

## Escaping the 'Oil Curse': Is Ghana on the right path?

**Emmanuel Graham**

PhD Student, York University

Email: graham19@yorku.ca

**Ishmael Ackah**

Local Content Secretariat, Ghana Energy Commission

Email: ackish85@yahoo.com

**Nathan Andrews**

Assistant Professor, University of Northern British Columbia

Email: nathan.andrews@unbc.ca

&

**Ransford E. Van Gyampo**

Associate Professor, University of Ghana

Email: vangyampo@yahoo.com

### **Abstract**

*Evidence from around the world has shown that oil discovery could be a curse or a blessing. In some countries such as Canada, Norway, Saudi Arabia, Indonesia, and the United Kingdom, oil has proven to be a blessing. On the contrary, some sub-Saharan African countries such as Nigeria, Angola, and Equatorial Guinea are experiencing what is known as the 'oil curse'. Ghana, on the other hand, started oil production on 15<sup>th</sup> December 2010, and endeavoured to escape the 'oil curse'. This paper critically looks at eight years of oil production in Ghana using the resource curse as a framework. It argues that though it might be a bit early to decidedly say, Ghana's oil and gas sector currently exhibit signs of both a curse and blessing, our paper reinforces existing scholarly work that points us to the challenge of establishing simplistic correlations between extraction and resource curse. It further provides some suggestions on how to address what we capture as signs of the oil curse.*

**Keywords:** Ghana, resource governance, oil production, resource curse

## **Introduction**

Is Ghana on track in escaping the 'resource curse', or the 'paradox of plenty', a situation many African countries with rich mineral resources find themselves in? This is a relevant question that has lingered since Ghana began oil production on 15<sup>th</sup> December 2010, although there have been many speculations around how the different attributes of the 'oil curse' may or may not apply to the Ghanaian context (Acosta and Heuty, 2009; Ayelazuno, 2014; Gyampo, 2011; Kopinski et al., 2013; Obeng-Odoom, 2014a, 2014b, 2015; Okpanachi and Andrews, 2012). Ghana, which is characterised as the 'Black Star' of or the beacon of hope for Africa, has been at the centre of discussion as people are waiting to see what will become of its new petroleum sector. Interestingly, the political economy of Africa in terms of oil and gas has not been encouraging with countries such as Nigeria, Sudan, Angola, Chad, Equatorial Guinea, Sao Tome, Gabon and others that produce high quantities of oil and gas but have failed to channel this resource into the material improvement of their countries and the lives of their ordinary citizens. The case of Nigeria is particularly striking mainly based on estimates that showcase how fundamental oil is to the national economy, contributing approximately 40% of the country's GDP, 95% of exports, and 83.5% of government revenue (Idemudia, 2012). By contrast, some other countries such as Norway, Saudi Arabia, Qatar, Trinidad and Tobago, United Arab Emirates, Venezuela, Canada, and United Kingdom have over the years been reported to make excellent use of their oil to improve the lives of their citizens and for the development of their countries (see for instance Davis and Tilton, 2005).

On the contrary to the state of affairs in its neighbouring oil-rich countries, Ghana dares to be different with its infant oil and gas industry. In 2007, following the discovery, then President J.A. Kufuor declared that Ghana would avoid the 'resource curse' and use its new-found oil wealth to transform the country's economic and social development (Cavnar, 2008). The quest to avoid the 'oil curse' continues to be the aspirations of the current government and several Ghanaians. The question to reiterate here is after eight years of oil production in the country, can it be said that the state is experiencing a curse or blessing?

Although the oil and gas sector in Ghana is young, there has been a growing amount of research with particular focus on the sector. Some of

them have looked at how to manage people's expectations (Andrews, 2013; Asante, 2009; Bybee and Johannes, 2014; Gyampo, 2011) while others have examined how to handle the intersectoral impacts of oil production (Asafu-Adjaye, 2010). Gyampo et al. (2011) have looked at the challenges facing the sector within the first hundred days of oil production, with a more recent publication focusing on how to utilise the proceeds to save the country from the resource-curse syndrome (Gyampo, 2014). Debrah and Graham (2015) have also done some work that highlights the contribution of civil society organisations in preventing the oil curse in Ghana. Moreover, Graham et al. (2016) in their research pointed out to the politics that is rife in Ghana's infant oil and gas sector and the potential implications for the sector if caution is not taken. Not all existing literature can be rehashed here but it is noteworthy that Obeng-Odoom, (2015) provides an excellent review of Ghana's oil and gas sector by investigating both the analytical and empirical works that have been done since December 2007 in order to identify lessons learned, existing gaps and forecast future areas of focus for both research and policy-making.

It must be emphasised that these earlier works have contributed immensely to the growing literature on Ghana's oil and gas sector and the extent to which the resource curse as an idea applies to the context (Obeng-Odoom, 2014b; Phillips et al., 2016). It is, therefore, the goal of this paper to build on the foundation laid by existing scholarly and policy research by zooming in more on what one may consider as signs of oil curse or blessing after eight years of production, as there is much to be known about specific outcomes. To undertake this endeavour, the paper firstly summarises the resource curse literature by discussing the manifestations of what may be regarded as a curse or blessing. This leads to the discussion of these different manifestations in Ghana, followed by a concluding section that highlights some ways by which the country could potentially escape notable 'oil curse' attributes.

### **'Resource Curse' Manifestations and Questions**

The 'resource curse' speaks of a phenomenon in which 'countries rich in natural resources are less well off in terms of economic growth and development more generally than countries without such an abundance of natural resources' (Roll, 2011: 9). Before the late 1980s, the general notion of some scholars such as Rostow (1960) was that abundance of natural

resource in a country would enhance or facilitate its development and growth. This premise became questionable after research evidence that suggested that natural resource abundance in developing countries has been more of a curse than a blessing. For these theorists, natural resource abundance increases the chances of developing countries to experience weak economic growth (Auty, 1993; Gelb, 1988), high levels of poverty (Ross, 2001), authoritarian rule (Jensen and Wantchekon, 2004; Ross, 2001), and even civil war in some cases (Collier and Hoeffler, 1998, 2005).

There is a plethora of literature on the manifestations of the resource curse, some focusing on the economic causes and others focusing on the political causes. But there are at least seven perspectives identified by Rosser (2006) to help us explain the different elements in and approaches to explaining the resource curse. These are (i) economic perspective, (ii) behaviouralist perspective, (iii) rational actor perspective, (iv) state-centred perspective, (v) social capital perspective, (vi) structuralist perspective, and (vii) radical perspective. In the view of Ross (2001), a lot of the earlier studies on the economic performance of resource-rich states revealed that the causal relationship between resource abundance and economic performance were more or less economical. One of the economic manifestations of the curse is the 'Dutch disease', a phenomenon by which a boom in a resource sector undermines investment that could be made in other relevant sectors of the economy (Auty, 1993; Gelb, 1988). Beyond this economic interpretation, several scholars are convinced that political attributes play a more defining role as to whether or not natural resource endowment would yield positive socio-economic dividends (Mehlum et al., 2006a, 2006b; Ross, 2001; Yates, 2012).

Despite the extensive scholarly evidence that there is indeed a curse, most of which cannot be elaborated here due to limited space, we still cannot take the idea of a resource curse for granted. To be sure, both the empirical and theoretical assessments of the concept have been questioned. There are at least three critical notes of caution to be considered. First of all, there is a radical perspective that highlights how natural resource abundance makes a developing country a target for forced incorporation into the global capitalist system (a system in which the interests of poor developing countries are subordinated to those of

wealthy developed countries) in turn impairing their ability to pursue autonomous programs of economic development. Perelman (2003: 200), for example, has cautioned that 'a rich natural resource base makes a poor country, especially a relatively powerless one, an inviting target – both politically and militarily – for dominant nations.' This is reflected in discourses around a so-called 'new scramble' for Africa (Carmody, 2011; Yates, 2012). But essentially what this perspective tells us is that although appropriate institutions play a fundamental role in proper resource management (Davis and Tilton 2005; Idemudia 2012; Mehlum, Moene, and Torvik 2006b), the resource curse is more than a domestic governance (or technocratic) issue, as there are multiple players in the global political economy that influence both political and socio-economic outcomes in resource-rich countries (see Siakwah, 2017). In light of this, Cramer (2002) and Rosser (2006) have critiqued the resource curse literature for being deterministic and reductionist by failing to take into account the role of social forces or the external politico-economic factors that shape outcomes in resource-rich countries.

Secondly, there is the need to be generally mindful of the fact that the nature of the curse and the causal factors remain debated. Scholars like Brunnschweiler and Bulte (2008) have challenged the conventional methodology used in previous studies since it ignores reverse causality and adopts inappropriate proxies to measure resource endowment. This means that by using a different proxy, the causal relationship between resource endowment and conflict or poor economic growth dissipates. Someone like Dunning (2008) has challenged the negative correlation between natural resource abundance and democracy (or the lack thereof) whereas Haber and Menaldo (2011) have posited that the opposite is true, in that resource abundance and increased reliance on it does not fuel authoritarianism as suggested by previous writers. All these contradictory pieces of evidence imply that nothing can be taken as a given, and in fact, the resource curse may not be manifesting in the ways that have been popularised.

The third note of caution at the theoretical (even methodological) level is the question of whether Ghana's relatively infant oil and gas industry can be subjected to a rigorous and meaningful assessment of the resource curse – that is if we begin with the premise that the idea of the curse or

blessing is worth examining. From Obeng-Odoom (2014b: 667), we are aware of the challenges in making grand statements about or in wanting to 'measure' success and failure in Ghana's oil industry because 'blessings and curses intermingle, coexist, and co-evolve, and fall differentially on diverse classes'. Another study by Phillips et al. (2016) points us to the limits of the resource curse framing and its related liberal institutional and management approaches, particularly elucidating how sovereignty and party politics in Ghana contend with the global disciplining forces and discourses on 'good governance'. While we admit that the sector is still young to get a complete sense of how the different manifestations play out on the ground, there are a number of early signs that one can use to make such a case in Ghana based on available data and evidence. By doing this, however, we hope not to reinforce a simplistic binary of blessings and curses. Preferably, we are using the signs as analytical categories to delineate the duality (or multiplicity) of resource extraction outcomes.

### **The Manifestation of Natural Resource Blessing**

There are several works on escaping or solving the resource curse by various scholars focusing on different issues and contexts (see, for instance, Humphreys, Sachs, and Soros, 2007). The most common solutions usually put forward by scholars, also captured by Weinthal and Luong (2006) include (i) sound fiscal and monetary policies, (ii) economic diversification, (iii) management of natural resource funds and (iv) transparency, accountability and public involvement. These are discussed in detail below, with some evidence from Ghana to help advance our argument of the present mixed bag of both blessing and curse.

### **Fiscal and Monetary Policy**

Malothra et al. (2004) suggest that for rich natural resource states to counter the appreciation of the real exchange rate, these countries are encouraged to accumulate income-producing foreign assets to sterilise their local economy from the inflow accrued from their mineral sector. This, in their opinion, enables mineral-rich countries to deal with their expenditures when there is a boom and to prevent borrowing during busts. Together, these policies help to secure the domestic economy from the volatility of commodity revenues and lead to budget stability (Weinthal and Luong, 2006). Sarraf and Jiwaji (2001), for instance, cite the case of Botswana in terms of how countries that implement sound

macroeconomic policies and spend their windfalls wisely can combat the 'Dutch Disease'. They emphatically note that Botswana was able to manage its exchange rate policy by the accumulation of foreign reserves and has run budget surpluses that were kept for stability spending at the periods of economic busts. As a result of the country's commitment to fiscal discipline, Botswana stopped wasteful spending during boom periods and borrowing during busts periods. Furthermore, they argued that these policies have contributed to Botswana's rapidly growing GDP, which in effect enabled it to move from the 25<sup>th</sup> poorest country in 1966 to an upper-middle income country within 30 years (Sarraf and Jiwanji, 2001).

The success story of Botswana has attracted some debate. One of the views held by Stevens (2003) and Gelb (1988) is that an insulated and autonomous technocracy focused on long-term developmental goals is important for pushing through macroeconomic policies that may be socially and politically unpopular. There is also the question of population and how that could impact how resource benefits reach the average citizen and the number of people that may fall through the 'development cracks'.

The core of fiscal and monetary successes hinges on the commitment of countries to fiscal and monetary discipline. More so, in order for governments to obtain fiscal sustainability the following elements or features need to be present; there must be an effective rent capture by the state (in cases where exploitation is carried out by private actors); there must be fiscal rules to limit discretionary use of revenues from the resources; an operational natural resource fund should be present, and finally, there must be an 'effective public investment management' system in place (Hamilton and Ley, 2011: 136–137). It must be noted that the situation with Ghana's fiscal and monetary policy in terms of the oil and gas sector is characterised by some degree of resource blessing.

To begin with, in terms of rent capture or revenue mobilization, Sunley et al. (2003) points out that several governments tend to use means such as royalties, income taxes, resource rent taxes, production sharing agreements and indirect taxes such as tariffs, export duties and value-added taxes (Hamilton and Ley, 2011: 137). A clear indication of resource blessing is that the Ghanaian oil and gas sector is characterised by the

following complex means of generating revenue; first is the up-front payment, here the rule does not require up-front payments in the form of bonuses, and major stock takes so state share arrives from streams of payment; secondly, royalty rate of between 5% - 12.5% is provided depending on the water depths these royalty enables the state also to get early cash flow; thirdly, state participation through carried and participating interest ranges from 12.5% to 30% with Jubilee field currently having 13.75%, this makes the state part owners though it does not share in exploration risk and development risk (in case of the Carried Interest) but does take part in both production and commercial risk with investor; fourthly, unlimited carry forward of losses and non-capping of the exploration and development cost recovery which makes it more investor-friendly allowing for Corporate Income tax only after deduction of allowable expenses. Fifthly, Ghana has 'Additional Oil Entitlements (AOE)', which enables the state to capture more of the economic rent as it focuses on additional profit this enhances neutrality and progressivity of the regime; Finally, there is also the standardisation clause which is set to protect investor's investments. It is used to inhibit legislative intervention in a negotiated contract (Kankam and Ackah, 2014: 403). Therefore, the Ghanaian fiscal regime protects the investor and makes the regime more stable, particularly with signed contract (ibid).

Secondly, in terms of fiscal rules to limit discretionary use of revenue from resources Hamilton and Ley (2011), Ghana has in place the Petroleum Revenue Management Act (Act 815) which sets the framework for the inflow and outflow of petroleum revenues and the disbursement or distributions of these revenues. It has three components; allocation to the national oil company (Ghana National Petroleum Oil Corporation, GNPC) for equity cost financing; allocation to the Annual Budget of government to finance development project and allocation to the Ghana Petroleum Funds for savings and stabilising or mitigating the budget against oil price fluctuations. According to PRMA (Act 815), not more than 70% of the Benchmark Revenue<sup>1</sup> is allocated to the Annual Budget Funding Amount (ABFA) (Adam, 2013). The balance after this deduction is split into 30% being assigned to the Ghana Heritage Fund and 70% to Ghana Stabilization Fund. It further requires that of the total ABFA, not less than 70% should be allocated to capital spending. Moreover, with the Ghana Heritage Fund and Ghana Stabilization Fund, the proceeds are to be invested in qualifying



instruments like bonds (Adam, 2013: 63). The point must be made that since December 2010 when Ghana began commercial production of oil, the government has been adhering strictly to these fiscal rules with regard to the PRMA (Act 815), which we consider as one of the positive outcomes.

### **Economic Diversification**

It has been argued that diversified economies perform better in the long run as compared to economies that are not diversified. The explanation for this is that engaging in the manufacturing sector enables dynamic learning-by-doing gains, which increase productivity and income. Similarly, diversification exposes producers to a broad range of information such as foreign markets, which gives these producing countries the opportunities to discover their unused potential (Gelb, 2011).

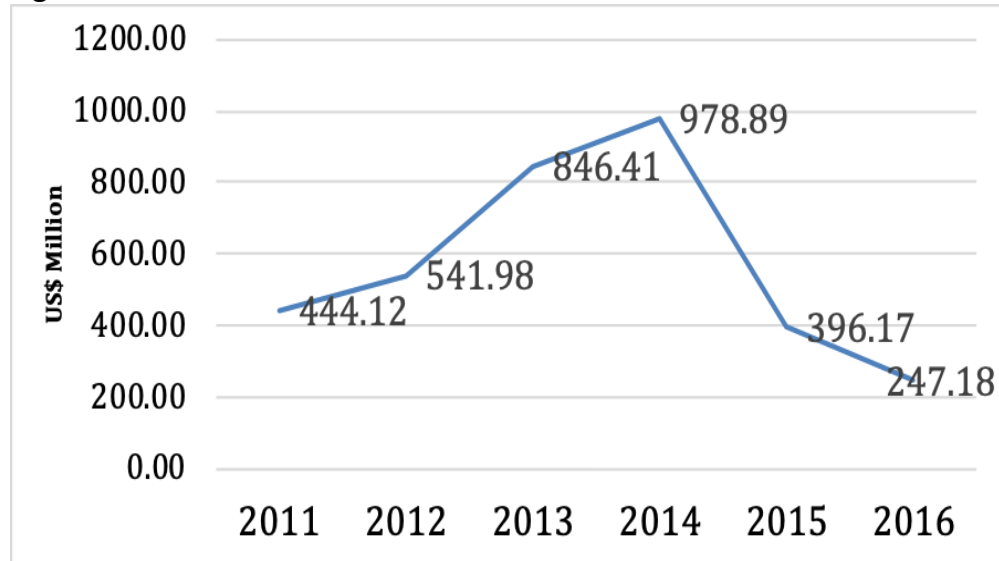
According to scholars such as Malothra et al. (2004) and Sarraf and Jiwaji (2001) to prevent the booming export sector and the non-traded goods sector from overshadowing the non-booming export sectors, resource-rich countries are advised to invest windfalls in economic diversification. In the view of Weinthal and Luong (2006) these resource-rich countries will be able to protect their economies from shocks caused by market volatility. Furthermore, they contend that economic diversification has a direct link to sound fiscal and monetary policies (that is, when the local currency does not appreciate, the likelihood of a decline in the non-booming sectors is reduced). Again, they posit that economic diversification is one of the rare areas in which policy prescriptions have been widely followed. In support of this, Weinthal and Luong (2006) argue that with the endorsement of developmental economists and international organizations by the United Nations Conference on Trade and Development, the United Nations Economic Commission, and the World Bank, from the 1960s until the early 1980s most resource-rich states made considerable investments in promoting some other economic sectors of the states.

Auty (2001) argues that decisions to mitigate the effects of Dutch Disease by transferring rents from the mineral sector to the non-booming export sectors have had an unfavourable economic effect. Again, earlier studies by Auty (1993) and other scholars such as Sachs and Warner (1995) argued that in historical context state-led investment has brought not only inefficiency in investment but also has led to import substitution

industrialisation and protectionism both of which are independent contributing factors to stagnant growth rates. On the other hand, Lewis (1984) points out that few countries have managed to diversify their economies. Davis (1995) cites the example of Tunisia as the only mineral economy in 1970 that was no longer ranked as a mineral economy in 1991. Therefore, Auty (2001:142) ironically suggests, 'the growth collapses of the late 1970s and the early 1980s resulted in the backfiring of the resource-abundant countries' efforts to reduce their commodity dependence'.

Furthermore, Weinthal and Luong (2006) argue that these policies have failed to decrease dependence on natural resource exports for the same reason that most resource-rich states have not been able to implement sound fiscal and monetary policies. In their opinion, because these states lack strong institutions and a transparent decision-making process, they are subject to making poor investment decisions 'that is, decisions that are based on either shaky economic ground or political priorities, and hence, do not offer high domestic rates of return' (Weinthal and Luong, 2006: 40). This research supports the assertion that indeed, strong institutions and transparent decision-making processes are necessary for the economic policies to be made a reality. Indeed, research has proven that the resource curse could easily be avoided in countries with high-quality institutions (Mehlum et al., 2006b). For example, Boschini et al. (2007) opine that countries that maintain high-quality institutions, well-developed financial systems and openness to international trade suffer much less from the resource curse syndrome and are even likely to avoid it. Like the case of Botswana, where through good government policies, strong political leadership, long-term development plan, effective anti-corruption laws and high civic engagement the country has been able to escape the typical symptoms of the resource curse.

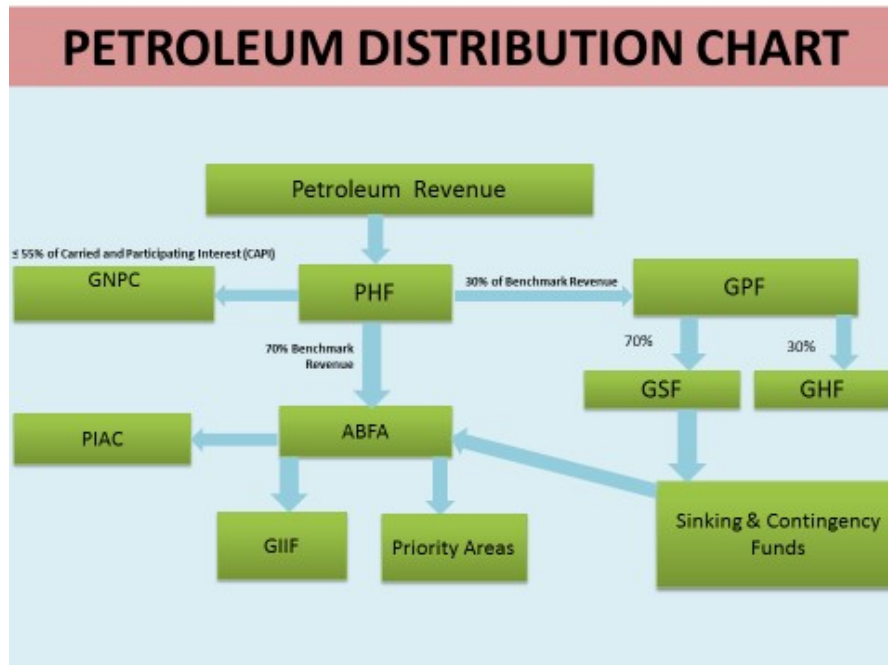
In Ghana, oil revenues contribute immensely to capital investment in agriculture. This has enhanced the agriculture sector's chances of meeting the Maputo declaration of committing 10% of the national budget to agriculture annually. The only challenge is that oil revenues are gradually replacing traditional sources of funding to the sector. This has led to a volatile allocation that appears to erode the positive gains of oil revenue investment in the industry.

**Figure 1: Petroleum Revenues**

**Source:** Authors' computation based on data from the Petroleum Reconciliation Statements, Ministry of Finance, 2017.

According to Aryeetey and Ackah (2018), petroleum revenues contributed on average 7.5% per annum to government revenues from 2011 to 2015. While this may be modest, when compared with Nigeria and Angola, it can make an impact when judiciously spent. To promote strategic spending, the petroleum revenue management Act (PRMA) provides for investment channels and accountability provisions. Figure 2 presents a diagrammatic expression of the PRMA.

Figure 2: Petroleum Management framework, Ghana



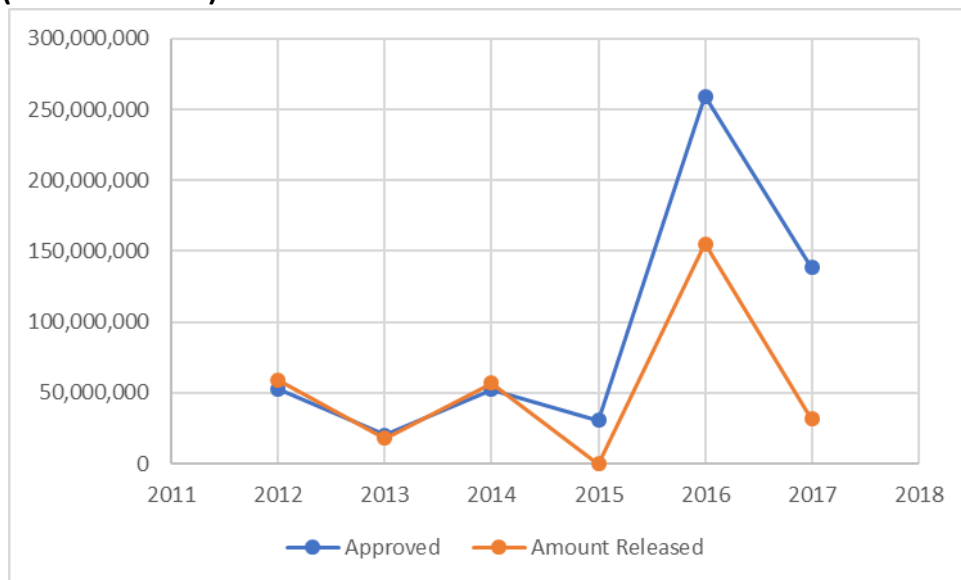
Source: Bank of Ghana and PIAC, 2018

According to figure 2, all petroleum revenues are deposited in the petroleum holding fund (PHF). From there, the revenues are shared among three principal accounts. First, the Ghana National Petroleum Corporation (GNPC) receives 55% or less of the benchmark revenues. Second, the Annual Budget Funding Amount (ABFA) receives 70% of the benchmark revenue. The ABFA is used to fund priority areas that are selected every three years. Over the past eight years, agriculture, roads and other infrastructure, capacity building, education, health and railway have been selected. In particular, agriculture and roads have been selected three times. A pre-determined percentage of the ABFA is used to fund the Public Interest and Accountability Committee (PIAC) and the Ghana Infrastructure Investment Fund (GIIF). Finally, 30% of the benchmark revenues go to the Ghana Petroleum Funds (GPF). The GPF is shared between the Ghana Stabilisation Funds and the Ghana Heritage Funds (PRMA, 2011).

Despite these prudent arrangements, the diversification goals appear to be difficult to achieve. Four factors have been identified as the reasons for

the inability of the petroleum revenues to make an impact (see Graham et al., 2016; Aryeetey and Ackah, 2018). First, no investment framework guides the selection of a priority area, the amount that needs to be allocated and little or no monitoring mechanism of the expenditure. Second, there is often a high disparity between the allocation and disbursement, especially in the agriculture and road sectors (see figure 3). Third, instead of oil revenues used to shore up expenditure deficit in the agricultural industry, oil revenues are rather replacing traditional budget allocations to the sector. Finally, the limited oil revenues are spread over many projects, which usually leads to time and cost overrun.

**Figure 3: ABFA allocation and disbursement to the Ministry of Agriculture (in Ghana Cedis)**



**Source:** Authors' illustration based on data from the Ministry of Finance, 2019

Figure 3 shows that there has been a massive disparity between ABFA allocation to the agriculture sector and actual disbursement since 2015. This has to be checked since oil revenues have two significant limitations: they are exhaustible and volatile. To overcome these challenges, countries such as Norway, Indonesia and Malaysia, which have been able to convert oil resources into development projects and programs diversified such revenues into non-extractive resource sectors where they have a

competitive advantage (Ackah, 2016). According to a report by the Africa Centre for Energy Policy as of 2016, 144 educational projects have been financed with the oil revenues (ACEP, 2016). On average, 18 projects were funded annually from 2011 to 2013. This increased to 40 in 2014 and 49 in 2015. This increment can be partially attributed to sustained advocacy work and the recognition that, infrastructure deficit in the education sector should be filled. Since 2017, the government has been using oil revenues to fund the free senior high school education program.

### **Management of Natural Resource Funds**

As noted above by Hamilton and Ley (2011: 136–137), a vital sign of a resource blessing is that there must be an operational natural resource fund. Natural Resource Funds (NRFs) comprise stabilisation or savings funds and often a combination of both. NRFs are a particular class of fiscal rules or rules-based fiscal policy. As pointed out by Davis, Fedelino, and Ossowski (2003) NRFs serve to buffer the economy from the volatility of natural resource markets, and they can limit Dutch disease symptoms by spreading the conversion of resource receipt into domestic currency with time. Additionally, NRFs can also serve as a relevant source of liquidity for governments concerned with administering ‘countercyclical fiscal regime’ (Hamilton and Ley, 2011: 139).

According to Davis, Fedelino, and Ossowski (2003) stabilisation funds aim to reduce the impact of commodity price volatility on the economy and therefore, improve the ability to predict the budget by stabilising spending patterns. This, they argue, reduces overspending when prices are high and borrowing when prices are low or fall simply because, when commodity prices are high, excess revenue is placed in the stabilization fund. However, when prices are low, revenue is transferred out to make up for budgetary shortfalls (Davis, Fedelino, and Ossowski, 2003). Again, the authors note that savings funds are intended to ensure instead that a share of the wealth will exist for future generations after the natural resources are exhausted.

Furthermore, it must be noted that NRFs has two main objectives; first is its proper integration into the budget and secondly, preserving the quality of spending. It is in this regard that Humphreys et al. (2007) points three main approaches in designing a NRF which could help advance the

incentives for responsible fiscal policy. First is its rule-based design, which underscores that point that it should operate under rules that determine which revenues will be paid into the funds and limit the discretions of the current government. Secondly, it should have broad governance involving other actors in the decision making such as the legislature and civil society. Finally, it must be transparent to ensure efficiency (see also Hamilton and Ley, 2011).

Subsequently, it has been argued that for NRFs to be effective, there must be strong institutions for it to work effectively. In the view of Mehlum et al. (2006b) quality of institutions are crucial in determining if a country will be able to escape the resource curse. Therefore, states must have strong state institutions (institutions that emphasise oversight, transparency, and accountability, for instance, a professional bureaucracy that abides by clear fiscal accounting standards and an independent judiciary that can prevent the executive from arbitrarily changing the rules). To add to this, some scholars argue that a strong institution such as civil society could play the role of a watchdog between the vacuum that exists between the state and the home (Debrah and Graham, 2015). This has been the trend in Ghana and Uganda after the discovery of oil. Through the efforts of civil society, Ghana was able to include the stabilisation fund and heritage fund (future savings fund) in the PRMA 815 (Debrah and Graham, 2015). This evidence underlies the significant contribution of Ghana's vibrant civil society in the oil and gas industry. For instance, Gyimah-Boadi and Prempeh (2012) also point out that the Civil Society Platform on Oil and Gas – an advocacy coalition – has played a vital role in the development of Ghana's oil management framework and ensuring transparency in the process of its establishment.

Furthermore, on transparency and accountability, Ghana has laid one of the highest standards in the management of the country's petroleum revenues, as stated in the Petroleum Revenue Management Act 815 (PRMA, 2011).<sup>2</sup> For example, Clause 8 requires the publication of the records of the petroleum receipt in the newspapers and online. Also, Clause 16 requires the minister of finance to reconcile quarterly petroleum receipts and expenditures and submit reports to parliament as well as publish the reports in the newspapers and several clauses such as 46 to 48 all on accountability and transparency (PRMA, 2011).

### **Transparency, Accountability and Public Involvement**

More recently, the issue of transparency and accountability has become a significant concern for mineral resource-endowed countries particularly those rich in minerals such as gold, diamond, oil and gas, just to mention but a few. There is a growing agreement that transparency and accountability are essential to ensure that resource windfalls do not negatively affect the development of oil-rich countries (Yaw, 2013; Sovacool and Andrews, 2015; Sovacool et al., 2016). It seems that transparency and accountability (though sometimes seen as buzzwords) are no longer a mere option for stakeholders in the management of natural resource but a necessity that all must strive to achieve (Yaw, 2013).

It must be emphasised that Ghana's oil and gas sector is characterised by an impressive commitment to transparency, accountability and public involvement by all stakeholders. For instance, in 2003, Ghana signed on to the Extractive Industries Transparency Initiative (EITI) and has been a complaint country since October 2010. Despite the several challenges with implementing the initiative in the local context and with global 'soft' norms in general (Andrews, 2016; Van Alstine, 2014), being part of the initiative shows some commitment to the topic of transparency and accountability. If nothing at all, its multi-stakeholder framework involves government, civil society, and corporations as the potential of making the governance and management of the extractive industry less opaque. Although one can question that this is happening partly due to power differentials, varying interests among different stakeholders, and the lack of correlation between revenue disclosures on the one hand and accountability and developmental outcomes on the other. Despite this, 'it is probably too early to cast the baby out with the bathwater' due to all the changes being made through the new EITI Standard, which could influence the effectiveness and proper compliance in local sites of implementation (Andrews, 2016: 76).

Additionally, the government of Ghana passed the Petroleum Revenue Management Act (PRMA) in April 2011, which governs the use of oil revenues in the country and provides for the creation of oil funds to guard against economic volatility and save for future generations. Among other mandates, the PRMA requires the transparency and accountability of petroleum receipts. It states that the Minister of Energy shall



simultaneously publish petroleum receipts in whatever form and Petroleum in the Gazette and at least two states owned daily newspapers, within thirty calendar days after the end of the applicable quarter (Debrah and Graham, 2015). The law also establishes a Public Interest and Accountability Committee, launched in September 2011, to introduce an additional layer of public oversight in petroleum revenue management. Ghana also in 2011, established the Petroleum Commission to regulate the petroleum sector and to advise the government on the award of contracts and licenses (Debrah and Graham, 2015).

Also, the Exploration and Production Act (2016) makes provisions for the publication of decision to open or close an area, open and competitive public tender, and mandatory contract disclosure. These characteristics provisions are arguably major pillars of good governance in the petroleum production, and it is expected that local content mechanisms would help strengthen the possibility of resource rents to benefits more Ghanaians than a select group of elites and business partners (Debrah and Graham, 2015). On issues of transparency, accountability and public involvement, Gyimah-Boadi and Prempeh (2012: 98) have noted that 'the sustained involvement of organised civil society and the media throughout the ensuing legislative process made the development of the initial legal framework for oil governance in Ghana exceptionally participatory and transparent'. Gyimah-Boadi and Prempeh (2012: 99) go on to mention that as a result of the work of civil society, the petroleum legislation before it was passed into law included:

clear procedures for the custody and transfer of petroleum receipts between the central bank, as designated custodian, and the government; the mandatory annual transfer of 30 percent of total petroleum revenues into separate stabilization and future savings funds; the mandatory publication by the Finance Ministry of quarterly reports of petroleum receipts and expenditures; multiple audits of the petroleum accounts; and the establishment of the Public Interest and Accountability Committee (PIAC), a thirteen-member independent watchdog group tasked with monitoring and reporting on the government's stewardship of petroleum funds and compliance with the law. As a safeguard of the group's independence, PIAC members are to be nominated by

statutorily designated professional associations, private sector bodies, organised labour, civil society, policy research organisations, and other non-state stakeholders, including Christian and Muslim clergy and traditional leaders.

Furthermore, on transparency and accountability, we have already alluded to the fact that Ghana has laid one of the highest standards in the management of the country's petroleum revenues as stated in the Petroleum Revenue Management Act 815 (PRMA, 2011).<sup>3</sup> For example, Clause 8 requires the publication of the records of the petroleum receipt in the newspapers and online (PRMA, 2011).<sup>4</sup> Also, Clause 16 requires the minister of finance to reconcile quarterly petroleum receipts and expenditures and submit reports to parliament as well as publish the reports in the newspapers and several clauses such as 46 to 48 all on accountability and transparency (PRMA, 2011).<sup>5</sup> While these institutional mechanisms of governance will require a more nuanced evaluation to understand their overall impacts, they go a long way to support the argument for transparency, accountability and public involvement in the oil sector – and perhaps Ghana's perceived ability to escape or avoid the curse.

#### **Possible Manifestation of a 'Resource Curse'**

Despite the points raised above that highlight some of what may be called a resource 'blessing', there are a number of ongoing issues that could also be characterised to be a manifestation of the resource 'curse'. The primary one has to do with governance, accountability and the overall management of oil revenues. While the establishment of the PIAC is very welcome, it faces a number of challenges that limit its potential as an independent watchdog group tasked with monitoring and reporting on petroleum funds, expenditures, and its compliance with the law. The committee has been under-funded since its establishment. Ironically, PIAC is supposed to monitor and report oil revenue receipt and expenditure. For instance, the discretion of the Finance Minister to cap the stabilisation fund to service debts may provide incentives for 'wholesale contraction' of loans some of which may not be in the long-term interest of the country. This point supports existing studies that suggest that the PIAC 'progress' report is misleading and potentially misplaced particularly in terms of how

it establishes or measures the relationship between resource abundance and economic development (Obeng-Odoom, 2014a).

Secondly, the spreading of oil revenues thinly over many projects has led to cost and time overruns, which have affected project completion, time and cost. The country is not deriving a value for money as most of the projects are behind schedule, experiencing cost overruns or not adequately executed. The ABFA is also thinly spread to the extent that some of the projects may either not be completed or can lead to poor quality projects. There is also an overall absence of any fiscal rule on spending growth, debt targeting, and development of the non-oil sector or deficit with price smoothing can lead to excessive borrowing at the expense of the ABFA and excessive spending beyond budgetary allocation. Excessive expenditure on goods and services at the expense of capital investments contrary to the provisions of ACT 815 is also a point worthy of note. Some reports suggest that the Government of Ghana is violating provisions laid out in the PRMA, which is the primary regulatory framework that supports the utilisation of oil revenues. The allegation is that the Bank of Ghana, acting on behalf of the government, made an unlawful withdrawal from the Stabilization Fund, which is meant to only support the budget during revenue shortfalls (Odonkor, 2016). This was before an amendment to the PRMA was done in 2015. The amended Petroleum Revenue Management Law allows the Minister of Finance to cap the Ghana Stabilisation Fund. The excess from the cap can be used for debt repayment. Specifically, Section 5 of the amended PRMA, 2015 (Act 893) stipulates that there can be withdrawals from the GSF to offset the petroleum revenue shortfall, to transfer into the contingency fund, or for debt repayment (sinking fund). According to PIAC (2017), the GSF should have had a balance of US\$604 million by December 2015. However, the fund was capped at US\$100 million in the 2016 budget. As at December 2018, 82% of the excess cap had been used for debt service. This implies that, instead of playing a budget stabilisation function, the GSF is now a debt repayment tool.

Although we have mentioned that the Exploration and Production Act (2016) represents a 'blessing', the Act also ironically comes with its own 'curses'. The 'blessing' includes an open and competitive public tender for the allocation of petroleum rights, a requirement for the Minister to

publish the reasons for vetoing the outcome of a competitive public tender, and the use of direct negotiation if only one company expresses interest in the area after a notice to tender has been published. On the other hand, there is still room for Ministerial discretion. For instance, the Minister can set aside an outcome of a competitive bidding process by publishing his/her reasons for doing so. The question is, who can challenge this decision, and can it be reversed? Further, there are no specific provisions on penalties for conflict of interest of public officers. Section 73 of Liberia's Petroleum Act 2014, for instance, provides a conflict of interest and penalty clause which reads as follows:

An officer in the public service engaged in the implementation of this Act shall not, in his or her private capacity, knowingly, directly or indirectly, acquire, attempt to acquire or hold: (a) a petroleum right or an interest in a petroleum right; (b) a direct or indirect economic interest, participation interest or share in an entity that is authorized under this Act to carry out petroleum right in Liberia; or (c) a direct or indirect economic interest, participation interest or share in a company that is providing goods or services to a holder of a petroleum right under this Act. A person who contravenes this commits an offence and is liable on conviction to a fine not exceeding fifty thousand US dollars or imprisonment not exceeding five years or both.

Such an explicit regime around conflict of interest, if followed, has the potential of reducing the rate at which discretion is used by the Finance Minister. However, such a provision is not currently spelt out in the Ghanaian context. Another sign has been the volatile and decline growth in the agriculture sector. The agriculture sector grew by 0.04% in 2015, down from 4.52% in 2014. Since oil revenues are a core source of funding to the agriculture sector, the volatility of allocation to the sector can be a factor in the declining growth rate of the sector. For instance, in the 2016 budget ₵259, 317 904, only 60% was released. In 2017, only 23% of the allocation was disbursed.

**Table 1: ABFA allocation and disbursement to the Ministry of Agriculture**

Year	Approved Funds in million Cedis(₵)	Amount Released in million Cedis(₵)
2012	53,000,000	59,331,774
2013	20,000,000	17,719,538
2014	52,180,591	56,943,010
2015	30,503,536	30,198,747
2016	259,317,904	155,351,312.63
2017	138,214,220	31,411,407.35

**Source:** Authors computation based on data from the Ministry of Agriculture, 2018

Although we have highlighted some evidence of diversification above, this account of declining investment in a fundamental sector such as agriculture suggests that more needs to be done to be fully immune to what has been described as the 'Dutch disease'. In the face of weak fiscal management, unstable petroleum revenues have not been of much use, and the elaborate rules have not been followed. According to Aryeetey and Ackah (2018), when the oil price fell in 2015, it led to the request for an International Monetary Fund (IMF) facility, and a huge cut to the capital budget by an estimated 52.4%.

Another sign of a curse is the politics that exist in Ghana's infant oil and gas sector. Graham et al. (2016) point out that Ghana's oil discovery has been marked by many instances of politicisation from one government to another. Firstly, the New Patriotic Party (NPP) under the leadership of President John A. Kufuor asserted that it was their time Ghana found oil in 2007. Secondly, the National Democratic Congress (NDC) also maintained that it was during ex-President J. J Rawling's regime that the GNPC started the process of oil exploration and that the NDC discovered oil before they left office in 2001. Thirdly, the chiefs and the people of the Western Region of Ghana argued that the oil was found in their region and therefore petitioned the government to allocate 10% of the revenues from the sector to the region. Also, oil and gas were visible in both 2008, 2012, 2016 general elections campaign and is already becoming rife in the campaign

leading up to the 2020 elections. This evidence of intense 'politicking' can be said to be a sign of a resource curse since these major political parties in the country have such high stakes in the oil and gas sector as a source of revenue to their campaign policies hence their thirst for political power to get access to the 'petrodollar' (Siakwah, 2017). In this regard, a major concern to Graham et al. (2016) is how perhaps greedy multinational lobbyists might be able to fuel pre-election and post-election political frictions in future elections through sponsoring the pursuit of political power which, if not curtailed, could have a severe effect on Ghana's democracy.

### **Conclusion**

The paper so far has proven how difficult it is to itemise 'blessing' and 'curse' in a simple fashion. In fact, it supports existing scholarship that points us to a mixed bag of both successes and failures and the need to not take the mainstream resource curse framework as a given (Obeng-Odoom, 2014b; Phillips et al., 2016). However, an account of Ghana's oil production over the past eight years reveals that there is some opportunity to address what we have captured above as curse indicators. One of the first steps will be proper diversification. Due to the usual boom and bust cycles that come with natural resource exploration, the Government of Ghana should take steps to diversify the economy and invest in agriculture, education and other areas that can reduce poverty, inequality and enhance development.

In ensuring that the government's commitment to development is upheld, the oil-civil society nexus will need to be reinforced despite the gains over the past couple of decades since Ghana became a recognised democracy. This also entails allowing for more public input in the promulgation of laws, policies and developmental initiatives that are meant to benefit the people (Okpanachi and Andrews, 2012). More public participation will ensure that spending of oil revenues be based on an investment plan guided by a long-term national development or medium-term development framework. This will provide consistency in the use of petroleum revenues for projects that add value to the economy on a sustainable basis. Projects funded with oil revenues should also be monitored, and their progress, reported in the annual petroleum reconciliation report presented to parliament.

In light of the evidence of government violating PRMA, explicit guidelines need to be established regarding when and how the Finance Minister can use his discretion concerning fixing benchmarking prices and managing the stabilisation fund. Digging into the Stabilization Fund to contribute to the country's overall budget is not a sustainable revenue management practice. On another related monetary issue, the funding for PIAC should be defined by law and should be a percentage of the total oil receipts. As an independent body, it cannot operate within that capacity if it has to depend on the whims of the party in office to fund its oversight activities and reports. Defining what is due to them by law enables them to act without fear or favour. Finally, the government should implement fiscal rules that guard against the use of oil resources (reserve or revenues) as collateral for loans. Instead, oil revenues should be invested in needed infrastructure.

There is no easy way of rigorously confirming whether or not an infant oil and gas sector exhibit signs of resource curse or blessing. However, due to existing 'tell tales' about the crude days that may be forthcoming (Obeng-Odoom, 2014b; see also Siakwah, 2017), it is worthwhile to assess the different opportunities and constraints that the sector faces. We hope that our endeavour here has pointed us to what we know about the sector and the kind of reforms needed to ensure the possibly optimal benefit of extraction for affected populations and the country at large.

#### Notes

1. Is a total expected petroleum revenue minus the equity financing cost of the National Oil Company minus the share of the net carried and participating interest allocated to the National Oil Company for investments.
2. PRMA, (2011). "Petroleum Revenue Management Acts 815"
3. PRMA, (2011). "Petroleum Revenue Management Acts 815"
4. Ibid.
5. Ibid.

## References

- ACEP, 2016. "Oiling the Wheels of Quality Education in Ghana", Africa Centre for Energy Policy (ACEP) Report May 2016, available at <https://new-acep-static1.s3.amazonaws.com/> (accessed 7.4.2019).
- Ackah, I. 2016. "Sacrificing Cereals for Crude: Has Oil Production Slowed Agriculture Growth in Ghana?", *SSRN*, available at: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2745904](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2745904).
- Acosta, A. M. and Heuty, A. 2009. "Can Ghana Avoid the Oil Curse? A Prospective Look into Natural Resource Governance", *Policy briefing prepared for the UK's Department for International Development (DfID)*, available at: [http://www2.ids.ac.uk/gdr/cfs/pdfs/Ghana\\_oil\\_curse\\_DFIDbriefing\\_May09.pdf](http://www2.ids.ac.uk/gdr/cfs/pdfs/Ghana_oil_curse_DFIDbriefing_May09.pdf) (accessed 12.9.2016).
- Adam, M. A. 2013. "The Money Trail and Economics of Oil and Gas", In: *Handbook on Oil and Gas for Journalists*. Accra: International Institute of ICT Journalism Penplusbytes.
- Andrews, N. 2013. "Community Expectations from Ghana's New Oil Find: Conceptualizing Corporate Social Responsibility as a Grassroots-Oriented Process", *Africa Today* 60(1): 54–75.
- Andrews, N. 2016. "A Swiss-Army Knife? A Critical Assessment of the Extractive Industries Transparency Initiative (EITI) in Ghana", *Business and Society Review* 121(1): 59–83.
- Aryeetey, E. and Ackah, I. 2018. "The Boom, the Bust, and the Dynamics of Oil Resource Management in Ghana", *WIDER Working Paper* 89: 21.
- Asafu-Adjaye, J. 2010. *The Inter-Sectoral Impacts of Oil Production in Ghana- Estimates and Policy Implications*.
- Asante, K. 2009. "Managing People's Expectation for Ghana's Oil", *Centre for Democratic Development Ghana (CDD-GHANA)*.
- Auty, R. M. 1993. *Sustaining Development in Mineral Economies: The Resource Curse Thesis*. London: Routledge, available at: <http://public.eblib.com/choice/publicfullrecord.aspx?p=166395> (accessed 9.3. 2017).
- Auty, R. M. 2001. *Resource Abundance and Economic Development*. Oxford University Press.
- Ayelazuno, J. A. 2014. "Oil Wealth and the Well-being of the Subaltern Classes in Sub-Saharan Africa: A Critical Analysis of the Resource Curse in Ghana", *Resources Policy* 40: 66–73.



- Boschini, A. D., Pettersson, J. and Roine, J. 2007. "Resource Curse or Not: A Question of Appropriability", *Scandinavian Journal of Economics* 109(3): 593–617.
- Brunnschweiler, C. N. and Bulte, E. H. 2008. "The Resource Curse Revisited and Revised: A Tale of Paradoxes and Red Herrings", *Journal of Environmental Economics and Management* 55(3): 248–264.
- Bybee, A. N. and Johannes, E. M. 2014. "Neglected but Affected: Voices from the Oil-Producing Regions of Ghana and Uganda", *African Security Review* 23(2): 132–144.
- Carmody, P. 2011. *The New Scramble for Africa*. Cambridge, UK ; Malden Mass: Polity Press.
- Cavnar, A. 2008. "Averting the Resource Curse in Ghana: The Need for Accountability", *Ghana Center for Democratic Development (CDD-GHANA)* 9(3): 1–4.
- Collier, P. and Hoeffler, A. 1998. "On Economic Causes of Civil War", *Oxford economic papers* 50(4): 563–573.
- Collier, P. and Hoeffler, A. 2005. "Resource Rents, Governance, and Conflict", *Journal of Conflict Resolution* 49(4): 625–633.
- Cramer, C. 2002. "Homo Economicus Goes to War: Methodological Individualism, Rational Choice and the Political Economy of War", *World Development* 30(11): 1845–1864.
- Davis, G. A. 1995. "Learning to love the Dutch disease: Evidence from the Mineral Economies", *World Development* 23(10): 1765–1779.
- Davis, G. A. and Tilton, J. E. 2005. "The Resource Curse", *Natural Resources Forum* 29(3): 233–242.
- Davis, J. M., Fedelino, A. and Ossowski, R. 2003. *Fiscal Policy Formulation and Implementation in Oil-Producing Countries*. International Monetary Fund.
- Debrah, E. and Graham, E. 2015. "Preventing the Oil Curse Situation in Ghana: The Role of Civil Society Organisations", *Insight on Africa* 7(1): 21–41.
- Dunning, T. 2008. *Crude Democracy: Natural Resource Wealth and Political Regimes*. Cambridge Studies in Comparative Politics. Cambridge ; New York: Cambridge University Press.
- Gelb, A. H. 1988. *Oil Windfalls: Blessing or Curse?* World Bank.
- Gelb, A. H. 2011. "Economic Diversification and the Role of Finance. In: *Beyond the Curse: Policies to Harness the Power of Natural*

- Resources*. Washington, D.C: International Monetary Fund (IMF), pp. 66–93.
- Graham, E., Ackah, I. and Gyampo, R. E. V. 2016. "Politics of Oil and Gas in Ghana", *Insight on Africa* 8(2): 131–141.
- Gyampo, R. E. V. 2011. "Saving Ghana from Its Oil: A Critical Assessment of Preparations so Far Made", *Africa Today* 57(4): 49–69. DOI: 10.2979/africatoday.57.4.49.
- Gyampo, R. E. V. 2014. "Making Ghana's Oil Money Count: Lessons from Gold Mining", *International Journal of Development and Economic Sustainability* 2(1): 25–38.
- Gyampo, R. E. V., Kuditchar, N. L. and Asare, B. E. 2011. "First One Hundred Days of Oil Production in Ghana", *African Research Review* 5(2): 16–28.
- Gyimah-Boadi, E. and Prempeh, H. K. 2012. "Oil, Politics, and Ghana's Democracy", *Journal of Democracy* 23(3): 94–108.
- Haber, S. and Menaldo, V. 2011. "Do Natural Resources Fuel Authoritarianism? A Reappraisal of the Resource Curse", *American Political Science Review* 105(01): 1–26.
- Hamilton, K. and Ley, E. 2011. "Sustainable Fiscal Policy for Mineral Based Economies", *Beyond the Curse: Policies to Harness the Power of Natural Resources*.
- Humphreys, M., Sachs, J. D. and Soros, J. E. S. F. by G (eds) (2007) *Escaping the Resource Curse*. Columbia University Press.
- Idemudia, U. 2012. "The Resource Curse and the Decentralization of Oil Revenue: The Case of Nigeria", *Journal of Cleaner Production* 35: 183–193.
- Jensen, N. and Wantchekon, L. 2004. "Resource Wealth and Political Regimes in Africa", *Comparative Political Studies* 37(7): 816–841.
- Kankam, D. and Ackah, I. 2014. "The Optimal Petroleum Fiscal Regime for Ghana: An Analysis of Available Alternatives", *International Journal of Energy Economics and Policy* 4(3): 400–410.
- Kopinski, D., Polus, A. and Tycholiz, W. 2013. "Resource Curse or Resource Disease? Oil in Ghana", *African Affairs* 112(449): 583–601.
- Lewis, S. R. 1984. "Development Problems of the Mineral-rich Countries", in: *Economic Structure and Performance*. Elsevier, pp. 157–177.
- Malothra, H., Bartsch, U., Cuc, M., and Katz, M. 2004. *Lifting the Oil Curse: Improving Petroleum Revenue Management in Sub-Saharan Africa*. International Monetary Fund.

- Mehlum, H., Moene, K. and Torvik, R. 2006a. "Cursed by Resources or Institutions?" *The World Economy* 29(8): 1117–1131.
- Mehlum, H., Moene, K. and Torvik, R. 2006b. "Institutions and the Resource Curse", *The Economic Journal* 116(508): 1–20.
- Obeng-Odoom, F. 2014a. "Black Gold in Ghana: Crude Days for Fishers and Farmers?", *Local Environment* 19(3): 259–282.
- Obeng-Odoom, F. 2014b. "Measuring What? "Success" and "Failure" in Ghana's Oil Industry", *Society and Natural Resources* 27(6): 656–670.
- Obeng-Odoom, F. 2015. "Global Political Economy and Frontier Economies in Africa: Implications from the Oil and Gas Industry in Ghana", *Energy Research and Social Science* 10: 41–56.
- Odonkor, E. 2016. "Ghana government Violating Petroleum Revenue Management law", In: *Ghana Business News*, available at: <https://www.ghanabusinessnews.com/2016/03/31/ghana-govt-violating-petroleum-revenue-management-law/> (accessed 6.1.2019).
- Okpanachi, E. and Andrews N. 2012. "Preventing the Oil "Resource Curse" in Ghana: Lessons from Nigeria", *World Futures* 68(6): 430–450.
- Perelman, M. 2003. "Myths of the Market Economics and the Environment", *Organization and Environment* 16(2): 168–226.
- Phillips, J., Hailwood, E. and Brooks, A. 2016. "Sovereignty, the 'Resource Curse' and the Limits of Good Governance: A Political Economy of Oil in Ghana", *Review of African Political Economy* 43(147): 26–42.
- PIAC, 2017. "Public Interest Accountability Committee-Analysis of Petroleum Receipts from 2011 to 2017", available at: <http://www.piacghana.org/portal/29/33/analysis-of-receipts> (accessed 6.4.2019).
- PRMA, 2011. "Petroleum Revenue Management Act 2011", available at: [http://www.mofep.gov.gh/sites/default/files/reports/Petroleum\\_Revenue\\_Management\\_Act\\_%202011.PDF](http://www.mofep.gov.gh/sites/default/files/reports/Petroleum_Revenue_Management_Act_%202011.PDF) (accessed 29.8.2017).
- Roll, M. (ed.) 2011. *Fuelling the World - Failing the Region? Oil Governance and Development in Africa's Gulf of Guinea*. Abuja: Friedrich-Ebert-Stiftung.
- Ross, M. L. 2001. Does Oil Hinder Democracy? *World Politics* 53(3): 297–322.
- Rosser, A. 2006. "Escaping the Resource Curse", *New Political Economy* 11(4): 557–570.

- Rostow, W. W. 1960. "The Problem of Achieving and Maintaining a High Rate of Economic Growth: A Historian's View", *The American Economic Review* 50(2): 106–118.
- Sachs, J. D. and Warner, A. 1995. "Natural Resource Abundance and Economic Growth", available at: <http://www.nber.org/papers/w5398> (accessed 7.12.2016).
- Sarraf, M. and Jiwanji, M. 2001. "Beating the resource curse: the case of Botswana", *Environment Department working paper*; no. 83. Environmental economics series. World Bank, Washington, DC., available at <https://openknowledge.worldbank.org/handle/10986/18304?local-e-attribute=fr> (accessed 7.4.2016).
- Siakwah, P. 2017. "Are natural resource windfalls a blessing or a curse in democratic settings? Globalised assemblages and the problematic impacts of oil on Ghana's development." *Resources Policy* (52): 122-133.
- Sovacool, B. K., and Andrews, N. 2015. "Does transparency matter? Evaluating the governance impacts of the Extractive Industries Transparency Initiative (EITI) in Azerbaijan and Liberia." *Resources Policy* (45): 183-192.
- Sovacool, B. K., Walter, G., Van de Graaf, T., and Andrews, N. 2016. "Energy governance, transnational rules, and the resource curse: Exploring the effectiveness of the Extractive Industries Transparency Initiative (EITI)." *World Development* (83): 179-192.
- Stevens, P. 2003. "Resource Impact: a Curse or a Blessing?", *Investment Policy* 22: 5–6.
- Sunley, E. M., Baunsgaard, T. and Simard, D. 2003. "Revenue from the Oil and Gas Sector: Issues and Country Experience", *Fiscal policy formulation and implementation in oil-producing countries*: 153–183.
- Van Alstine, J. 2014. "Transparency in Resource Governance: The Pitfalls and Potential of "New Oil" in Sub-Saharan Africa", *Global Environmental Politics* 14(1): 20–39.
- Weinthal, E. and Luong, P. J. 2006. "Combating the Resource Curse: An Alternative Solution to Managing Mineral Wealth", *Perspectives on Politics* 4(1): 35–53.

- Yates, D. A. 2012. *The Scramble for African Oil: Oppression, Corruption and War for Control of Africa's Natural Resources*. London : New York: Pluto Press.
- Yaw, O. J. J. 2013. "The role of Information Accessibility in achieving Transparency and Accountability in Ghana's oil Industry: A reality check from Cape Three Point", Masters Dissertation: Norwegian University of Science and Technology, available at <https://ntnuopen.ntnu.no/ntnu-xmlui/handle/11250/265555> (accessed 6.4.2019).