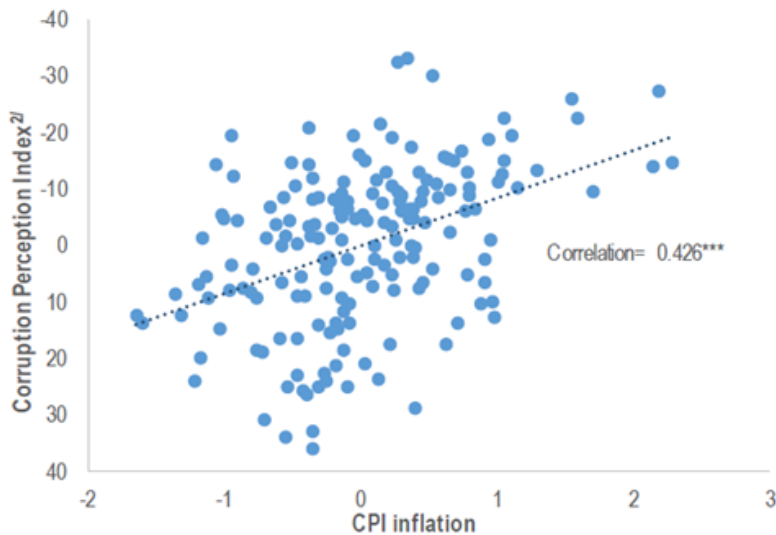


Figure 3: CPI Inflation and Perceived Corruption Index (Average for 1995-2014) Source: IMF staff estimates, Transparency International

There should be a clear distinction between establishing whether Nigeria could be suffering from the Resource Curse and - if so - whether oil dependence explains Nigeria's bad economic performance. For this reason, we initially show that Nigeria's economic performance has been well below average in comparison with other African countries in which natural resources are scarce. In support of the Resource Curse theory, the GDP data we analysed with regard to the economic performance of resource rich African countries suggests that an abundance of natural resources could very well be a curse from an economic point of view. Nigerian GDP per capita has actually started to outperform other ARRCs after a long spell of underperformance, but at the cost of major volatility in growth and a high inflation rate which should have had a negative impact on the economic stability. Inflation does not only influence economic stability directly but also indirectly through the Resource Curse with respect to corruption (see Figure 3. Nigeria appears to be narrowing the disparity with ARRCs. The next step is to examine if relatively bad economic performance is an unavoidable consequence for global oil producing countries; rather than just being a possibility. This might indicate whether Nigeria's economic performance can be traced to nationally inherent oil wealth mismanagement and/or a relatively high level of resource dependence.

The second sample contains developing countries that have a significant level of oil rents as a percentage of GDP. We assume that these countries have a higher likelihood of being victims of the Resource Curse in a similar sense to Nigeria due to their resource dependence with specific regard to oil. There is no necessity for determining if the other countries do in fact suffer from the Resource Curse because we want to compare their ability to manage oil wealth to that of Nigeria. Taking data starting from 1970 we classify oil rich developing countries (ORDCs) as developing countries labeled as such by the IMF (Source) having an average of more than 10 percent in oil rents (% of GDP) over the given time period. These countries all experienced oil exports of at least 30 percent (of total merchandise exports) over the past two decades, putting the 20-year average of the cluster at 76.11 percent. Nigerian fuel exports had an average of 93.63 percent, already alluding to its high dependence

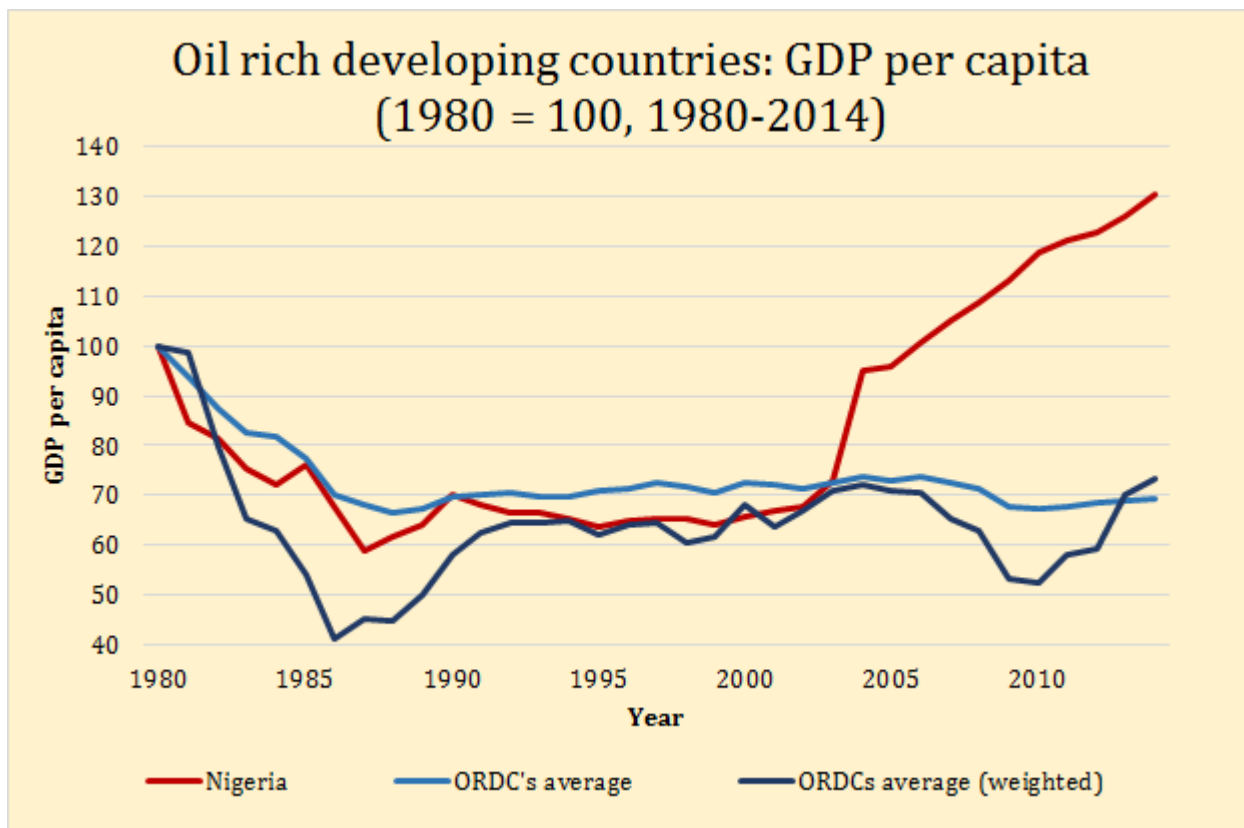


Figure 4: Oil rich developing countries: GDP per capita (1980 = 1980-2014)

on oil exports. Azerbaijan, Iraq, Kazakhstan, Libya, Russia, Syria and Yemen were excluded because of insufficient data. The average GDP capita of ORDCs was just short of 9000 USD, leaving Nigeria's 716 USD at a dramatic low level in comparison. In fact, Nigeria has only managed to narrowly outperform its continental counterparts Chad and Sudan from the total of 15 selected ORDCs. It should be stressed that this disparity is largely determined by historical factors other than resource revenues, in contrast with modern natural resource wealth management. For this reason, the data series was normalised by constructing an index level starting at 100 in 1980. This starting point is of particular interest because of the increasing popularity of trade liberalization that started in the 1980s, coinciding with the data set used by Sachs and Warner in their research (Krugman 314-316; Sachs & Warner 1999, 14). To account for relative sizes of the economies a weighted series was composed; determined by the relative sizes of the national GDPs. Since 1980, Nigeria for the most part has exhibited a trend of GDP per capita coinciding with that of other ORDCs (both weighted and non-weighted). In accordance with the first sample, from 2003 onwards Nigerian GDP per capita started to steadily increase compared to other countries dependent on natural resources (see Figure 4). GDP growth figures confirm that Nigeria has achieved a more effective way of increasing oil revenues than the average oil producing country since 2004.

From the figures above it can be concluded that Nigeria has had a historic problem with natural resource (oil) wealth management similar to countries with comparably structured economies with regard to natural resource (oil) dependence. From 2004 onwards, the country has somehow managed to reverse a trend of relative underperformance to one of outperformance in relation to ARRCs and

ORDCs. For this reason, there should be a unique explanation in the case of the oil-based economy of Nigeria.

1.4 Oil Prices

Remaining within the bounds set by the Resource Curse theory, two substantially plausible reasons emerge for Nigeria’s recent success in promoting economic growth with regard to oil: The expansion of the production of oil (and thus exports) and oil prices. Exposure to volatility in oil prices should present an obvious causal relationship with economic growth, in which the level of correlation is represented by the level of oil production. Once again the use of several economic indicators listed in Table 1 are relevant to investigate the aforementioned claims. We also introduce data on Brent crude oil price (current USD) movement.

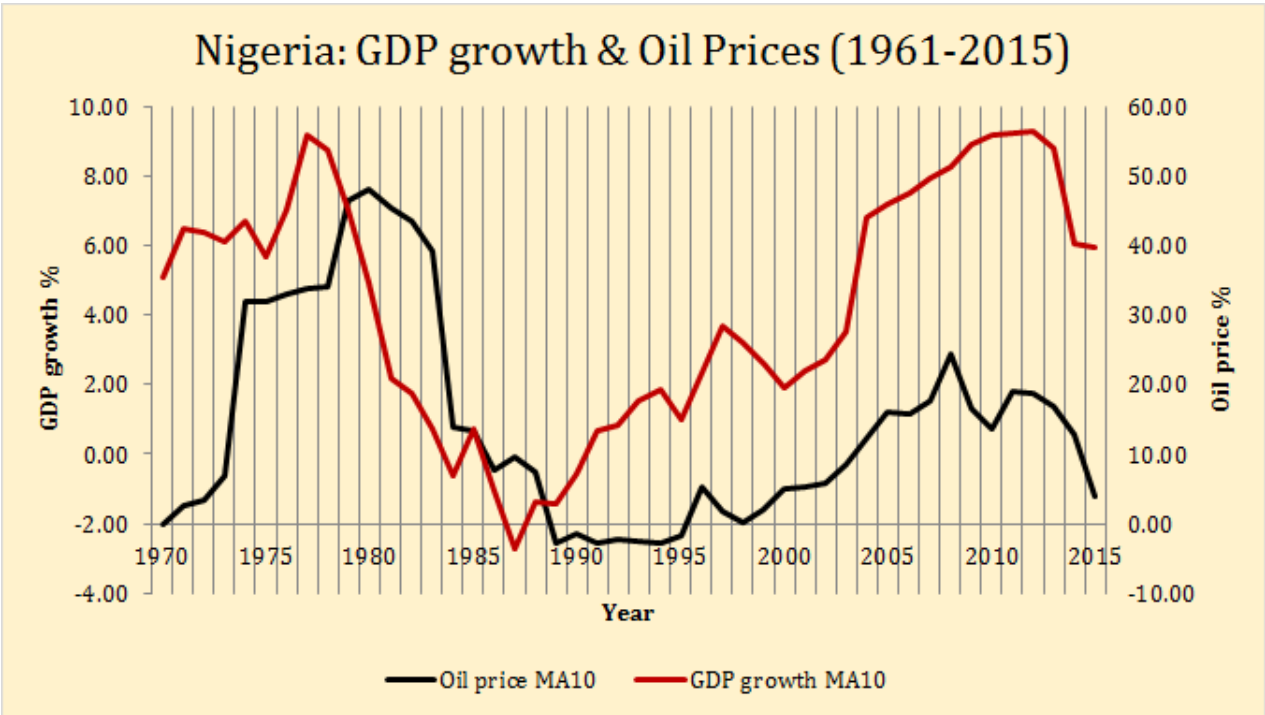


Figure 5: Nigeria: GDP growth & Oil Prices (1961-2015)

Once again, a MA10 was derived from GDP and oil price data to show that historically, the GDP growth trend is extremely similar to the trend of oil price movements (see Figure 5). Prior to 1988, GDP growth appears to lead oil price movements. Because of its counter-logical nature, we examine this relationship more closely. Revenues are always determined by both price and quantity. If the trend in GDP growth cannot be explained by oil price movement, maybe the historical quantities of oil production might shed some light on the matter. Until 1974, Nigeria brought about a massive expansion in its production of oil; increasing fuel exports as a percentage of merchandise exports from 10.3 percent in 1962 to 93 percent in 1974 (1962 is the first year of available data). This is a clear indication of export-led growth with specific regard to oil production expansion. It also offers an explanation as to why GDP growth started its 10-year slump from 1978 onwards, three years before oil prices started to fall. Plunging oil prices further contributed to negative GDP growth in that period of time. Just before GDP growth reversed its downward trend in 1988, oil prices had risen 27.8 percent in the previous year. After 1995, it becomes

clear that the trend of oil prices has led GDP growth in Nigeria. The period after 2008 is of particular interest, with falling oil prices having led GDP growth to a 15-year low. Note that this period contains the global financial crisis of 2008 which was followed by a global recession, making the drop in GDP all the more impressive.

1.5 Conclusion

To seek a better understanding of oil in relation to economic growth, the specific level of natural resource dependence in Nigeria became a crucial factor. Our initial analysis of the Nigerian economy compared to other economies relevant for the analysis, largely confirmed the theory of the Resource Curse presented by both Sachs and Warner and Sala-i-Martin and Subramanian in their respective research. The latter being in specific regard to Nigeria.

The parallel movement of global oil prices and Nigerian GDP growth proved to be the most likely determinant for the country's economic instability. Together with ineffective institutions unable to execute economic policies, this presented a decent explanation for the country's economic instability in which oil assumes a central role. A partial review of the Resource Curse theory revealed that Sala-i-Martin and Subramanian might have neglected to understand the importance of Nigeria's level of oil dependence. Instead of analysing the correlation between economic growth and resource dependence, it must be understood that because of the high level of dependence, Nigeria's economy is highly susceptible to oil price movement. Although the resource curse mentions exposure to volatile commodity prices, a direct analysis of oil prices and GDP growth proved to be quite revealing.

The relatively strong dependence on the production of oil makes Nigeria somewhat of a special case, even within the Resource Curse theory; demanding additional indicators for the measurement of the theory as well as economic and overall stability. This leads to the inclusion of more factors besides corruption, rent-seeking behaviour, exposure to volatile commodity prices and the Dutch Disease, giving a further insight into our original question of what role oil assumes in the stability of Nigeria, and to what extent. It is quite conceivable that this cannot be deduced from assessing economic stability exclusively. If this were the case, one might expect a typical causal relationship of the Resource Curse theory on the stability of Nigeria.

At the moment the general domestic solution for economic instability seems to be the Nigerian Content strategy. It is a strategy that is executed by the government controlled Nigerian National Petroleum Corporation (NNPC) in order to transform the oil and gas industry into the economic engine for job creation and national growth (NNPC 2016). Of course the problem still lies in the reliance on oil prices which currently (2016) are extremely low compared to their peak in 2014.

2. Environmental Sciences & Social Geography

2.1 Introduction

Nigeria's establishment and integration in the global economic system dates as far back as the transatlantic trade. The Niger Delta specifically, has been at the centre of Nigeria's transcending borders with its geo-strategic location in the Gulf of Guinea and strong economic importance (Obi, "Because of Oil" 22). The Delta was historically a lucrative location for slave trade and later for palm oil and other products (Ukeje 22). The historical use of the Niger Delta as an international hub has been reinforced by the discovery of petroleum resources in the second half of the twentieth century (Akpomuvie 200-201). Obi has argued with respect to the Niger Delta that this discovery of oil in 1956 was the trigger to a wave of globalization ("Because of Oil" 24), defined as 'a process of global integration in which diverse peoples, economies, cultures and political processes are increasingly subjected to international influences and people are made aware of the role of these influences in their everyday lives' (Obi, "Globalization" 40). This wave has integrated the region further into the global capitalist system and has been extractive of nature (Obi, "Because of Oil" 24). Since then, local communities have continuously expressed displeasure over the unsustainable manner in which their fragile aquatic environment is being despoiled, while socio-economic opportunities and participation in national and local politics are undermined (Ukeje 16).

The Niger Delta lies atop one of the biggest reserves of crude oil in the world (Saliu, Luqman & Abdullahi 277), however it does not carry the promise of high economic and social growth. A paradox unveils as the huge amounts of revenues coming from the area hardly trickle down to the Delta communities. Instead of becoming an economic area of importance, the Delta has been characterized by chronic environmental degradation, social deprivation, administrative neglect, poverty and loss of cultural significance (UNDPa 9). People of the Delta believe that other regions of the country disproportionately benefit more from oil-revenues while only the Delta communities bear the environmental consequences of oil-exploitation. Environmental degradation and social underdevelopment have resulted in conflict between local communities, oil-companies and the government over resource control and use (Adekola, Mitchell & Grainger 45).

The chronic environmental degradation of the Niger Delta can eventually lead to environmental instability and disrupt traditional livelihoods of Delta communities, thus reinforcing social instability which is fueled by unequal distribution of oil-wealth. In short, it seems like mismanagement of oil-exploitation and oil-revenues have undermined sustainable development, which 'meets the needs of the present generation without compromising the ability of future generations to meet their own needs' (Brundtland 41). Within this framework of sustainable development, environmental stability can be defined as:

'Meeting the resource and services needs of current and future generations without compromising the health of the ecosystems that provide them' (Morelli 5).

And social stability as:

'[...] when the formal and informal processes, systems, structures and relationships actively support the capacity of current and future generations to create healthy and liveable communities' (Mckenzie 18).

As there are inseparable linkages between healthy ecosystems and human well-being (Adekola & Mitchell 59), a link can be identified between environmental degradation and environmental and social stability. However, a proper definition of socio-environmental sustainability is lacking. Therefore, by using the framework of sustainable development and the aforementioned definitions of stability by Morelli and McKenzie, this paper will use a fused definition of socio-environmental stability:

'Socio-environmental stability occurs when the formal and informal processes, systems, structures, relationships, natural resource and services needs actively support the capacity of current and future generations to create liveable communities, without compromising the health of the ecosystems that provide them.'

In order to assess what role oil assumes in the stability of Nigeria, and to what extent, from the disciplinary perspective of environmental sciences and social geography, we will first look at the main characteristics of the Niger Delta. Secondly, the environmental effects of oil-exploration and exploitation activities on wetlands will be elaborated upon. The effects of environmental degradation on ecosystem services will then be analysed and with it the effects on human well-being. To understand this relationship, a framework set up in the Millennium Ecosystem Assessment report (2005) will be used, which will be edited with respect to the Niger Delta case study. Herein, the interconnectedness of healthy natural systems and human well-being brings us to describe a reinforcing loop.

2.2 The Niger Delta: geography, people and natural environment

The Niger Delta region is located in the south of Nigeria and in the lower courses of the Niger/Benue river (Adekola, Mitchell & Grainge 43). The region can geographically be defined in several ways. This thesis uses a broad definition which includes all oil producing areas. This land area is 75,000 square kilometers and consists of nine states (Figure 6) (UNDPa 19). The region is largely rural and inhabited by approximately 32 million people that are ethnically diverse and traditionally dependent on local economic structures such as farming, trade and fishing (Francis, Lapin & Rossiasco 10; Ibaba, Okechukwu & Ukiwo 8; NDDC 53; Omokaro 20). The current situation demonstrates a gloomy picture as social services¹ (education, health, recreation, etc.) and physical infrastructure² (roads, electricity, water, sewers, etc.) in the region are either poor or completely absent (UNDPa 112).

¹ Reflected in e.g. impoverished school facilities (one primary school per 3700 people) and few public health care facilities (one health care facility for every 9,805 people) (Francis, Lapin & Rossiasco 10; UNDPa 32).

² Reflected in e.g. the 76 to 80% of the population that do not have access to safe drinking water and that 34% that has access to a sporadic supply of electric power (Francis, Lapin, and Rossiasco 10).

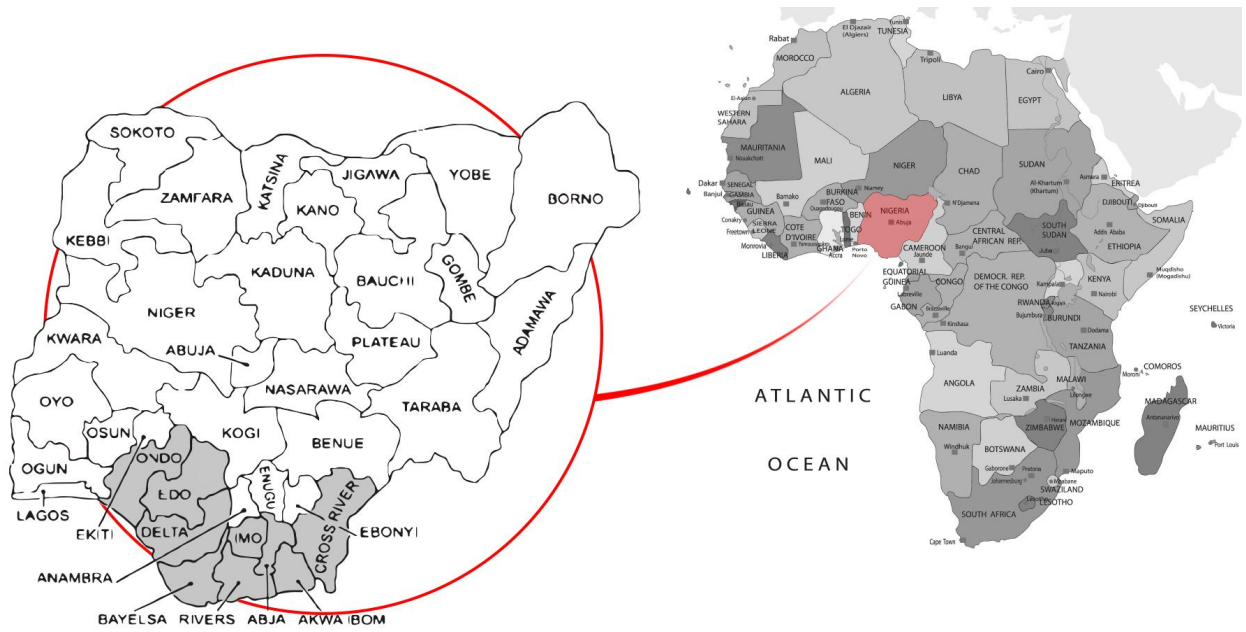


Figure 6. Nigeria and the Niger Delta (indicated in grey) (Edited from Adekola & Mitchell 52)

Another characteristic of the Niger Delta is its diverse flora and fauna and high terrestrial and aquatic biodiversity (Kuenzer et al. 354). The Delta is considered the third largest wetland in the world and the largest river Delta and mangrove ecosystem in Africa (Adekola, Mitchell & Grainger 43). The region is divided into a number of different ecological zones. The Niger Delta Development Commission (NDDC) defines five ecological zones on the basis of vegetation (Figure 7)(NDDC 59-64), and shows the complexity and fragility of this mosaic of different ecological zones (Adekola & Mitchell 51-52).

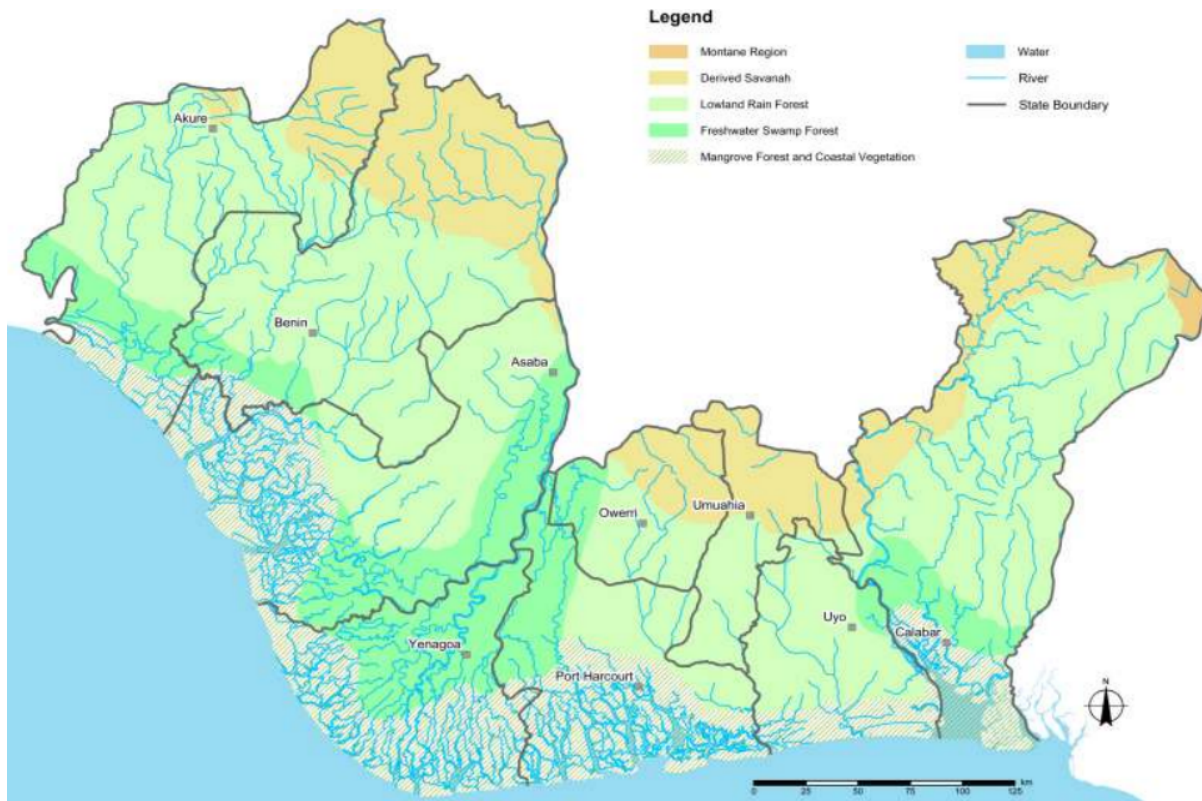


Figure 7. The Ecological Zones of the Niger Delta Region by the NDDC (NDDC 64).

2.3 Environmental degradation in the Niger Delta

The Niger Delta is a fragile environment that is sensitive to resource exploitation, and therefore has become highly stressed and degraded (Adekola & Mitchell 57). To start with, oil-exploration is done by seismic companies who use technology to detect and determine the extent of the deposits. The process involves removing any patch of vegetation for oil-infrastructure and dynamiting blasting. The blowout of dynamite in an aquatic environment such as the Niger Delta produces a narcotic effect and increases mortality of fish and other faunal organisms. Furthermore, destabilization of sedimentary materials associated with dynamite shootings cause, amongst others, a reduction of photosynthetic activity due to reduced light penetration (Adekola & Mitchell 57). Land reclamation by government agencies and oil-multinationals (OMN's) are nevertheless enforced to create space and construct canals to shorten travel time and improve access to oil-fields. This caused saltwater to flow into freshwater zones, destroying freshwater ecological systems. Dredging, which relocates underwater sediments and soils, is used herein too and causes physico-chemical changes of water in the Delta. This causes water degradation and harm to other marine animals as well as poor health amongst local residents (Adekola & Mitchell 58; Okonkwo, Kumar & Taylor 453; UNDPa. 76). Furthermore, chemical discharges occur during the early stages of oil-exploitation by drilling chemicals, muds and salt-solutions that are used to stimulate production (Bayode, Adewunmi & Odunwole 112; Ugboma 80).

Nevertheless, a more prominent problem that cause large-scale damage is oil-spillages. Nigeria has the highest number of oil-spill incidents in the world and these incidents occur routinely in the Niger Delta (Figure 8)(Adekola & Mitchell 59; Saliu et al. 279). Records show that between 1976 and 2001, a total of 6.817 oil spills occurred with a loss of approximately three million barrels of oil, of

which 70 percent was not recovered (UNDPa 76). According to more recent data provided by the National Oil Spill Detection and Response Agency (NOSDRA), 10,321 spills and other incidents have been reported from January 2006 to May 2016 (Figure 10) (Nigerian Oil Spill Monitor 2016). Figure 10 shows the wetland area of the Niger Delta, and demonstrates that most of the recent spills and incidents occurred within wetlands. Not only is this problematic for their importance as biodiversity hotspots, but also for their social, cultural and economic value and vital role for livelihood security (Adekola & Mitchell 50; James et al. 312).

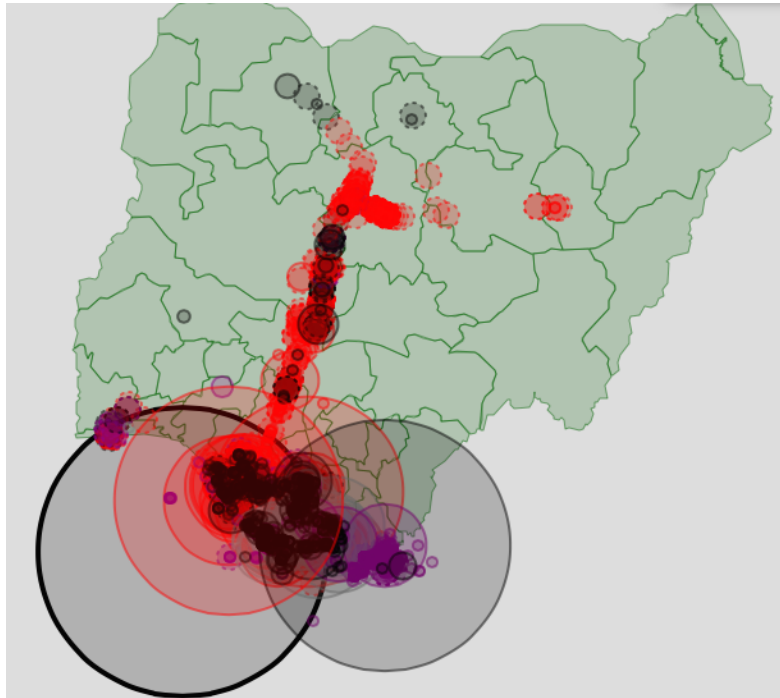


Figure 8. Map of Nigeria: Oil spill locations (Nigerian Oil Spill Monitor 2016)

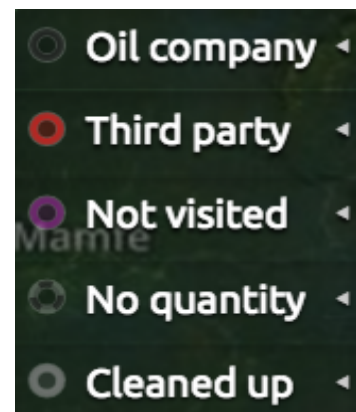


Figure 9. Legend for map (Nigerian Oil Spill Monitor 2016)

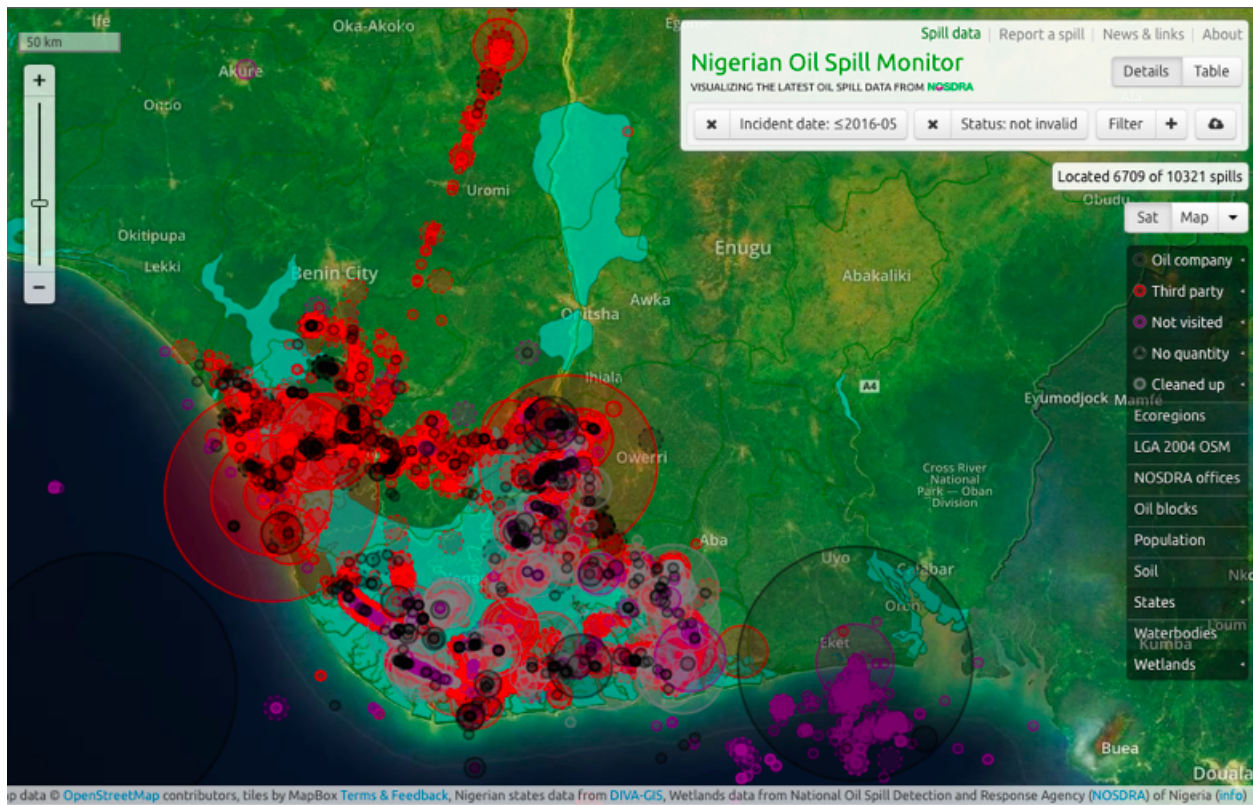


Figure 10. Map of the Niger Delta: Oil spill locations and wetlands (Nigerian Oil Spill Monitor 2016)

Oil-spills have multiple causes that include equipment failure, corrosion of pipelines and storage tanks, human error, accidents in oil operations and sabotage (Emoyan, Akpoborie & Akporhonor 31; Ibaba, Okechukwu & Ukiwo. 7). When large quantities of oil come in contact with soil, physical and chemical properties are altered and cause chemicals to remain in the soil for decades. This leads to toxicity, lower soil quality, destruction of microorganisms and long-term soil infertility, which makes the soil itself a source of pollution. Contaminated soil, in turn, affects the health of organisms by direct contact or indirectly via inhalation of soil contaminants that have evaporated (Inoni, Omotor & Adun 42; Kadafa 24; UNEP 37). As soil becomes less fertile and nutrients essential to plant growth become scarce, it could lead to retardation of vegetation growth and destruction of vegetation (Adekola & Mitchell 57; Bayode, Adewunmi & Odunwole 113). This has several detrimental effects such as food-insecurity for animals, disruption of the capacity for air purification of trees and coastal erosion due to the loss of roots (Asimiea & Omokhua 125). As soil becomes a reservoir of residual pollution it does not only release contaminants in the air, but also into groundwater over an extended period of time as it trickles down. It still releases contaminants even if the original source of pollution has been removed (UNEP 37). This means that oil spills on land can indirectly cause damage to water. Direct effects of leaked oil on water are visible by oil-film floating on the water surface. This blocks natural aeration, which leads to pollution of freshwater and death of marine life (Kadafa 24; UNEP 38). Oil-exploitation has several by-products that cause environmental degradation as well, such as liquid and solid wastes that contaminate groundwater (UNDPa 88), and the burning of natural gas (gas flaring) which produces noise-, air- and thermal pollution as well as acid rain (Ugboma 78; UNDPa 79).

2.4 Impact of oil-exploration and exploitation on ecosystem-services

The demonstrated effects of oil-exploitation and exploration activities have had severe impacts on goods and services that the ecosystems offer to people and their human well-being. These are called ecosystem services and consist of provisioning (e.g. food and fresh water), regulating (e.g. water-climate- and natural hazard regulation), cultural (e.g. spiritual and recreational functions) and supporting services (e.g. soil formation) (Table 2) (Adekola & Mitchell 53; Millennium Ecosystem Assessment V). Due to the limited length of this thesis, this section will only analyse a selection of impacts resulting from environmental degradation. A collection of other impacts are summarized in Figure 11, which is the framework used in the Millennium Ecosystem Assessment and can be found below. As mentioned before, it has been adopted in this thesis to show how environmental degradation is degrading ecosystem services and reduces human well-being, which will be discussed later (Figure 11).

General Ecosystem Services ^a	Niger Delta Ecosystem Services ^a
Provisioning	
Food	Agricultural and tree crops: cassava, yam, cocoyam, rice, maize, ogbono, cocoa, etc. (World Bank 1995; Umoh 2008; Omofonmwan and Odia 2009)
Fresh water	Fish and other aquatic food such as barnacles, crabs and other invertebrates (Nwadiaro 1984; Fentiman 1996; Davies et al. 2009)
Fibre & Fuel	Timber products: saw logs, transmission poles, bamboo, building poles, fuelwood and chewing sticks (World Bank 1995; NDDC 2006; Alogoa 2005; McGinley 2008)
Biochemical	Aquatic insects (Arimoro and Ikomi 2009)
Genetic Materials	Medicinal species (Ndukwu and Ben-Nwadibia (2005)
Other products	Bushmeat (Luiselli 2003; Luiselli et al. 2006) & Other products including raffia, snail, spices, mangrove salts, reeds and sedge (World Bank 1995; UNDP 2006)
Regulating	
Climate regulation	Provides a good sink for greenhouse gases of CO ₂ and CH ₄ (Brooks et al. 2000)
Water regulation (hydrological flows)	Provides buffer against natural disaster including coastal erosion and regulates flood (Cugusi and Piccarozzi 2009; Sanford 2009)
Water purification & Waste treatment	Regulates water movement, quality and volume (Abam 2001; Uluocha and Okeke 2004)
Erosion regulation	Habitat for pollinators (Dupont et al. 2000)
Natural hazard regulation	Natural attenuation (Benka-Coker and Ekundayo 1995; Abu and Dike 2008)
Cultural	
Spiritual & Inspirational	Source of spiritual inspiration (Isichei 1982)
Recreational & Tourism	Site for fishing festivals (Jonathan 2006)
Aesthetic	Spiritual and sacred sites (Anderson and Peek 2002; Bisina 2006)
Educational	Vast biodiversity (indicative of tourism) (World Bank 1995; Ebeku 2004)
Supporting	
Soil formation	Supports Delta's biodiversity (Ejechi 2003)
Nutrient cycling	Soils support nitrogen mineralisation (Iwegbue et al. 2006)

Notes: A. Based on MEA (2005), Edited from Adekola and Mitchell (2011) and Okonkwo and Taylor (2015)
B. Some Niger Delta wetlands ecosystem services, such as sacred sites, are little known and subject to ongoing research.

Table 2. Major ecosystem services provided by or derived from Niger Delta wetlands

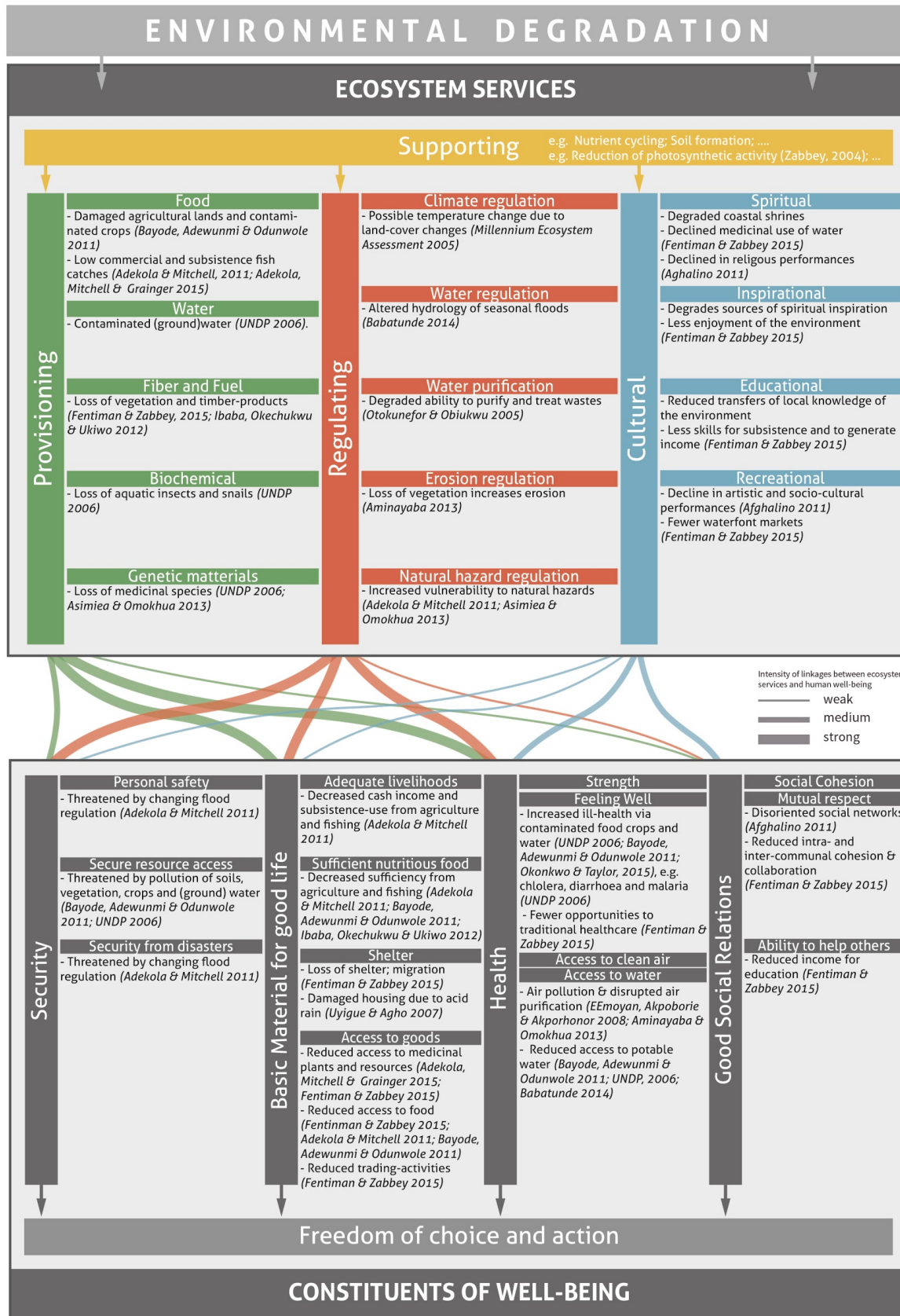


Figure 11. Niger Delta Ecosystem Services and Human Well-Being within the Millennium Ecosystem Assessment (MEA)

framework (indicating impacts of environmental degradation and significant linkages)

Note: Supporting services are linked to other ecosystem services as it underpins their function

Oil-exploration and exploitation activities have affected ecosystem services in several ways. Firstly, degraded provisioning services result in a decline of food, fish and fresh water due to pollution which deny communities a source of income, subsistence, trade and medicinal ingredients (Adekola & Mitchell 59; Adekola, Mitchell & Grainger 47; Bayode, Adewunmi & Odunwole 116-117; UNDPa 9). This is also detrimental for the local economy that is largely based on farming, trade and fishing and thus constitute the main sources of livelihood in the region (Ibaba, Okechukwu & Ukiwo 8; UNDPa 134). Secondly, regulating services are altered because of pollution, changes in land cover and loss of vegetation. These result in the degraded ability to purify water and treat wastes, altered hydrology of seasonal floods, altered temperature and precipitation, increased erosion and vulnerability to natural hazards (Adekola & Mitchell 55; Asimiea & Omokhua 15; Babatunde 78; Otokunefor & Obiukwu 61). Thirdly, cultural services that are not as visible as others are the spiritual, inspirational, educational and recreational functions (Adekola & Mitchell 55). The Niger Delta population are predominantly animist and attach cultural values to local flora and fauna (Adekola, Mitchell & Grainger 43). Fentiman and Zabbey have researched the impacts of cultural services, on which little is known and is subject to ongoing research. They found that environmental degradation has resulted in cultural erosion and loss of intra- and inter-communal cohesion, creating a sense of despair among parents for the future of their children (615-614), and ultimately distorting indigenous cultural practices (Aghalino 8). Lastly, supporting services that are necessary for all other ecosystem services, differ from other services as their impacts on people are often indirect or occur over a very long time (Millennium Ecosystem Assessment 40). Photosynthesis for example, which produces oxygen for living beings, is negatively affected by oil-spillages. This results in a reduction of photosynthetic activity due to reduced light penetration (Zabbey 6) and thus leads to reduced plant photosynthetic activity and degraded (food)provisioning services (Adekola & Mitchell 56, 61).

In short, environmental degradation has affected the ability of ecosystems to deliver their services to humans. It thus results in the derangement of environmental stability as the health of ecosystems are degraded by environmental degradation, thus complicating resource and services needs of current and future generations. The demonstrated interlinkages of a degraded environment and degraded ecosystem services trickle down to human well-being and social stability as will be discussed in the following section.

2.5 Impact of oil-exploration and extraction on human well-being

Oil-exploration and exploitation activities have thus far shown to cause environmental degradation and the subsequent degradation of ecosystem services on which nearly 60 per cent of the Delta population depends on for their livelihood (UNDPa 74). It is not surprising then that this development causes harm to human well-being. Figure 11 shows how environmental degradation influences ecosystem services and human well-being. Here, human well-being is divided in four components; security, basic materials for good life, health and good social relations. Security is seen in terms of personal safety, secure resource access and security from disasters. Health is seen as the ability of an individual to feel well(nourished), be disease-free and to have access to clean drinking water and air. Basic materials for a good life is regarded as the ability to have a secure and adequate livelihood (e.g. income and assets), enough food and water at all times, shelter, and access to goods (Millennium Ecosystem Assessment 49-

52). Lastly, the meaning of good social relationships is the presence of social cohesion, mutual respect and the ability to help others and provide for children.

Figure 11 demonstrates how all four constituents of well-being are threatened or deteriorated as a result of environmental degradation and degradation of ecosystem services. A lack of social stability is therefore of occurrence as water-, soil- and air-pollution have resulted in a lack of access to clean water and air, secure resource access (e.g. crops and fresh water), shelter (e.g. forced migration), social cohesion and degraded possibilities for adequate livelihoods (e.g. decreased cash-income and subsistence use) (Figure 11). The negative impacts of a degraded environment and ecosystem services consequently mean that 'freedom of choice and action' can not be met. It refers to the opportunity to be able to achieve what an individual values doing and being (Millennium Ecosystem Assessment 50). Instead, poverty in the Niger Delta has become a way of life due to economic stagnation; agricultural underdevelopment from soil-infertility; unemployment; poor quality of life due to shortages of essential goods, facilities and money; government insensitivity and an unhealthy environment spreading disease and malnutrition (UNDPa 36).

The absence of reliable livelihoods has led to social instability and has also meant high unemployment rates for youth (40 percent in 2011), many of whom turn to violence. Unceasing oil-spillages, pollution and minimal government assistance have uprooted youths out of a once fertile farmstead. Traditional occupations such as fishing, farming and crafts are have become unattractive because of weak earnings relative to the oil sector. Unemployment rates have become a driver of conflict as 62 percent of the population in the region are below 30 years old (NDYRA 3; UNDPa 37). Thus, years of environmental degradation and unemployment have led to a sense of hopelessness, discouraging future prospects and thus disarranging freedom of choice and action (Fentiman & Zabbey 621-622). The alternative to unemployment and a lack of income is to join militant groups that provide resemblance to adequate livelihoods and social protection (NDYRA 15). Multiple cases have shown that unemployed youth have been recruited into armed groups waging systematic campaigns against the oil industry and the military to further their demands. This has helped to drive and sustain violence and criminality throughout the Delta region as local unemployed youth take advantage of the chaotic situation to illegally divert oil revenues and engage in oil theft³ (Francis, Lapin & Rossiasco 2).

Young people have expressed their inability to provide for themselves as the result of being an oppressed group, namely residents of an oil-deprived Niger Delta. Even though some have urged for a non-violent solution, others stated that militancy is a logical consequence if oil companies and the government continue to deny them some form of compensation (NDYRA 15-16). Therefore, armed groups have pressured oil-companies by means of sabotage. Sabotage is a result of rent-seeking youth that are attracted to quick money from oil operations in the form of standby money, hostage-taking or as a means of venting anger on oil producing companies (Bayode, Adewunmi & Odunwole 120). Illegal refineries and attempts to fight back have aggravated the environmental challenges, such as when sabotage results in more pollution (UNDPa 3). Thus, countermovements in forms of pipeline bombings, sabotage or illegal refineries, fighting multinationals and unequal wealth distribution generates a reinforcing loop of stagnating well-being and development. This is because any damage to the environment is damage to oneself (Bayode, Adewunmi & Odunwole 120). The reinforcing loop does not limit itself to the environment and human well-being, but also in violence and conflict. Failure of the

³ An estimation of 70,000 to 300,000 barrels per day (up to 12 percent or more of average daily oil production) are lost to the illegal oil trade (Francis Lapin & Rossiasco 57).

government on requiring companies to adopt corporate social responsibility and ensuring a proper legal and social environment for peaceful conflict resolution has led to uproar of violence. In addition, (peaceful) protests or clashes with communities are sometimes handled by forces hired by oil-companies. Force is commonly used herein and results in secondary conflicts that tend to run their own course. Military interventions as a result of restive youth or protests further aggravate the situation. Ijaw (ethnic group) towns for example have been indiscriminately bombarded whenever youths have taken hostages, aggravating youths even more as innocent citizens suffer along (UNDPa 123). In short, as a result of environmental degradation and degraded ecosystem services, social stability is denied as the previously described social systems, structures and relationships do not support healthy and liveable communities.

2.6 Conclusion

Several decades since the rise of the global oil-industry in the Niger Delta, communities are left holding the shorter end of the stick. Farmlands and fishing grounds have been damaged, traditional economic and cultural practices are no longer viable, social interaction has been adversely affected and a sense of hopelessness is prevalent among others. Oil-exploration and exploitation activities have resulted in a degraded environment and ecosystem services that are central to local livelihoods, which have made traditional livelihoods unattractive for youths and harmed human well-being. Hence, this has inflamed tensions, protests and violent resistance against resource-exploitation and unequal distribution of oil-wealth. In short, oil-exploration and exploitation activities have played a major role in thwarting socio-environmental stability in the Niger Delta.

Against the background of growing poverty and stagnation of human livelihoods in the region, the Niger Delta can be defined as a globalized site of oil production. The local site of global oil production continues to integrate into the global economy, leading to skewed relations between local, national and global actors. The negative impacts of oil-production on the environment, ecosystem services and human well-being in the Delta has crippled possibilities for sustainable development and exacerbated conditions for violence.

3 Conflict Studies

3.1 Introduction

'We are using [this] medium to warn and condemn the activities of all brands of social media agitators being peddled around by some politicians to promote their criminal ways in affairs of the Niger Delta. This genuine spirit behind our struggle for the Niger Delta cannot be derailed on the basis of connivance by politician, traditional rulers, settled ex-agitators and criminals moving around to fill their pockets (...) Finally, if need be we may review our earlier stance of not taking lives. We are going to redirect and reactivate all our activities if the government, oil companies and their services firms don't heed to these modest warnings' (Brig. Gen Mudoch Agbinibo).

This an excerpt of a 'press statement' from a militant group in the Niger Delta, located in the south of Nigeria, called the 'Niger Delta Avengers' (NDA). Their website is full of accusations and threats towards the government and oil multinationals (OMN's) and exemplifies the reasoning of many armed groups in the Niger Delta. This area hosts a resource conflict in which various actors compete over oil revenues. The NDA for example, carry out bombings on oil wells and pipelines which are owned by several international oil companies such as Chevron, Shell and Agip (Ikelegbe 218). Oil theft is also problematic in the region, with estimates of the Nigerian Economic Summit Group pointing towards a daily theft of around 100.000 barrels a day in 2003, which equals about USD 2.8 million (Ikelegbe 209). Partly in consequent, Nigeria currently has the lowest oil production in 20 years (Volkskrant, May 28, 2016). Another paramilitary group, called 'Movement for the Emancipation of the Niger Delta' (MEND), emerged in 2005. MEND identifies itself as 'a guerrilla movement whose decisions like fighters are fluid', and demand ransom money and the demilitarization of the Niger Delta and compensation from Shell, 'covering four decades of environmental degradation' (Watts 646). MEND has vandalized several pipelines and abducted oil workers (Watts 637). These examples imply that oil and violence in the Niger Delta go hand-in-hand.

This chapter will analyse what role oil assumes in the stability of Nigeria, and to what extent from the disciplinary perspective of Conflict Studies (CS). Therefore, it is of importance to elaborate on the definition of 'stability' that will be used. CS is a multidisciplinary field in which 'stability' is not clearly defined. When the dictionary for Social Sciences is consulted, 'stability' is not included, suggesting that it is not considered as a term that needs explanation (Mitchell, 'A new dictionary'). Generally, having a stable situation within Conflict Studies means to have sustainable peace. As a clarification, this chapter will deem a situation to be stable when *there are no perceived reasons to use violence in order to attain one's goals*. 'One' can be anyone within the region: armed groups or individuals who are not (yet) part of rebel groups. Mentally ill people are excluded herein.

A survey conducted in the Niger Delta has shown that a little over 36% of the people 'revealed a willingness or propensity to take up arms against the state' (Watts 640). Deriving from this statement and the outlined examples, one could hypothesise a relation between oil and instability in the Niger Delta. The Resource Curse hypothesis claims that an 'abundance in natural resources, particularly oil, encourages especially civil war', since it provides motive and finance for violence (Autesserre 11; Basedau & Lay 757; Collier 2007a, 21, 39). To understand this relationship, the link between oil and

motivations for mobilisation for collective action should be analysed. This link has caused an extensive debate, which will hereafter be outlined and applied to the Niger Delta case. In order to do so, this chapter is divided into three parts. Firstly, it is argued that the existence of oil in the Niger Delta is causing grievance, which is the main driver for mobilisation. Secondly, and in opposition to the grievance argument, it is argued that the main mobilisation tool is greed. The third section will argue that these motivations are intertwined and they coexist and will thus advocate for a simultaneous acceptance of both arguments.

This chapter is well aware of the given criticism on the Resource Curse. Watts for example has criticized the Resource Curse of 'commodity determinism' (642, 648) which implies that the causality between oil and violence is too easily accepted. Wegenast and Basedau argue that although natural resources are a main causal factor for the emergence of conflict, the Niger Delta conflict could also be described as ethnic (438). However, this research is designed to analyse the effects of the existence of oil in the Delta, therefore this section will take the hypothesis as a starting point. This section does acknowledge that factors other than oil - such as ethnicity or religion - might be equally important for the proneness of conflict to emerge.

3.2 Grievance

In this section it is argued that the existence of oil in the Niger Delta is causing grievance, which functions as the main motivation for its inhabitants to mobilise for violent collective action. Grievance can be described as feelings of resentment and deprivation people have, that are caused by external factors over which they have little or no influence. In the Niger Delta, the so-called 'grievance' arguments are based on several issues: the influence of the weak state, the consequences of state repression, marginalisation and influence of ethnicity. These arguments will be analysed in the stated order.

3.2.1 Weak state

Firstly, there is the often-quoted relationship between the weak state and emergence of grievances as a basis for mobilisation. Weak state is defined as 'the lack of willingness or capacity [of state institutions] to perform core state functions in the fields of security, representation and welfare' (Boege et al. 16). Nigeria is regularly quoted as the prime example for the weak state, which is mainly caused by 'rent-seeking behaviour' (Ikelegbe 208; Omeje 322). It works as follows: the government of Nigeria is highly dependent on international oil companies to produce oil revenue (Omeje 325). This '[...] causes the state largely to sacrifice the well-being of the populace in policy making and governance in preference to the interests of international capital' (Omeje 322). In other words, there is a so-called 'hegemonic alliance' between the government of Nigeria and the oil companies, in which the interests of the latter are perceived as being paramount to the interests of the Nigerian state and its inhabitants (Omeje 323, 325). In addition to this misrepresentation, the government of Nigeria is highly corrupt and patrimonial, leading to increased inequality (Basedau & Lay 757, 762; Gore & Pratten 213; Ikelegbe 208; Omeje 325; Oyefusi 329; Ukiwo 2007 589; Watts 642).

In the Niger Delta, there are several consequences of the 'weak state' mechanism. The aforementioned factors of the weak state, such as misrepresentation, oil mismanagement and corruption, have created a strong sense of inequality, exclusion and grievance among citizens of the Delta (Gore & Pratten 240; Koos 5; Oyefusi 329). There is no confidence in the capability of the

government to provide basic services such as protection, which implies that citizens must mobilise to protect themselves (Gore & Pratten 232). One example of such mobilisation is the so-called 'Ibom Allied Congress' (IAC), a group securing the property, rights and resource of Akwa Ibom State in the Niger Delta (Gore & Pratten 238). By taking over the task of the government to provide security, the IAC forms a so-called 'shadow structure' or 'parallel state' (Gore & Pratten 240; Kilcullen 5). This shows a lack in the capability of the government to represent the locals, which is a result of the 'hegemonic alliance' that is in favour of oil companies (Omeje 325). The population of the Niger Delta broadly supports this narrative on the hegemonic alliance or misrepresentation. As one Niger Delta civil group activist argued, '[...] it is well known that any time things go wrong in the oil producing area, soldiers are sent in and they are never on the side of the people, but to protect oil' (Omeje 329). Some even argue that the Nigerian government has no power at all, like Nigerian human rights activist Oronto Douglas. He states that 'Nigeria (...) continues to be governed by multinational companies (...) [who] actually dictate in which direction the country should go (Omeje 325). Both the hegemonic alliance and corruption have been quoted as main grievance causing factors (Omeje 323).

In short, Nigeria is a weak state as it lacks both willingness and capability to perform core state functions. There is a misrepresentation or hegemonic alliance since the government prioritizes the interests of external oil companies over the interests of the locals in the Niger Delta. Furthermore, the government is highly corrupt and unable to provide security services to the locals. The consequence of the weak state mechanism is that inhabitants of the Niger Delta are aggrieved, due to distrust towards the government. This grievance functions as a major recruitment tool to join violent collective action.

3.2.2 State repression

State repression is the second factor that causes grievance amongst the inhabitants of the Niger Delta. Due to the weak state mechanism, there is a lack of security provision by the state. Parallel structures in the form of militias and rebel groups come into existence in order to, amongst others, provide security. Hereby, the government loses its monopoly on violence. In an attempt to regain this monopoly, the Nigerian state uses repression and indiscriminate violence against civilians (Basedau & Lay 757; Ejobowah 38; Gore & Pratten 213; Ikelegbe 208; Kalyvas 142; Koos 8, Omeje 329; Watts 639; Wegenast & Basedau 434). This tactic is called a 'force for force policy', which is a performance of governmental power but inevitably causes civilian casualties (Mason 88; Kalyvas 142; O'Neill 25; Leenders & Heydemann 142; Watts 639). Another inconvenient side effect is that state repression leads to increased grievances among the population. 'The Niger Delta oil conflict is no doubt greatly exacerbated by the state's excessive reliance on military reprisals against anti-oil protesters, ethnic militias and the oil-bearing communities in the region' (Omeje 329). As was stated before, a little over 36 percent of the Niger Delta population has indicated to have a willingness to mobilise for violent collective action against the state (Watts 640). Due to the 'hegemonic alliance' narrative, the wrongdoings of the state and of oil companies are perceived as two sides of the same coin (Omeje 328). There have been many accusations of corporate mismanagement: OMN's would have caused environmental degradation and corruption and are accused of bribing local elites and arming local youths to provide protection (Ejobowah 38; Ikelegbe 209; Watts 653). Corporate mismanagement has led to more grievance, which was expressed by an increase in violent paramilitary activities such as hostage taking of oil company employees and pipeline attacks (Watts 653).

In short, the Nigerian government pursues to maintain its monopoly on violence by using a

'force for force' policy, whereby applying state repression and indiscriminate violence. In combination with corporate mismanagement by oil companies, this has led to an increased sense of grievance, which has been a driver for paramilitary mobilisation.

3.2.3 Marginalisation

The third grievance-causing factor is that many inhabitants of the Niger Delta experience inequality, relative deprivation and marginalisation (Ejobowah 36; Gore & Pratten 233; Ikelegbe 208; Koos 4; Osaghae 5; Oyefusi 329; Ukiwo 2005 11; Ukiwo 2007 588; Watts 652). Corruption, the hegemonic alliance and state repression are the main causing factors hereof. In addition, the very existence of oil businesses in the area has led to a deteriorating social and environmental situation (Ejobowah 39). Oil spills and pollution threaten the very existence of the local population, since agriculture was the main source of revenue before oil was found in the area (Ejobowah 40). Hence, the local population is impoverished without getting any compensation from oil companies or the government (Ejobowah 38; Watts 651). Being collectively marginalized is a strong incentive for group cohesion, which in turn leads to an increase in the propensity to initiate violent collective action (Wegenast & Basedau 437). The emergence of the rebel group MEND for example, was mainly based on an 'inevitable process or marginalization, alienation and political mobilisation' (Watts 652).

In short, the inhabitants of the Niger Delta share a feeling of relative deprivation and marginalisation due to corruption, the hegemonic alliance and oil mismanagement. This marginalisation is feeding feelings of grievance, which in turn are incentives to mobilise for violent collective action.

3.2.4 Ethnicity

Fourthly, ethnicity is causing grievance due to experienced inequality between different ethnic groups. It should be noted that the first three grievance-causing factors were results of government or oil company mismanagement, whilst ethnicity is a factor that draws boundaries within the population of the Niger Delta. Wegenast & Basedau argue that 'whenever natural resources are present, high(er) ethnic diversity may actually lead to a higher intrastate conflict propensity' (436). According to the Uppsala Conflict Data Programme (UCDP), more than 60 non-state violent actors have been fighting each other since 1989. The multiplicity of ethnic groups in Nigeria can explain why there are so many different rebel groups. The exact amount of ethnic groups in Nigeria is not agreed upon, but estimates range between 250 and 690 (Osaghae 17). Ethnic disputes over oil- and land resources and unequal prosperity are generating feelings of grievance (Ejobowah 37; Ukiwo, 'From "pirates" to "militants"' 592). The Ijaw ethnic group for example, has complained to be treated as inferior to the ethnic group of Itsekiris ever since colonialism (Ukiwo, 'From "pirates" to "militants"' 594). Therefore, militias have not only fought the government and oil companies, but many ethnically affiliated rebel groups have also fought amongst each other. These warring ethnic groups all claim that they are the ancestors of the soil and therefore claim to have the right to attain the profit the land generates (Ejobowah 40). Ethnicity creates strong ingroup cohesion and has therefore served as an efficient tool for resource-related mobilisation for rebel groups (Koos 7; Wegenast & Basedau 434).

In short, it is of importance to know that the 'people of the Niger Delta' are not one homogenous mass of people. There are many ethnic groups who fight over resources amongst each other, creating more grievance. Furthermore it also serves as a tool for rebel mobilisation.

3.3 Greed

Within the academic debate, 'grievance' arguments are opposed by 'greed'. The greed-argument was first elaborated by Paul Collier and was opposed to the 'grievance' stance. Ever since, it has received increasing support from other disciplines (Ukiwo 2007 589). Firstly, Colliers criticism of the grievance argument is outlined. Thereafter, the greed-argument is analysed. Thirdly, the argument will be applied to the Niger Delta conflict and finally, critique on the greed argument will shortly be outlined.

3.3.1 Criticism on grievance

In his criticism on the 'grievance' argument, Collier emphasises that in order to gain support, rebels actively generate the grievances discourse. Academics have eagerly adopted this discourse as an explanation for the reasons why people rebel (Collier *The Bottom Billion* 18; Ikelegbe 212). Collier refutes the idea that these grievances are sincere. Fearon & Laitin have researched this and found that there is 'no relationship between whether a group was politically repressed and the risk of civil war. There are several other factors that would cause grievance, such as inequality, ethnicity or a colonial history, but no correlation was found between these factors and the proneness for civil war to emerge. Furthermore, Collier has argued that rebel groups often forcefully recruit people, which would imply that mobilisation based on grievance would not hold. In short, Collier argues that 'a flagrant grievance is to a rebel movement what an image is to a business (Collier *The Bottom Billion* 23-24). In other words: rebels have successfully used grievance as a marketing technique.

3.3.2 The greed argument

Instead, Collier argues that starting a civil war or engaging in rebellion can be beneficial to the people who join, since it generates profit and gains. 'In the presence of natural resource wealth (...) there are credible prospects of riches, so that some of the young men in the queue to join will be motivated by these prospects rather than by the mission to deliver social justice' (Collier *The Bottom Billion* 30). Therefore, Collier sees rebel organisations as organised crime groups, generating income from oil (Basedau & Lay 758; Collier *The Bottom Billion* 30; Collier 'Economic Causes' 199; Ikelegbe 210; Ukiwo 2007 588; Wegenast & Basedau 437; Watts 649). The goal of rebels is for the conflict to continue since it creates conditions in which plundering can continue (Ikelegbe 210; Ukiwo 2007 589). 'Violence (...) can become a form of business rather than an instrument for furthering any coherent ideological or even ethnic interest' (Ikelegbe 210). In short, the major motivator to join rebellion is the prospect of profit and gains and therefore the objective of using violence is the continuation of disorder.

3.3.3 Greed in Nigeria

Collier uses Nigeria as a case study for the greed argument. In his argument, he quotes Oyefusi who has conducted research in the Niger Delta, who has found that aggrieved people were not more likely to mobilise for violent collective action than those who did not experience grievance. The Nigerian government has actually transferred a huge amount of money to the Niger Delta and oil companies are spreading protection money (Collier *The Bottom Billion* 30). Political rent seeking behaviour therefore is what is causing more violence. Furthermore, Watts had found that 'trained militants in the Niger Delta (...) receive monthly salaries over N50,000 (about USD 350), which is well above the average wage that is expected from the productive sector by the educated' (Oyefusi 327; Watts 640). If a job as a

rebel would pay better than that of an educated person, greed might be the primary motivator for rebel mobilisation. Therefore, the greed argument can be accepted for the Niger Delta case.

3.3.4 Criticism on greed

The greed argument has been severely criticised. Ikelegbe argues that it is 'dangerously simplistic' to state that greed is the sole motivation for violent action (213). For the Niger Delta case specifically, it has been said that '[...] if greed were the major cause of violent conflicts, then all ethnic groups in the oil-bearing region would have taken up arms against the state and the oil business', which is not the case (Ukiwo 'From "pirates" to "militants"' 590). Another critic has argued that '[...] nowhere in Africa has a band of criminals grown into a rebel movement. Thus, the opportunism for primary commodity predation is not the cause of violent conflicts' (Ikelegbe 213). Summarizing, since conflicts always have a plurality of causes, the greed argument has been criticised for being mono-causal.

3.4 Greed and grievance

The Nigerian case has shown that both grievance and greed-based motivations have been argued for when it comes to drivers for mobilisation of violent collective action. Therefore, being aware of avoiding mono-causality, it is argued that both stances can be accepted since one does not disqualify the other. Several scholars agree and argue that more research to this coexistence is needed (Basedau & Lay 762; Watts 650; Wegenast & Basedau 438). Basedau and Lay claim that neither greed nor grievance is the sole explanatory factor in fractionalized societies with resources such as oil, but that they 'interact and form a particularly dangerous combination' (761). Wegenast & Basedau agree, arguing that they are causally linked and reinforce each other. Basedau & Lay have attempted to describe the causal relationship between greed and grievance, but no consensus on the order of causality has been achieved (Basedau & Lay 759; Ikelegbe 213; Ukiwo 'From "pirates" to "militants"' 590). In short, greed and grievance are both reasons for mobilisation in the Niger Delta, since they are co-existent and mutually reinforcing each other.

3.5 Conclusion

This research was conducted in order to analyse the effect of the presence of oil on the stability in the Niger Delta from the perspective of Conflict Studies. It can be concluded that the presence of oil is destabilising the Niger Delta, since it provides local inhabitants with a plethora of reasons to resort to violence in order to attain their goals. These incentives for mobilisation are based on motivations of greed and grievance, which mutually reinforce each other. Therefore, the main factors causing people to take up arms are the weak state, state repression, feelings of marginalisation, ethnicity and the propensity to material gain or profit. In turn, these factors are caused by corruption, the hegemonic alliance between the government and oil companies, the use of indiscriminate violence by the state and corporate mismanagement by oil companies. This knowledge can function as a nuance when reflecting on the press statement of the NDA that was posed at the beginning of this chapter.

4. Integration

This chapter will provide an overarching answer to the key question 'what role does oil assume in the stability of Nigeria, and to what extent' by integrating the obtained disciplinary insights using the integrative model of Repko. In order to answer the research question, the differences and similarities

between the methodology and the results of the disciplines will firstly be identified. Thereafter *common ground* between the disciplinary insights will be created. Finally, a *more comprehensive understanding* will be obtained by using Repko's technique of *horizontal causal integration* (389).

4.1 Comparing Disciplinary insights

In order to compare the disciplines and their insights, a distinction between methodology and results of the disciplines is made. Section 3.1.1 will discuss the similarities and differences between the methodological approach of the different disciplines whilst section 3.1.2 will elaborate on the similarities and differences between the research results. Figure A depicts how the disciplinary insights will be analysed on both levels. The *common ground* will be created in section 3.2.

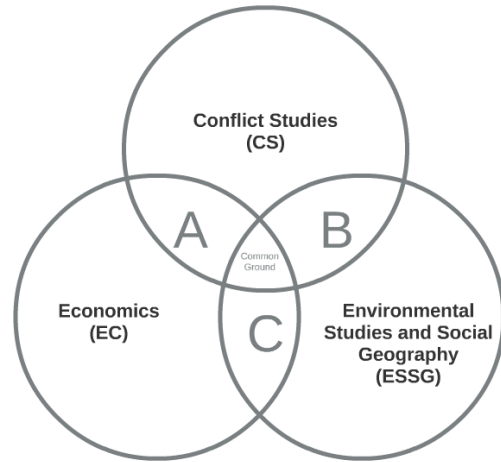


Figure A: Comparing disciplinary insights: methodology and results

4.1.1 Methodology

A: Economics (EC) and Conflict Studies (CS)

There are four theoretical differences between the disciplines of CS and EC. In this particular thesis, these disciplines do not seem to have obvious methodological similarities apart from the fact that standard literary research is conducted in both disciplines.

Firstly, there is a difference in the definition of stability. In EC, stability is a general term and hence has a regular definition. In CS however, it is not common to question the stability of a country, since the research subject of CS is conflict, which is inherently unstable. Therefore, a new definition for stability had to be created from a CS point of view. The second theoretical difference between CS and EC is the assumption of the rational actor, since economics mainly defines a rational actor as one that seeks to attain maximum welfare whilst CS deems motivating factors which are not based on attaining welfare, such as feelings of grievance, as rational. Thirdly, CS and EC differ in methodology. CS conducts qualitative research, based on secondary sources that are reporting on conducted empirical research. Some quantitative secondary research results were used, but no statistical analyses was conducted. EC however, predominantly conducts quantitative research since data is used to make generalisations in order to create applicable models for a more general phenomenon. This difference in methodology results in a difference in assumptions when generalizing. Economists continuously make generalizations about countries based on certain economic indicators, whilst CS has a more 'tailor-made' approach, being more hesitant to make generalizations in the first place. Finally, with regard to this thesis CS and EC differ in scope. CS has focused on the national and local level since the research subjects were individuals and their motives and experiences. EC in this research has taken a more global scope, in order to conduct comparisons with other countries on a macroeconomic level.

B: Environmental Studies & Social Geography (ESSG) and Conflict Studies (CS)

The first difference between ESSG and CS is again that of the definition of stability. In essence, both

agree on the assessment of stability and show a cause-and-effect relationship. The difference lies in the fact that ESSG has put the definition more in the environmental dimension, which it argues to be interconnected with the perceived reasons to take up arms as noted by CS. Adding to this, a second difference can be seen in the starting points of research subjects. CS continues where ESSG ends. The latter describes the processes leading to the deterioration of the natural environment, human well-being and livelihoods. While ESSG mentions that this leads Delta communities to resort to violence, it remains a shallow statement. It is here that CS starts and analyses the motivations for people to resort to violence as a result of a deteriorated environment and livelihood more in depth in the greed and grievance discussion.

There are several similarities between these disciplines. ESSG and CS for example both touch upon motivation for violence and impacts of oil-extraction on local and regional levels. Secondly, ESSG points to the inability of the government to redistribute wealth to the Niger Delta region, which coincides with the weak state theory used by CS. This theory is in turn fuelled by corruption.

C: Economics (EC) and Environmental Studies & Social Geography (ESSG)

Before we discuss the similarities among the two disciplines, it is important to reflect on the differences in the context of analysis. Although ESSG takes the national level into account, ecosystems and social structures are usually examined on a more local level. For this reason it becomes important to differentiate between local areas within a nation. EC does not exclude analysis on a more local level, but when assessing the impact of oil on the Nigerian economy a macroeconomic context is self-evident. This means that the national economy is studied as an element within the global economy. Furthermore, when determining stability in Nigeria, contrasting definitions arise from the two disciplines. ESSG arrives at an assessment of the socio-environmental stability whereas EC deems an economy as stable when there is an absence of excessive fluctuations in macroeconomic indicators while achieving stable and sustainable growth. It is important to note that these factors from the two disciplines do not mutually exclude each other but rather they choose to ignore the dual relevance in the eventual explanation of stability.

4.1.2. Results

A: Conflict Studies (CS) and Economics (EC).

As for the insights, CS and EC have similarities in three main areas. However, these similarities are explained in a different way.

The first similarity is that CS and EC both use the Resource Curse theory. Due to the described theoretical differences the Resource Curse is interpreted dissimilarly. The Resource Curse theory was initially economic, stating that an abundance of one resource leads to stagnating - or even negative - growth, which is measured by a correlation between resource exports and weak GDP growth. Factors for examining this relationship are rent-seeking behaviour, corruption, exposure to volatility in commodity prices and the Dutch Disease. CS has diverted from this initial definition of the theory and interprets the Resource Curse in a manner that an abundance of natural resources in a country can increase the proneness of the emergence of civil war. Note the quantitative approach in EC and the qualitative approach in CS. Although EC does mention national conflict as a potential consequence of resource abundance, the focus lies on economic indicators and factors. Despite the differences in

interpretation of the stated relationship between, in this case, oil and stability, both disciplines come to the same conclusion: acceptance of the Resource Curse and thus concluding that oil and instability in Nigeria are highly correlated and intertwined. Furthermore, both disciplines have mentioned the criticisms on the Resource Curse. EC has indicated that the theory should adapt to countries with different circumstances, while introducing additional indicators with different levels of relevance in the process. In CS it is mentioned that the Resource Curse could be a driver for commodity determinism. The second similarity between CS and EC is that both describe the process in which people 'want a piece of the cake', which in this case refers to the potentially large revenues derived from oil. While CS labels this as greed and EC as rent-seeking behaviour, both describe a process that is highly similar. CS and EC use them for different methods of analysis though. EC's main objective is to show a certain correlation between the presence of natural resources and GDP growth, using rent-seeking behaviour as a possible explanation for this relationship. CS strives to completely understand the process in which individuals revert to conflict in the presence of natural resources by analysing greed. Another difference is that CS deems both grievance and greed as valid, whilst EC can only accept greed and rent-seeking behaviour due to the assumption of the rational actor. Thirdly, both CS and EC have mentioned corruption as a manifestation of rent-seeking behaviour, and both disciplines have named weak and ineffective institutions as a catalyst in this process. EC is interested in the influences of corruption and oil mismanagement on economic growth, contrasting with the link CS presents between corruption and oil mismanagement on motivations to resort to violence. It is important to realize that both processes affect each other.

B: Environmental Studies & Social Geography (ESSG) and Conflict Studies (CS).

As CS and ESSG largely agree on their assessment of stability, it becomes clear that insights and results of these two disciplines are complementary and consistent with each other. ESSG concludes that the absence of reliable livelihoods has led to social instability and violence resulting from environmental degradation. A sense of hopelessness and a discouraging future prospect have functioned as a catalyst for violence and criminality throughout the Delta region, in which systematic campaigns are waged against the oil industry and the military. ESSG mentions motivations therefore, based on a degraded human well-being and resulting in actions of greed and grievance. CS complements this finding by arguing that greed and grievance are the main reasons to take up arms. This is corresponding with the argument of ESSG that people take up arms as a result of degraded human well-being. In this sense, greed and grievance are complementary indicators to determine the effects of a degraded human well-being and that of the presence of oil. Other similarities can be found since both disciplines mention oil-mismanagement as a driver for instability. Furthermore, both disciplines mentioned the sabotage and vandalisation of oil-pipelines. Adding to this, CS as well as ESSG speak of the state sacrificing the well-being of the populace in policy making and governance in preference to the interests of international oil companies. Lastly, both disciplines emphasize that the environmental consequences threaten the existence of the local population and results in increased impoverishment.

The only difference in assessment is that CS addresses ethnicity as a driver for violence next to impacts of oil-extraction activities. This is opposed to ESSG, as this discipline does not look at other actors that might have impact on the outbursts of violence apart from the impacts of oil-extraction activities in the Niger Delta.

C: Economics (EC) and Environmental Studies & Social Geography (ESSG)

In explaining stability, EC takes the economic dimension as a requisite for understanding and attaining overall stability in a country. ESSG partly uses that economic dimension on a local level to explain the sustainable interaction between social and environmental dimensions. But the emphasis remains on the health of the environment (both in a biological sense and the general use of the word) and the social groups that inhabit the Niger Delta area. Both disciplines agree on the presence of instability in Nigeria, and the fact that oil assumes a substantial role in the creation and preservation of instability. The main focus of ESSG lies on the interconnected framework of healthy ecosystems and human well-being, to further understand the socio-environmental impact of oil in Nigeria. The relationship between Economic instability and resource dependence is explained through market mechanisms within the global economy, but the relevance of environmental degradation is neglected. In accordance with the economic theory of the Dutch Disease, a lack of productivity and development in other sectors than that of the natural resource is seen as a major problem for stability in Nigeria. The main difference with the economic theory lies in the mechanism driving that lacking diversification. ESSG accredits this to environmental degradation, while EC explains it through the workings of labour distribution and export prices. These mechanisms that are vital to explaining both social and macroeconomic stability are substantially intertwined. Finally, it becomes apparent that the evaluation of overall stability should occur on both an economic and social level, bearing in mind that both contain factors that influence each other.

4.2 Common Ground

To gain *a more comprehensive understanding* of the question ‘what role does oil assume in the stability of Nigeria, and to what extent’ a *common ground* between the different disciplines needs to be created (Repko 56-57). The disciplinary insights have shown to be complementary, but they do have terminological and theoretical differences. Firstly, the concept of stability is redefined by the means of Repko’s technique called ‘extension’ (340). The disciplines have been using the following disciplinary definitions of stability:

Economics:

‘A country’s economy is deemed stable when certain requirements are met on a macro-economic level. This includes a constant positive economic growth rate, low inflation and low unemployment.’

Environmental Sciences & Social Geography:__

‘Socio-environmental stability occurs when the formal and informal processes, systems, structures, relationships, natural resource and services needs actively support the capacity of current and future generations to create liveable communities, without compromising the health of the ecosystems that provide them.’

Conflict Studies:

‘A situation is deemed stable when there are no perceived reasons to use violence in order to attain one’s goals.’

To create *common ground* between the three disciplines, the concept of stability is redefined as:

'To secure a social environmentally sustainable future within the global economy in a non-violent way'.

This redefinition functions as the *common ground* between the disciplines. The role that oil assumes in the stability of Nigeria can be accessed using the results of the different disciplines, whereby creating a *more comprehensive understanding*.

4.3 A more comprehensive understanding

The identification of similarities and differences between the three disciplines and the created *common ground* can be used in constructing a *more comprehensive understanding*. The disciplinary sections have described various factors that are causing the complex problem of the role that oil assumes in Nigeria. These factors will be integrated in order to explain how the modified concept of stability is inclusive of all disciplines and what role oil assumes herein (Repko 384).

As has been shown, the disciplinary insights have produced different outcomes that are mainly complementary. Therefore, Repko's (2012) horizontal causal integration technique will be used, in which explanations are fully complementary but focus on separate aspects of the complex problem (Repko 389). This technique is chosen since horizontal integration uses findings that are completely non-overlapping or share common variables, as the results of this thesis have shown. Horizontal integration is formulated by Repko as a means to describe the relationships among the different intertwined explanations in order to attain a *more comprehensive understanding* (389).

Figure 12 Integration.

All disciplines agree that oil-mismanagement is a core driver of instability. Therefore, the focus point of figure X is oil mismanagement and is depicted as a barrel in the middle of the circle (Figure X). This circle has been divided into three scales in order to connect the causal factors of instability.

On a global scale, oil mismanagement has led to exposure of volatile commodity prices causing the Dutch Disease (EC) and a hegemonic alliance (CS). However, these processes have not led to global instability, since the instability is only apparent at national and local level. Figure X shows the relationships among different factors that end in instability on these scales.

All disciplines agree that oil-mismanagement has led to rent-seeking behaviour (EC, ESSG, CS) and greed (CS) on a national level. EC mentions that this directly contributes to underdeveloped sectors besides that of oil, while CS argues that it leads to a weak state which in turn causes state repression. Both CS and EC agree that rent-seeking behavior and greed cause corruption. CS continues by stating that corruption on a national level functions as a catalyst for the weak state, state repression and the hegemonic alliance. Rent-seeking behaviour and greed are also apparent on a local level.

On a local scale, oil-mismanagement generates environmental degradation which leads to a degraded human well-being (ESSG). This degradation of human well being functions as a catalyst for rent-seeking behavior and greed. Simultaneously, a degraded human well being leads to marginalization of locals, which in turn results in feelings of grievance that cause instability (CS, ESSG). These local processes are influenced by global and national processes, since marginalization and grievance are both stimulated by hegemonic alliance and state repression (CS).

Concluding, the different disciplinary insights have revealed the multiple causal pathways leading from oil mismanagement to instability in Nigeria. Stability has been redefined as a 'social environmentally sustainable future within the global economy that is secured in a non-violent way'. The *more comprehensive understanding* has shown that Nigeria does not satisfy the conditions of this definition. Therefore, the *more comprehensive understanding* demonstrates that there is a negative relationship between the presence of oil and stability in Nigeria, as illustrated in Figure 12.



Figure 12: Construction of a *more comprehensive understanding*. The relationships among different relationships and (causal) explanations.

Conclusion

This interdisciplinary thesis has utilised the disciplinary insights of EC, ESSG and CS to answer the complex question of the role that oil assumes in the stability of Nigeria, and to what extent. It has become clear that the presence of oil in the Niger Delta has not led to wealth and prosperity, but rather to an unstable state, both on a local as on a national scale. All three disciplines have focused on separate aspects of the research question and show non-overlapping as well as complementary explanations. The economic dimension for Nigeria has been analysed in order to clearly portray the context in which the country is situated on the international spectrum. The causal relationship between oil and economic growth became clear through the consideration of specific circumstances inherent to Nigeria. The devastation of the environment of the Niger Delta as a result of oil-exploitation has been emphasized together with the adverse effects on ecosystem services, local livelihoods and human well-being. The presence of oil in an ethnically fractionalised Niger Delta has caused greed and grievance, which both have been the key motivations for people to resort to violent collective action.

In order to create *common ground*, the technique 'extension' was used to redefine the concept of stability as 'to secure a social environmentally sustainable future within the global economy in a non-violent way'. The insights are in agreement on the point that oil-mismanagement is the key driver of instability in Nigeria. The combination of insights on the role that oil assumes and the redefined stability in Nigeria has shown that oil stands central in causing multiple factors that in turn cause instability. Because most of these factors are interconnected, a *more comprehensive understanding* is made possible through integration between the three disciplines.

Discussion

One could argue that the approach of this thesis is too broad, since 'oil' and 'stability' are two very encompassing terms. The narrowing down of the research question happened within the disciplinary chapters. By creating focus, certain unavoidable choices have been made. EC has for instance chosen to take a macroeconomic perspective whilst it could have chosen to examine microeconomic processes in the Delta. ESSG could have put more emphasis on corporate responsibility and CS could have chosen to map out the different violent actors in the conflict. It is unknown whether the same or different results would have been found, but as was said before: narrowing down is unavoidable. However, we argue that the broad research question is one of the strengths of this thesis since it enabled the execution of interdisciplinary research of this complex problem. It has been argued that the holistic results of this thesis would not have occurred when a single disciplinary approach would have been taken. Another possible criticism is that this thesis does not provide a more detailed description of certain factors such as ethnicity or corporate social responsibility, which is caused by the length of this thesis. Furthermore, it also lacks insights from other disciplines such as politics or business economics. These disciplines could have been useful contributions to this thesis.

The interdisciplinary insights obtained by the three disciplines can be used as a guide for future research. The insights have clarified the problem regarding oil in Nigeria and its consequences. The integrative model that is constructed in the *more comprehensive understanding* can be used as the

starting point and as a framework that can be taken into account by Nigerian policy makers, oil-multinationals for their corporate responsibility or for further academic research.

References

Adekola, O., G. Mitchell, and A. Grainger. 'Inequality and ecosystem services: the value and social distribution of Niger Delta wetland services'. *Ecosystem Services* 12 (2015): 42-54.

Adekola, O. & G. Mitchell. 'The Niger Delta wetlands: threats to ecosystem services, their importance to dependent communities and possible management measures'. *International Journal of Biodiversity Science, Ecosystem Services & Management* 7.1 (2011): 50-68.

Agbinibo, Brig. Gen. Mudoch. 'Press statement'. *Niger Delta Avengers*. (June 13, 2016): 5 pars. Online. Internet. July 29, 2016. Available <http://www.nigerDeltaavengers.org/2016/06/press-statement.html#more> .

Aghalino, S. O. 'Oil and cultural crisis: the case of the Niger Delta'. *Africana Special Issue: The Niger Delta* 5.1 (2011): 1-21.

Akpomuvie, O. B. 'Tragedy of commons: Analysis of oil spillage, gas flaring and sustainable development of the Niger Delta of Nigeria'. *Journal of Sustainable Development*, 4.2 (2011): 200-210.

Asimiea, A. and G. Omokhua. 'Environmental impact of illegal refineries on the vegetation of the Niger Delta, Nigeria'. *Journal of Agriculture and Social Research* 13.2 (2013): 121-126.

Autesserre, S. 'Dangerous tales: dominant narratives on the Congo and their unintended consequences'. *African Affairs Advance Access*. (2012): 1-21.

Babatunde, A. 'Oil, Environmental Conflict and The Challenges of Sustainable Development in The Niger Delta'. *Journal of Peacebuilding & Development* 9.2 (2014): 77-82.

Basedau, M. & J. Lay. 'Resource Curse or rentier peace? The ambiguous effects of oil wealth and oil dependence on violent conflict'. *Journal of Peace Research*. 46 (2009): 757-776.

Bayode, O. J. A., E.A. Adewunmi & S. Odunwole. 'Environmental implications of oil exploration and exploitation in the coastal region of Ondo State, Nigeria: A regional planning appraisal'. *Journal of Geography and Regional Planning* 4.3 (2011): 110-121.

Boege et al. 'On hybrid political orders and emerging states: What is failing – states in the global south or research and politics in the west?' *Building peace in the absence of states: challenging the discourse on state failure*. Eds. M. Fischer and B. Schmelzle. Berlin: Berghof, 2009: 5-36.

Brundtland, G.H. et al. *Our Common Future*. World Commission on Environment and Development. Brussels: Oxford University Press.

Collier, P. *The bottom Billion. Why the poorest countries are failing and what can be done about it*. 1st edition. Oxford: Oxford University Press, 2007a.

Collier, P. 'Economic Causes of Civil Conflict and Their Implications for Policy'. *Leashing the Dogs of War; Conflict Management in a Divided World*. Eds. C. A. Crocker, F. O. Hampson, and P. All. Washington D.C.: United States Institute of Peace, 2007b: 197-218.

Ebohan, S.I. 'Nigeria: State, Oil and Malignant Underdevelopment'. *The Western Journal of Black Studies* 36.3 (2012): 201-219.

Economist, the. 'The Niger Delta Avengers. Danegeld in the Delta. Nigeria's turbulent oil fields cannot be pacified by bribing rebels.' *The Economist*. (June 25th, 2016): 7 pars. Online. Internet. July 1st, 2000. Available <http://www.economist.com/news/leaders/21701124-nigerias-turbulent-oilfields-cannot-be-pacified-bribing-rebels-danegeld-delta?zid=304&ah=e5690753dc78ce91909083042ad12e30> .

Ejobowah, J. B. 'Who owns the oil? The politics of ethnicity in the Niger Delta of Nigeria'. *Africa Today*. 47 (2000): 28-47.

Emoyan, O. O., I. A. Akpoborie & E. E. Akporhonor. 'The oil and gas industry and the Niger Delta: Implications for the environment'. *Journal of Applied Sciences and Environmental Management* 12.3 (2008): 29-37.

Energy Information Administration (US), 'Petroleum & Other Liquids'. Online. Internet. 25 June 2016. Available <https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=pet&s=rbrte&f=a>

Fentiman, A. and N. Zabbey. 'Environmental degradation and cultural erosion in Ogoniland: A case study of the oil spills in Bodo'. *The Extractive Industries and Society* 2.4 (2015): 615-624.

Francis, P., D. Lapin, and P. Rossiasco. *Securing Development and Peace in the Niger Delta: A Social Conflict Analysis for Change*. Washington: Woodrow Wilson International Center for Scholars, 2011.

Guardian, the. 'Niger Delta Avengers militants shut down Chevron oil facility'. *The Guardian*. (May 26, 2016): 12 pars. Online. Internet. July 1st, 2000. Available <https://www.theguardian.com/world/2016/may/26/niger-delta-avengers-militants-shut-down-chevron-oil-facility> .

Gore, C. and D. Pratten. 'The politics of plunder: the rhetorics of order and disorder in southern Nigeria'. *African Affairs*. 102 (2003): 211-240.

Ibaba, Samuel I., U. Okechukwu & U. Ukiwo. 'Introduction: Natural Resource, Conflict, and Sustainable Development in the Niger Delta'. *Natural Resources, Conflict and Sustainable Development: Lessons from the Niger Delta*. Eds. Okechukwu, Ukaga, Ukoha Ukiwo & Samuel Ibaba Ibaba. New York: Routledge, 2012. 1-21. Print.

Ikelegbe, A. 'The Economy of Conflict in the Oil Rich Niger Delta Region of Nigeria'. *Nordic Journal of African Studies*. 14 (2005): 208-234.

Inoni, O. E., D. G. Omotor & F. N. Adun 'The effect of oil spillage on crop yield and farm income in Delta State, Nigeria'. *Journal of Central European Agriculture* 7.1 (2006): 41-48.

International Monetary Fund. *Financial System Stability Assessment Report No 13*. Washington, Washington, D.C.: Publication Services, 2013.

International Monetary Fund. . *Nigeria: Selected Issues Report No 16*. Washington, D.C.: Publication Services, 2013.

Investing.com. 'Commodities'. Online. Internet. 8 June 2016. Available <http://www.investing.com/commodities/brent-oil-historical-data>

James, G. K., Adegoke, J. O., Osagie, S., Ekechukwu, S., Nwilo, P., & Akinyede, J. 'Social valuation of mangroves in the Niger Delta region of Nigeria'. *International Journal of Biodiversity Science, Ecosystem Services & Management* 9.4 (2013): 311-323.

Kadafa, A. A. 'Environmental impacts of oil exploration and exploitation in the Niger Delta of Nigeria'. *Global Journal of Science Frontier Research Environment & Earth Sciences* 12.3 (2012): 18-28.

Kalyvas, S. N. *The logic of violence in civil war*. 1st edition. New York: Cambridge University Press, 2006).

Kilcullen, D. 'Counterinsurgency Redux'. *Survival*. Spring (2007): 1-11.

Koos, C. 'Does violence pay? The effect of ethnic rebellion on overcoming political deprivation'. *Conflict Management and Peace Science*. 33 (2016): 3-24.

Krugman, P.R., Maurice, O., Melitz, M.J. *International Economics: Theory and Policy*. 10th edition. England: Pearson Education Limited, 2014.

Kuenzer, C., S. van Beijma, U. Gessner and S. Dech. 'Land surface dynamics and environmental challenges of the Niger Delta, Africa: Remote sensing-based analyses spanning three decades (1986–2013)'. *Applied Geography* 53 (2014): 354-368.

Leenders, R. and S. Heydemann. 'Popular Mobilization in Syria: Opportunity and Threat, and the Social Networks of the Early Risers'. *Mediterranean Politics*. 17 (2012): 139-159.

Litwack, J., Nthara, K.L., Kojima, M., Dabalén, A.L., Hoffman, J., Joseph-Raji, Gloria A., Babalola, O.O. . *Nigeria Economic Report No 3*. Washington, D.C: World Bank Group, 2015.

Majbouri, M. 'Oil and entrepreneurship'. *Energy Policy* 94 (2016): 10-15.

Mason, T. D. 'Mobilizing peasant social movements'. *Caught in the crossfire, revolutions, repression, and the rational peasant*. (2004) 89-93.

Mazrui, A. A. ed. *UNESCO General History of Africa, Vol. VIII: Africa since 1935*. Unabridged edition. California: University of California Press, 1993.

Millennium Ecosystem Assessment [MEA]. *Ecosystems and Human Well-Being: Synthesis*. Washington D.C.: Island Press, 2005.

Morelli, J. 'Environmental sustainability: A definition for environmental professionals'. *Journal of Environmental Sustainability* 1.1 (2013): 2.

Mitchell, D. *A new dictionary of the social sciences*. 2nd edition. New Brunswick: Aldine Transaction, 2007.

Morrissey, O., Haldenwang, C. Von, Schiller, A. Von, Ivanyina, M., Bordon, I. 'Tax Revenue Performance and Vulnerability in Developing Countries'. *The Journal of Development Studies* (2016): 1743-9140.

Niger Delta Development Commission [NDDC]. 'Chapter 1: The Niger Delta Region: Land and People'. *Niger Delta regional development master plan* (2006): 47-99.

Nigerian National Petroleum Corporation. 'Mission & Vision'. Online. Internet. NNPC's website. 23 May 2016. Available <http://www.nnpcgroup.com/AboutNNPC/MissionVision.aspx>

Niger Delta Region Youth Assessment [NDYRA]. *A Report on Niger Delta Region Youth Assessment*. Abuja, Nigeria: Foundation for Partnership Initiatives in the Niger Delta (PIND), 2011.

Nigerian Oil Spill Monitor. 'Nigerian Oil Spill Monitor', 1 pars. Online. Internet. 15 May 2016. Available <https://oilspillmonitor.ng/>.

Obi, C. 'Globalization and environmental conflict in Africa.' *African Journal of Political Science*. 4.1 (1999): 40-62.

Obi, C. 'Because of Oil: Understanding the Globalization of the Niger Delta and Its Consequences.' *Natural Resources, Conflict and Sustainable Development: Lessons from the Niger Delta*. Eds. Ukaga, U.O. Ukiwo & I.S. Ibaba. New York: Routledge, 2012: 22-38.

Okonkwo, C. N. P., L. Kumar, & S. Taylor. 'The Niger Delta wetland ecosystem: What threatens it and why should we protect it?'. *African Journal of Environmental Science and Technology* 9.5 (2015): 451-463.

Omeje, K. 'The Rentier state: oil related legislation and conflict in the Niger Delta, Nigeria'. *Conflict, Security and Development*. 6 (2006): 211-230.

Omokaro, O. 'Oil and gas extraction in the Niger Delta Region of Nigeria: The social and environmental challenges'. *DAAD Alumni expert seminar: Mining and Water*, October 2009, Freiburg, Germany. Conference Paper.

Otokunfor, T. V. and C. Obiukwu. 'Impact of refinery effluent on the physicochemical properties of a water body in the Niger Delta'. *Applied ecology and environmental research* 3.1 (2005): 61-72.

O'Neill, B. *Insurgency & Terrorism: Inside modern revolutionary warfare*. 1st edition. Washington, D.C.: Brassey's, 1990.

Osaghae, E. E. 'Structural Adjustment and Ethnicity in Nigeria'. *Nordiska Afrika Institutet Uppsala Research Report*. 98 (1995): 1-66.

Ovadia, J.S. 'The Making of Oil-backed Indigenous Capitalism in Nigeria'. *New Political Economy* 18.2 (2013): 258-283.

Oyefusi, A. 'Oil, youths, and civil unrest in Nigeria's Delta: the role of schooling, educational attainments, earnings and unemployment'. *Conflict Management and Peace Science*. 27 (2010): 326-346.

Redactie de Volkskrant. 'Aanval op belangrijke pijpleiding in Nigeria die olie aan Shell levert'. *De Volkskrant Economie*. (2016): 7 pars. Online. Internet. 28 May 2016. Available <http://www.volkskrant.nl/economie/aanval-op-belangrijke-pijpleiding-in-nigeria-die-olie-aan-shell-levert~a4309545/>.

Repko, A. F. *Interdisciplinary Research, process and theory*. 2nd ed. Los Angeles: SAGE publications, 2012.

Sala-i-Martin, X., Subramanian, A. 'Addressing the Natural Resource Curse: An Illustration from Nigeria'. *IMF Working Papers* 3.139 (2003): 1-45

- Saliu, H. A., S. Luqman, and A. A. Abdullahi. 'Environmental degradation, rising poverty and conflict: towards an explanation of the Niger Delta crisis'. *Journal of Sustainable Development in Africa* 9.4 (2007): 275-290.
- Sachs, J.D., Warner, A.M. 'Natural Resource Abundance and Economic Growth'. *Journal of Development Economics* 59 (1999): 43-76.
- Sachs, J.D., Warner, A.M. 'Natural Resources and Economic Development: The Curse of Natural Resources'. *European Economic Review* 45 (2001): 827-838
- Ugboma, P. P. 'Environmental Degradation in Oil Producing Areas of Niger Delta Region, Nigeria: the Need for Sustainable Development'. *AFRREV STECH: An International Journal of Science and Technology* 4.2 (2015): 75-85.
- Ukeje, C. 'Oil communities and political violence: the case of ethnic Ijaws in Nigeria's Delta region'. *Terrorism and political violence* 13.4 (2001): 15-36.
- Ukwaba, I.E. 'The Dominance of Oil Investment and Food Security in Nigeria under the President Obasanjo Civilian Administration'. *Mediterranean Journal of Social Sciences* 5.9 (2014): 515-521.
- U. 'On the study of ethnicity in Nigeria'. *CRISE: Centre for Research on Inequality, Human Security and Ethnicity*. University of Oxford (2005): 1-21.
- Ukiwo, U., "From "pirates" to "militants": a historical perspective on anti-state and anti-oil company mobilisation among the Ijaw of Warri, western Niger Delta", *African Affairs* 106 (2007) 425, 587-610.
- United Nations Environmental Programme [UNEP]. *Environmental Assessment of Ogoniland*. 2011. Nairobi: United Nations Environment Programme.
- United Nations Development Programme [UNDPa]. *Niger Delta Human Development Report*. 2006. Abuja, Nigeria: United Nations Development Program.
- United Nations Development Programme [UNDPb]. *Human Development Report 2014, Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience*. 2014. New York: United Nations Development Programme.
- United Nations Development Programme [UNDPc]. *National Human Development Report, 2015: Human Security and Human Development in Nigeria*. 2016.
- Uppsala Conflict Data Program. 'Nigeria'. 8 pars. Online. Internet. 05 June 2016. Available <http://ucdp.uu.se/#country/475> .
- Watts, M. 'Petro-insurgency or Criminal Syndicate? Conflict & violence in the Niger Delta'. *Review of African Political Economy*. 34 (2007): 637-660.
- Wegenast, T.C. and M. Basedau. 'Ethnic fractionalization, natural resources and armed conflict'. *Conflict Management and Peace Science*. 31 (2014): 432-457.
- World Bank, The. 'World Bank Open Data'. Online. Internet. 30 June 2016. Available <http://data.worldbank.org/>
- Zabbey, N. Impacts of extractive industries on the biodiversity of the Niger Delta region, Nigeria. *National Workshop on Coastal and Marine Biodiversity Management*, September 2004, Calabar, Cross-River State, Nigeria. Unpublished Conference Paper.