

Narh, John

Article — Published Version

The resource curse and the role of institutions revisited

Environment, Development and Sustainability

Provided in Cooperation with:

Springer Nature

Suggested Citation: Narh, John (2023) : The resource curse and the role of institutions revisited, Environment, Development and Sustainability, ISSN 1573-2975, Springer Netherlands, Dordrecht, pp. 1-21,
<https://doi.org/10.1007/s10668-023-04279-6>

This Version is available at:

<https://hdl.handle.net/10419/307263>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by/4.0/>



The resource curse and the role of institutions revisited

John Narh¹ 

Received: 27 March 2020 / Accepted: 27 November 2023
© The Author(s) 2023

Abstract

Many studies have shown that natural resource abundant countries with strong institutions tend to escape the resource curse. Institutional quality has been examined using broad indices of rule of law, the rate of murder, the share of the shadow economy and provision of public goods. Nonetheless, we need to locate the specific institutional conditions under which the curse manifests since some “rule of law” countries like Nigeria and Angola are generally classified as resource cursed. In this review, I argue that managing and distributing natural resource wealth through a centralised planning strategy and lack of a binding long-term national development plan are institutional conditions that encourage government unaccountability as they do not restrict policy makers against discretionary distribution of natural resource windfall, rent seeking, clientelism and corruption which contribute to poor economic development and growth. Also, inadequate regulations on how to address the potential or actual impacts of natural resource extraction on the livelihood of local people and the environment tend to precipitate grievance-induced resource conflict.

Keywords Resource curse · Government accountability · Institutions · Natural resource conflict · Natural resource windfall · Financial development

1 Introduction

Resource curse is any negative political and or socio-economic outcome emanating from the exploitation of natural resources (Auty, 1993; Ross, 2015). Precisely, resource curse is the situation whereby a natural resource abundant country fails to use its resources to achieve sustained universal socio-economic development and peace for its citizens. Resource curse is mostly evident through poor economic performance, lack of government accountability¹ and natural resource conflict (Aslaksen, 2010; Ross, 2015; Rosser, 2006).

¹ Authoritarianism is another cause of resource curse (Andersen & Ross, 2014; Rosser, 2006). In this review, however, more emphasis is place on government accountability instead of authoritarianism since some democratic countries are also facing the resource curse menace. Also, oil wealth only helped to make authoritarian regimes more durable as many resource abundant countries in the Middle East were already practicing authoritarian rule before they discovered oil (Andersen & Ross, 2014; Aslaksen, 2010; Ross, 2015). It is also true that resource (especially oil) wealth helped to consolidate any regime (including democracy) that predated the discovery of the resource in developing countries (Morrison, 2009; Smith,

✉ John Narh
jnacademics@gmail.com; john.narh@uni-passau.de

¹ Department of Geography, University of Passau, Innstr. 41, 94032 Passau, Germany

Over the years, scholars have investigated the manifestations of the resource curse in many natural resource abundant countries (Auty, 1993, 2001b; Collier & Hoeffler, 2004; Omeje, 2008; Ross, 2001, 2012; Sachs & Warner, 1995). These studies have contributed significantly to our understanding of the resource curse but there are a few loose ends that need to be tied to guide the many developing countries that are increasingly becoming oil and gas exporters in order to minimise the resource curse (Ross, 2015).

We know that the quality of existing institution determines, to a large extent, whether a resource abundant country will experience or escape resource curse (Mehlum et al., 2006; Robinson et al., 2006; Wantchekon, 2002). Although resource wealth can breakdown institutional quality (Bulte et al., 2005; Knack, 2009), it does so only when the pre-existing ones were already weak (Tornell & Lane, 1999; Wiens, 2014). Institutional quality has been measured by both objective and subjective indicators of rule of law, government efficiency, provision of public goods, the share of the shadow economy and rate of murder (Kennedy & Tiede, 2013; Polterovich et al., 2010; Samadi & Alipourian, 2021). Yet, Nigeria with abundant oil and natural gas and practicing some level of rule of law is saddled with both resource conflict and poor economic development and growth (Esu, 2017; Mähler, 2012). Therefore, we need to locate the specific institutional conditions that tend to precipitate the resource curse to develop effective antidote to the menace.

Moreover, resource curse or blessing is often measured by macroeconomic indicators such as GDP, economic growth and financial development. Impressive macroeconomic indicators do not always translate in the livelihood of ordinary citizens. So, the question is, resource blessing for who? To fringe communities which are immediately and directly affected by environmental challenges posed by resource extraction and to many ordinary citizens, impressive macroeconomic indicators may be meaningless or useless unless they reflect positively in their lives. I doubt if communities that have been deprived of fresh surface water through gold mining in Ghana will classify gold's contribution to GDP and financial development or the performance of multinational extractive firms on the stock market as resource blessing. Until now, some of the specific institutional conditions that could determine whether natural resource windfall will inure to the benefit of local people and ordinary citizens have been neglected or crowded-out by several indices for analysing broad institutions such as rule of law, provision of public goods, the share of the shadow economy, and rate of murder and other political and economic institutions (Kennedy & Tiede, 2013; Samadi & Alipourian, 2021). I have reviewed the resource curse literature and put forward some specific indices that can be considered in analysing institutional quality of natural resource abundant countries. These are the planning tradition that the country employs to manage and distribute the windfall of resource; existence of a binding long-term national development plan; and binding regulations to address potential or actual socio-economic and environmental impact of the exploitation of natural resources. I argue that broad-based planning tradition like the agonistic paradigm and a binding national development plan can act as institutional barriers to minimise discretionary distribution of resource windfall. In addition, adherence to clearly defined laws that ensure a fair distribution of resource windfall to local people or resource-fringe regions, and strict environmental regulations could minimise grievance-induced natural conflict which is an aspect of

Footnote 1 (continued)

2004). More importantly, Nigeria, a resource cursed country, has managed a democratic transition in 2015, defying the theory that oil wealth hinders democracy. Albeit democracy in Nigeria is low given that elections are always bedevilled with challenges such as vote buying.

resource curse. Therefore, this article enhances knowledge on resource curse by suggesting specific institutional indices that could be included in analysing institutional quality of natural resource abundant countries. This is done with the conviction that if most individuals benefit from natural resource extraction, then collectively, it is resource blessing unlike impressive GDP figures which may not translate in the livelihood of the masses.

The next section discusses the mechanisms for poor economic performance and resource conflict in resource-endowed countries. Section 3 discusses how quality institutions contribute to reducing the resource curse menace. Section 4 is the main contribution of this article and where the specific institutional conditions which play critical roles on the resource curse are discussed. Finally, the concluding remarks are presented in Sect. 5.

2 The resource curse mechanisms

2.1 Poor economic performance

Life in all forms and at all places throughout time requires natural resources to exist, develop or grow. It would be expected that countries with abundant known natural resources would leapfrog in growth and development than natural resource-stricken ones following classical economists' observations of the positive role of natural resources in national development (Asif et al., 2020; Esu, 2017). Ironically, many macro-scale studies found an inverse relationship between natural resources abundance or wealth and economic development in many countries (Atkinson & Hamilton, 2003; Auty, 2001a; Gylfason et al., 1999; Lamb et al., 2009; Neumayer, 2004; Sachs & Warner, 1995). This negative relationship is called "the paradox of plenty" (Karl, 1997). The paradox of plenty often emanates from economic mismanagement, natural resource dependence, lack of competent human capital and lack of government accountability, rent-seeking, clientelism and corruption (Duruji & Dibia, 2017; Pérez & Claveria, 2020).

Slower economic development and growth in many natural resource abundant countries emanate from economic mismanagement (Pérez & Claveria, 2020; Van der Ploeg, 2011). Behaviourists argue that natural resource abundance undermines critical thinking and make policy-makers to take myopic economic decisions and engage in overspending of the windfall (Brollo et al., 2013; Karl, 1997; Ross, 2012). It is argued further that abundant natural resource is associated with *wishful thinking* among policy-makers, and that people get over-exuberant and too optimistic of economic growth and development, leading to excessive and sometimes, unnecessary spending (Krause, 1995; Mitra, 1994). Torvik (2009) posits that overspending correlates significantly with poor economic performance and has observed that resource cursed countries have higher propensity to overspend. At best, overspending contributes to a depletion of the national fiscal reserve and at worse, it leads to national debt and economic turmoil when resource windfall reduces or diminishes (Bazzi & Blattman, 2013; Collier & Hoeffler, 2012; Wiens, 2014). Clearly, economic mismanagement is a major cause of resource curse. Natural resource extraction poses cost to the environment and or the source of livelihood of many people. So, where resource windfall is mismanaged, ecological and socio-economic conditions tend to worsen and it would have been better if the natural resources are left untapped. In such cases, natural resource become a curse to many people.

Another explanation for poor economic performance in many resource abundant countries is that a large amount of rent can lure policy makers to take over-burdened

responsibility for the citizenry (Brautigam et al., 2008; Morrison, 2009; Rosser, 2006). Large amount of “unearned” revenue from abundant natural resource can entice governments to focus on distributive policies with less attention to domestic revenue mobilisation and collaboration with the private sector for economic diversification (Auty, 2001b, c; Brautigam et al., 2008; Chaudhry, 1994; Karl, 1997; Moore, 2004; Morrison, 2009). Where distribution of natural resource windfall dominate national policy, state accountability is usually compromised as cared-for populace often assume that they derive their subsistence from the state’s natural resource revenue and are less likely to demand disclosure of detailed revenue expenditure and economic prudence (Brautigam et al., 2008; Duruji & Dibia, 2017; Moore, 2004; Ross, 2004a). A compromised government accountability would enable only a few people to enjoy full benefit of the resource windfall at the detriment of the masses.

Moreover, over dependence on natural resources contributes to poor economic development (Van der Ploeg, 2011). Generally, when natural resource contributes at least 20–25% of government or export earning, it is classified as a resource-dependent country (Hailu & Kipgen, 2017). Some countries tend to trivialise the volatility of natural resource prices on the global market and rely almost entirely on windfall for economic development. Dependence on natural resources exposes the economy to external price shocks that often militate against effective economic planning (Bazzi & Blattman, 2013; Collier & Hoeffler, 2012; Van der Ploeg, 2011). Although Nigeria manages democratic transitions to escape political conflict due to the slow but progressive improvement in several institutions and through a strategic political alliance (Amundsen, 2017), the economy is still highly oil-dependent and that is a major reason why the country is generally classified as resource cursed and that is a major reason why the country is generally classified as resource cursed (Hailu & Kipgen, 2017).

In addition, many countries lack the required bureaucratic capacity to manage the rapid inflow of large resource windfalls (Ross, 2012). Since natural resources are gifts of nature and do not always require higher level of critical thinking to obtain large amounts of resource windfall when they are abundant and of high-value, there could be less incentive for investing in human capital in order to make effective economic decisions (Besley & Persson, 2010; Brollo et al., 2013; Pérez & Claveria, 2020; Ross, 2001). More so, natural resource abundance tends to discourage investment in education since their extraction can provide higher income to people with even low or no formal educational background (Gylfason et al., 1999; Pérez & Claveria, 2020; Zolnikov, 2020). Limited or lack education will result in lack of intellectual acumen to manage windfall and provide socio-economic opportunities for the benefit of the citizenry.

Rent seeking, or rent grabbing, is another reason for poor economic performance in many natural resource abundant countries (Busse & Groning, 2013; Duruji & Dibia, 2017; Ross, 2001, 2015). Rent seeking or rent grabbing is where political elites and policy-makers capture natural resource revenue at the detriment of universal economic development (Karl, 1997). Rent seekers spend natural resource revenue to gain or maintain power at the expense of the well-being of the majority of the people (Ascher, 1999; Duruji & Dibia, 2017; Robinson et al., 2006). In a rent seeking economy, the country becomes a *predatory state* where a few people benefit from natural resources revenue through patronage networks at the detriment of the masses (Gould & Winters, 2012; Stevens & Dietsche, 2008). In some cases, public officials destroy mechanisms (institutions) that can prevent them from arrogating natural resource rents (Brollo et al., 2013).

Furthermore, *clientelism* and corruption also retard economic development and growth in many natural resource abundant countries (Duruji & Dibia, 2017; Esu, 2017;

Offiong, 1997; Pérez & Claveria, 2020). Clientelism is where political leaders provides lucrative public sector jobs to earn public support but, since the private sector is more efficient, total productivity becomes low (Robinson et al., 2006; Wantchekon, 2002; Wiens, 2014). Besides, corruption, which is driven by ‘moral impurities’, is a key factor hindering economic performance in many resource abundant countries (Adams et al., 2019; Farooq et al., 2013; Pérez & Claveria, 2020). Corrupt public officials in many resource abundant countries divert state resource windfalls into their private foreign accounts without the citizenry noticing since resource wealth “accrue from foreign sources directly to government coffers” (Ahmadov, 2014: 1241) or they receive kickbacks from extractive companies to the detriment of national economic development (Brollo et al., 2013; Caselli & Michaels, 2013; Zhu & Wu, 2014).

Further, natural resources abundance tends to benefit people who are already wealthy and well connected, thereby reinforcing existing power relations to the disadvantage of the general public (Broad, 1995; Pérez & Claveria, 2020). Many resource-endowed countries are vulnerable to the *voracity effect* where increase in natural resource windfall increases the propensity of *discretionary distribution* to powerful groups in the country (Tornell & Lane, 1999). Comparative studies between Latin America and East Asia show that natural resource abundance led to existence of powerful groups in Latin America whereas no such resource-controlling group exist in East Asia (Auty, 1995; Mahon Jr., 1992). Thus, natural resource abundance could lead to social and political dominance of powerful groups (elites) to the disadvantage of the larger population in the country (Pérez & Claveria, 2020).

Another reason why some natural resource abundant countries record poor economic performance is that they fail to channel windfall for financial development. Ideally, natural resource windfall should contribute to financial development through improvement in financial institutions and financial markets (Li et al., 2021). For instance, natural resource rents should make capital available for banks to operate effectively and be in capacity to provide loans for production and economic development (Asif et al., 2020; Jiang et al., 2021; Mohammed et al., 2020). Also, extractive industries could obtain capital from the financial market for production to accelerate economic development for individual with a cumulative effect on the national economy (Moradbeigi & Law, 2017; Yıldırım et al., 2020; Ali et al., 2022a). Unfortunately, corruption, clientelism, and rent-seeking inhibit financial development or lead to financial resource curse in many countries. Financial resource curse is where there is immature financial system or lack of credit facilities for production to stimulate economic growth (Beck, 2011; Ali et al., 2022a). For example, China is struggling to enhance financial development with natural resources windfall because the private sector has limited access to credit, and development is concentrated in regions with natural resources (Ahmed, 2020; Asif et al., 2020; Guan et al., 2020). In Malaysia too, oil windfall has insignificant impact on financial development because the banks engage in non-productive sectors (Ali et al., 2022a, b; Badeeb et al., 2016). Moreover, many resource-rich countries lack monetary policy required to address resource windfall-induced inflation which affect private sector investment (Asif et al., 2020; Shahbaz et al., 2018). Besides, when natural resource windfall causes increase in real exchange or new natural resource projects are saddled with corruption allegations, banks may not offer loans to those companies or people will not invest in their shares, which will negatively affect financial development and economic growth (Ahmed, 2020; Khan et al., 2020a, b, c; Lakshmi et al., 2021).

2.2 Natural resource conflict

Armed conflict over natural resources is a manifestation of resource curse (Ross, 2015). Unfortunately, “the general picture emerging from existing studies shows that the empirical evidence supports a relationship between resource wealth and conflict” (Koubi et al., 2014, p. 233). Two broad explanations for the causal links between natural resource abundance and conflict onset are the *greed* and the *grievance* schools of thought (Collier & Hoeffler, 2004).²

The greed school of thought argues that resource abundance incites rebels to instigate secessionist movement or fight for autonomy³ of the region with abundant resource in order to control and exploit the deposits (Berdal & Malone, 2000; Brown & Keating, 2015; Collier & Hoeffler, 2004, 2005; Collier et al., 2009; McNeish, 2011; Ross, 2012). The greed mechanism is particularly prevalent in regions where the abundant natural resources are *lootable*⁴ and widespread, making it difficult for central governments to have effective control over the resources (Le Billon, 2001, 2009; Lujala, 2010; Ross, 2004b). Moreover, lootable resources like alluvial gold and alluvial diamond provide money for rebel to fund and prolong civil war (Bellows & Miguel, 2009; Collier & Hoeffler, 2012; Lujala, 2009, 2010).

The grievance school of thought states that natural resource conflict occurs when the cost and benefit of natural resource extraction are unfairly distributed (Collier & Hoeffler, 2004; Frynas & Wood, 2001; Hilson, 2002). Since natural resource extraction usually cause environmental problems such as land degradation and water pollution (Aboka et al., 2018; Chukwuka et al., 2018), grievance-induced conflict often occurs when resource communities are marginalised or when they do not receive what they perceive as fair share of the resource windfall (Basedau & Richter, 2014; Duruji & Dibia, 2017; Østby et al., 2009). In many cases, resource extraction enhances environmental degradation which affects other livelihood activities like crop farming. So, where resource communities are not duly compensated or local people are not employed in the extraction of the resources when they have the required skills, they tend to have course to agitate and sometimes, to wage war against the extraction companies or the government (Boege & Franks, 2012; Brown & Keating, 2015; Le Billon, 2006; Mähler, 2012; Østby et al., 2009; Regan, 2003; Schilling et al., 2018). Ross (2004b: 41) observed that “resource wealth increases the probability of civil war by causing grievances over insufficiently compensated land expropriation, environmental degradation, inadequate job opportunities, and labour migration”.

Research on how the wealth of natural resource instigates conflict is inconclusive. Some scholars found no effect of abundance natural resources or primary commodity export and the onset of civil war (Fearon, 2004, 2005; Fearon & Laitin, 2003; Koubi et al., 2014; Thies, 2010). Others reported that the risk of conflict diminishes with a sustained increase in the natural resource wealth if the central government spends it on the security services

² Ross (2004b) found, based on 13 civil wars from 1980 to 2000, that *foreign intervention* and *booty future mechanism* are other conditions under which abundant natural resources lead to armed conflict. Foreign intervention is when external forces such as transnational companies and foreign governments support rebel group to gain control over natural resource deposits. The booty future mechanism is when rebels or governments could sell resource that they do not control but hope to capture in the future to fund their activities. Foreign intervention and booty future mechanisms are forms of greed.

³ This becomes a grievance-induced conflict when it involved disgruntled local people.

⁴ Natural resources that easily be exploited by rebels (Ross, 2004b).

or engages in large-scale distribution (welfare state) to buy off or suppress agitations of the people (Basedau & Lay, 2009; Collier et al., 2009).

According to Samset (2009), there is lack of consensus on how natural resource abundance causes conflict because the studies were conducted in different time periods and scholars have used different methods. It has been observed that diamond and oil cause more conflicts now than before (Lujala et al., 2005; Ross, 2006). Also, location accounts for the difference in the findings as offshore oil extraction has no effect on conflict onset but onshore extraction does (Cotet & Tsui, 2013; Lujala, 2010; Ross, 2012, 2015).

3 The role of institutions

Institutions are acceptable practices and procedures that remove doubts and guide our daily activities (North, 1990; Samadi & Alipourian, 2021). Resource curse is often explained by institutional failure (Li et al., 2021). The institutional failure hypothesis posits that a major intervening factor that determines whether a country will achieve a sustained universal socio-economic development and growth with abundant natural resource revenue or not is the quality of existing institutions (Bulte et al., 2005; Koubi et al., 2014; Li et al., 2021; Mehlum et al., 2006; Stevens & Dietsche, 2008; Wiens, 2014). Strong institutions ensure rule of law, minimise corruption, create investment-friendly environment and contribute to economic diversification to reduce the resource curse (Atkinson & Hamilton, 2003; Henry, 2019; Mehlum et al., 2006; Menaldo, 2016). Where quality institutions are lacking, especially in resource abundant developing countries, the resource curse becomes inevitable (Badeeb et al., 2017; Dou et al., 2022).

Mehlum et al. (2006) found that countries with strong and producer friendly institutions usually achieve economic development and growth and those with weak or *grabbing institutions* often experience the resource curse. Also, the resource curse is more prevalent in *democratic presidential (presidentialism)* than in democratic parliamentary countries (Andersen & Aslaksen, 2008). “While presidentialism may be more of a ‘one man show’ that can be captured by special interests, parliamentary regimes (parliamentarianism) with their continuous vote of confidence and broader representation in the making of policy, may be better suited to putting proceeds from resources into productive use” (Torvik, 2009: 247).

Further, lack of strong or restrictive political and economic institutions breed misappropriation of natural resource windfall by policy-makers and political elites which slowdown economic development (Brollo et al., 2013; Tornell & Lane, 1999; Wiens, 2014). Also, policy-makers and political elites may become over-exuberant and formulate myopic distributive policies if there are no strong institution that limits their power or could ensure that comprehensive economic decisions are taken (Ross, 2012; Tornell & Lane, 1999; Wiens, 2014). Further, when political leaders have unrestricted institution over national budget, they tend to focus on technologies that would enable them to suppress or annihilate agitations at the detriment of prudent economic development (Basedau & Lay, 2009; Collier et al., 2009; Wantchekon, 2002).

Robinson et al. (2006) also opined that it is only strong economic and political institutions that can prevent political elites from arrogating natural resource revenue to themselves and their cronies. Natural resource abundance could benefit only the wealthy and well-connected people when there are ineffective institutions to distribute natural resource revenue equitably (Gizelis & Wooden, 2010). According to the Organisation for Economic

Cooperation and Development, OECD (2016), lack of clearly defined laws on the distribution of natural resource wealth contributes to conflict onset. Al Moumin (2012) also found that ambiguous formulation of regulations on who owns natural resource, how it should be managed and how revenue should be distributed contributed to oil conflict in Iraq. If people resort to violent conflict to address conflicting interest, then relevant institutions are weak (Sandbu, 2012) or non-existent.

Further, it is usually in countries with strong institutions that the engagement of transnational corporations in the extractive sector can yield sustainable economic development (Pérez & Claveria, 2020). Transnational extractive corporations tend to prioritise profit over ethics when the host country has weak institutions (Adams et al., 2019; Pérez & Claveria, 2020). In countries with weak institutions, transnational corporations can avoid taxes to deprive the country of revenues and extract resources irresponsibly without adherence to international regulations and cause serious environmental degradation which increases the risk of conflicts in host communities (Conde & Le Billon, 2017; Kolk & Lenfant, 2010; Pérez & Claveria, 2020; Schilling et al., 2018). Also, given that transnational corporations are business and profit oriented, where there are no institutions to ensure that they employ local people, they will engage the cost-effective employee. This is where local content policies become very crucial. Local content policy/institutions are important for knowledge transfer and competent development but they must be complimented with innovation policy (Andersen et al., 2015). For instance, Ghana has a local content policy in which transnational oil companies are required to engage local suppliers and progressively employ Ghanaians in their engineering departments. However, without strong innovation policy and commitment to training and to develop the skills required, some transnational corporations cannot find qualified local people to employ so they continue to import workers. Thus, local content institution without accompanying innovation policies is impotent (Andersen et al., 2015). On the other hand, the existence of quality institution and political will led to education and training which spurred innovations in effective and efficient natural resource exploitation and management in Norway (Fagerberg et al., 2009).

Knowledge on how natural resource windfall and financial development influence each other is at its formative stage as the results from studies are dependent on the indicators and analytical models employed⁵ (Ali et al., 2022a, b; Solarin et al., 2021). However, quality institutions seem to play critical roles in enabling some countries to channel natural resource rents into developing financial market, financial institutions and the overall financial development of some countries (Ali et al., 2022a, b). Developed financial sector (both the stock market and banks) can attract savings and finance the development and exploitation of natural resources (Ali et al., 2022a, b; Shahbaz et al., 2018). Quality institution impacts banking development positively and efficient stock market is a conduit through which natural resource windfall leads to resource blessing and economic growth (Ali et al., 2022a, b). Quality institutions that control corruption and contract enforcement encourage investment in the banking sector and provision of loans to extractive companies for production (Ali et al., 2022a, b). Quality and stable institutions enhance stock market

⁵ Results on how natural resource windfall affect financial development in the Group of seven economies are at least, contradictory (Ding, 2023; Li et al., 2021). The United Kingdom and the United States of America have efficient and advanced financial development, Canada and Germany have financial resource curse, Italy and France are indifferent to these factors and Japan is both blessed and cursed (Li et al., 2021). Ding (2023) found negative effect of natural resource windfall on financial development in the economies of the group of seven countries. It is not clear if natural resource windfalls lead to financial development in OECD countries (Pradhan et al., 2014) or in Africa (Dwumfour & Ntow-Gyamfi, 2018).

development and encourage capitalisation of the financial market (Ali et al., 2022a, b; Khan et al., 2020a). Khan et al. (2020b) found that inadequate institutional quality in 87 Emerging and Developing Economies, natural resource rent impacts negatively on Financial development in those countries. And particularly for Pakistan, if institutional quality goes below a threshold of 3.097, natural resource will have negative impact on financial development (Khan et al., 2020c).

Characteristic of the countries that have positive impact of natural resource on their financial development is the existence of, or the strive for, quality institutions in those economies (Li et al., 2021; Shahbaz et al., 2018). It is estimated that a percentage increase in natural resource windfall will cause more than a percentage improvement in the stock market and over a quadruple improvement in overall financial development to cause a multiplier effect on the Malaysian economy if quality of institutions is enhanced (Ali et al., 2022a, b). Although studies on natural resource windfall and financial development are still emerging, countries with developed financial institutions and markets tend to overcome the resource curse by channelling natural resource rents to productive sectors of their economies (Gokmenoglu & Rustamov, 2019; Law & Moradbeigi, 2017; Moradbeigi & Law, 2017).

Further, using the two-step dynamic system of the Generalised Methods of Moments approach, Ali et al. (2022b) found that natural resource windfall affects the stock market in G-7 countries significantly in the presence of quality institution. Given that the stock market is sensitive to abrupt changes such as political shock and unexpected policies, it is less surprising that the G-7 countries with very strong, matured and stable institutions has efficiently channelled natural resource rents into the financial market to the access of the private sector, which, in turn, has created positive feedback in their economies (Ali et al., 2022a, b).

The role of institutions in containing the resource curse in resource abundant countries is path-dependent. If a country has strong institutions before it discovers a natural resource, it is likely to escape the resource curse than a country that had weak institutions (Wiens, 2014). Resource wealth even disintegrates institutional quality when pre-existing ones are weak and unrestrictive (Knack, 2009; Wiens, 2014). As such, weak institution is a major mechanism for poor economic performance, financial resource curse and conflict in many natural resource abundant countries.

Having discussed the mechanisms through which poor economic performance manifests and the role of quality institutions in facilitating economic growth and financial development, I now turn to some specific institutional conditions that seem to precipitate resource curse.

4 Some specific conditions under which the resource curse tends to occur

4.1 Neglect or lack of broad-based planning

One of the conditions under which the resource curse occurs is when centralised planning strategy is used to management natural resources (Grzybowski, 2012; Lachapelle et al., 2003). The “traditional planning processes that emphasise technical analysis and limit citizen involvement often create tensions between citizens and agencies in the form of inaction, distrust, litigation, and occasionally even threats and violence” (Lachapelle

& McCool, 2005: 279). The expert-oriented centralised planning strategy such as rational planning that excludes the public in making decisions on natural resources which often fails to cover public interest fully, contributed to resource conflict in Bolivia (Perreault, 2008; Schilling-Vacaflo, 2012) in the Philippines (Rovillos et al., 2005) and in South America (Hoyos, 2015) and does not ensure government accountability. These empirical findings provide evidence that centralised planning contributes to the resource curse. Consequently, participatory resource management has been recommended to minimise the incidence of resource-related conflicts (Hoyos, 2015; Humphreys et al., 2007).

Given that conflict usually occurs when people have competing values (Galtung, 1965; Souleimanov, 2013), collaborative planning with resource users and the public is crucial for obtaining social licence and to achieve a compromise to reduce natural resource conflict (Healey, 1992; Hoyos, 2015; Lachapelle & McCool, 2005; Lane, 2005; Lyytimäki & Peltonen, 2016; Scheidel et al., 2020). Moreover, “when people are listened to, paid attention to, treated politely and with respect, the legitimacy for the final decisions is [often] increased” (Zachrisson, 2004: 24). Involving the public to take decisions that affect them encourages deliberative democracy and enhances the legitimacy of the process (Jones, 2007; Mouffe, 2000; Zachrisson, 2004).

One of the planning strategies which includes and allows the public to express their concerns without being misconstrued as enemies is known as agonistic planning (Bäcklund & Mäntysalo, 2010; Mouffe, 2000; Pløger, 2004). According to Hillier (2003), agonistic planning enables the public to contest over resources which in many cases lead to satisfactory distribution of natural resource benefits. Agonistic planning offers the arena for people to present their interests and ideas which contributes to a comprehensive and inclusive final decisions (Flyvbjerg & Richardson, 2002; Mouat et al., 2013; Mouffe, 2000) which could minimise the occurrence of natural resource conflict. Thus, agonistic planning pre-empt and resolves conflicts and offers a platform to the public to exercise their democratic right by taking part in deciding the things that affect them (Flyvbjerg & Richardson, 2002).

Also, broad-based planning is required to do environmental impact assessment to minimise grievances associated with environmental degradation that is usually exacerbated by resource extraction. This is crucial because:

“when resource companies claim to respect local law, this often means that they undertake environmental impact assessments primarily as administrative tasks designed to secure the necessary permits, not as tools for understanding the physical and social environment into which they are entering” (Shankleman, 2012: 53)

Therefore, it is less likely that in-depth understanding of the political and social environments of natural resource-rich areas would be achieved without involving local people in planning and assessing potential environmental impacts.

More so, transparency in the extractive sector is an important factor that contributes to ensuring judicious use of natural resource windfall (Corrigan, 2014; Kasekende et al., 2016; Rich & Warner, 2012; Rustad et al., 2012, 2017) to minimise clientelism, corruption and rent grabbing. The need for transparency has led to the institutionalisation of the Extractive Industry Transparency Initiative (EITI) and the Kimberley Process Certification Scheme as well as major transparency policies in North America and Europe (Ross, 2015). The fourth principle of EITI “recognises that a public understanding of government revenues and expenditure over time could help public debate and inform the choice of appropriate and realistic options for sustainable development” (EITI, 2016: 10). However, transparency alone cannot eliminate corruption (Adams et al., 2019; Kolstad & Wiig, 2009). Publishing contract deals, receipts and expenditure of resource revenue between extractive

industries and governments alone may not strengthen public trust in governments' efforts at transparency and accountability. It is through active public engagement in making decisions on natural resource management and revenue utilisation that will enhance transparency and accountability and national development (EITI, 2016; Kolstad & Wiig, 2009; Rustad et al., 2017). Thus, transparency can be achieved through broad-based planning and decision-making approach.

4.2 Lack of a binding long-term national development policy

One of the institutional conditions under which the resource curse occurs is when there is no binding long-term nationally developed development plan or policy.⁶ As a case in point, Nigeria operates a federal government (parliamentary) system and rule of law, and despite the assumption that the resource curse is less prevalent in democratic parliamentary countries (Andersen & Aslaksen, 2008; Torvik, 2009), it has failed to escape the resource curse (Duruji & Dibia, 2017; Esu, 2017; Mähler, 2012). Nigeria is experiencing resource curse partly because political parties usually govern the country based on their manifestoes and campaign promises and abandon landmark developmental projects initiated by their predecessors (Duruji & Dibia, 2017). Both past and the incumbent administrations could be 'providing public goods' but the lack of continuity prevents Nigeria from reaping the full benefit of the oil wealth invested in those projects.

If governments can abandon developmental projects started by their predecessors, then, either those projects were not sanctioned by law or there are no laws that bind incumbent governments to continue those projects. The seeming lack of a binding national development agenda presents an opportunity for politicians to govern the country with party manifesto and therefore, it is not surprising that developmental projects initiated by past administrations are often abandoned since the incumbent administration also has its campaign promises that it must accomplish. It is not uncommon for politicians to use natural resource windfalls to provide unproductive jobs to fulfil campaign promises mainly in areas that they have massive electoral support (Ascher, 1999; Duruji & Dibia, 2017; Gould & Winters, 2012; Robinson et al., 2006) when there are no binding national development plan leading geographically unbalanced economic development. Tornell and Lane (1999) theorised that in an economy of many groups, rulers tend to distribute natural resource windfall in a way that will benefit them or to the powerful group. Thus, the lack of a binding national development plan (restrictive institution) to ensure equity in development, could enable rulers (politicians) to engage in discretionary distribution of natural resource windfall to the disadvantage of the weaker groups in the economy. When local people are disadvantaged and feel marginalised, natural resource conflict may ensue in the host community (Basedau & Richter, 2014; Conde & Le Billon, 2017; Østby et al., 2009).

4.3 Unfair or lack of natural resource benefit distribution regulation

Resource conflict occurs when the benefits from natural resource extraction are unfairly distributed or when resource extraction poses socio-economic threat to host communities (Duruji & Dibia, 2017; Miguel et al., 2004; Østby et al., 2009; Ross, 2004b). Unfortunately, many resource abundant countries assign an insignificant percentage of natural

⁶ Developed by all the relevant stakeholders, not just one political party.

resource windfall to the regions where the resources are being extracted for development. For example, the Nigerian central government now transfers only 13 percent of the oil revenue to the oil producing Niger Delta states which is seen as inadequate to address the environmental degradation and to accelerate socio-economic development in those states (Duruji & Dibia, 2017). Also, although Ghana is not classified as a resource cursed country yet, the mineral royalties distribution regulation assigns only 0.5 percent of total mineral revenues to mining communities which is woefully inadequate to address mining-related challenges thereby, rendering such communities poor, underdeveloped and environmentally degraded (Adimazoya, 2013; Lujala & Narh, 2020; Standing, 2014). Unfair distribution of natural resource windfall to producing regions breeds grievances and resistance which fuel conflicts (Duruji & Dibia, 2017).

Also, lack of adequate regulation on how local people should be compensated for land appropriation for mining or oil production purposes can cause resource curse. Economic hardship and resource conflict may occur in resource abundant regions when compensations packages to enhance individual livelihood are based on a discretionary and/or a myopic quantification of the benefits local people derive from their natural environment (Ogwang et al., 2018). For instance, if a one-time payment (compensation event) to landowners or local people is based on a quantification of annual agricultural yield for a major crop for expropriating their farm land for resource extraction without taking into consideration the fact that smallholder farmers usually practice mixed cropping which earns the more income, grievance-induced resistance or conflict may occur later when their livelihood conditions worsen. Such is the case in Albertine Graben region of Uganda where each household that would be affected by oil exploration was offered \$300 lump sum to relocate and people who could not buy land elsewhere with that amount due to price hikes are already agitating and settling in the nearby forest which is likely to cause environmental degradation (Ogwang et al., 2018). On the other hand, if compensations packages are based on a carefully enacted regulations and are paid periodically (compensation stream), the risk of conflict may decrease (Sandbu, 2012). Thus, whereas a compensation event could lead to resource conflict, compensation stream could improve the livelihood of local people and reduce the risks of resource curse.

Further, resistance and conflict often occur when local people are not employed in the extraction of their natural resources (Boege & Franks, 2012; Brown & Keating, 2015; Mähler, 2012). Naturally, natural resource conflicts are prevalent, more severe and last longer in resource extracting regions (Conde & Le Billon, 2017; Lujala, 2009, 2010; Maystadt et al., 2014). Where there are no regulations that require that jobs are provided for host communities, extractive companies, especially the transnational ones, will not be obliged to recruit local people. When income levels decreases, there is higher propensity for the onset of conflict (Miguel et al., 2004) and as resource extraction usually cause environmental degradation and threat to livelihood in host communities (Chukwuka et al., 2018), non-employment of local people causes resistance to the central government or the extraction companies (Brown & Keating, 2015; Conde & Le Billon, 2017; Ross, 2004b; Schilling et al., 2018).

4.4 Lack of strict environmental regulation

Natural resource exploration and production disturb the ecosystem (Chukwuka et al., 2018) and so, environmental management is fraught with divergent problem of finding a balance between economic success and ecological protection (Stead & Stead, 2000; van Niekerk,

2020). Since extractive companies are business entities with the aim of making profit, they, especially the transnational ones, tend to neglect environmental ethics in countries with weak institutions (Pérez & Claveria, 2020). The neglect of the environment by resource extraction companies causes violent conflict in many natural resource abundant countries (Conde & Le Billon, 2017; Regan, 2018; Ross, 2004b).

Countries with weak environmental institution tend to record serious environmental degradation resulting from resource extraction. Nigeria, for example, has weak institutions (Esu, 2017) and has recorded environmental degradation through oil production (Jack et al., 2016; Kadafa, 2012). Since 1960, more than 1.5 tonnes of oil has been spilled into the ecosystem of the Niger Delta (Kadafa, 2012) of which 50% and 21% of the spillage were due to corrosion of oil pipes and oil production processes respectively, contributing to loss of mangrove and habitat for biodiversity (Jack et al., 2016). Oil spillage can occur accidentally but hardly in countries with strict environmental regulation that oil would be extracted and transported through corroded pipes. Gas flaring also contributes to global warming and loss of agricultural yields, thereby posing significant threat to local livelihood (Chukwuka et al., 2018; Jack et al., 2016). Thus, lack of strict environmental regulations contributes to resource curse.

Despite the incidence of the resource curse in many countries, Botswana and Norway are among the few countries that have achieved massive economic development and growth with the exploitation of their natural resource (Humphreys, 2005; Iimi, 2007; McNeish, 2011). Many countries have used quality institutions to control resource curse. For instance, in a developing country like Ghana, after the discovery of oil, the country has taken pragmatic steps to formulate policies to ensure safe extraction of oil and efficient and transparent use of the windfall. Although the policies are work-in-progress, they are shielding Ghana against resource curse (Henri, 2019). Also, emerging economies like the BRIC countries have use quality institutions to avoid resource curse (Hussain et al., 2020). Despite the existence of resource curse in Western China (Zhang & Brouwer, 2020), the analysis of a panel data from 80 counties in Guangxi Province has shown that mineral extraction has contributed to a vicious cycle of livelihood improvement, economic development, financial increase and infrastructure improvement in China (Dou et al., 2022). In developed countries too, quality institutions stimulate overall development with natural resource windfall (Li et al., 2021; Shahbaz et al., 2018). Thus, institutional quality is a common denominator in developing, emerging and developed economies that have or are striving to escape the resource curse.

5 Conclusion

To measure institutional qualities, many indices have been used as proxies for rule of law, government efficiency, market efficiency and rate of murder, which sometimes overshadow critical indices that actually drive the resource curse. This article identifies some specific indices for analysing institutional quality in natural resource abundant countries. The article argues that where expert-oriented, narrow-based planning strategy is employed in managing natural resource, and or in the absence of a binding long-term national development plan, the onset of resource curse is inevitable. These institutional conditions encourage government unaccountability as they do not restrict policy makers against discretionary distribution of natural resource windfall, rent seeking, clientelism and corruption which contribute to poor economic development and growth. Also, inadequate regulations for a

fair distribution of natural resource benefit and lack of strict environmental regulation tend to precipitate grievance-induced resource conflict and environmental degradation to invite the resource curse. Therefore, in analysing institutional quality, existing planning models, availability of binding development policy, windfall distribution and strict environmental regulations should equality be considered.

The result is useful as it provides some critical pathways in which countries could enhance their institutions and minimise the resource curse. Natural resource abundant countries can adopt broad based planning paradigm to minimise grievances and environmental injustices. They can also develop a binding long-term development plans to ensure continuity of developmental initiatives. Additionally, they need to enact regulations to control clientelism, corruption and rent grabbing as well as to ensure fair distribution of resource windfall, compensation streams, and employment. These should not just be drafted, they must be binding.

Funding Open Access funding enabled and organized by Projekt DEAL. I have not receiving any funding for this research.

Data availability Data sharing is not possible for this article. This is not original research. It is a literature review. As such, the references are the sources of information for the article.

Declarations

Conflict of interest I do not have any conflict of interest to declare for this research.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

References

- Aboka, E. Y., Cobbina, S. J., & Dzignbodi, D. A. (2018). Review of environmental and health impacts of mining in Ghana. *Journal of Health and Pollution*, 8(17), 43–52.
- Adams, D., Ullah, S., Akhtar, P., Adams, K., & Saidi, S. (2019). The role of country-level institutional factors in escaping the natural resource curse: Insights from Ghana. *Resources Policy*, 61, 433–440. <https://doi.org/10.1016/j.resourpol.2018.03.005>
- Adimazoya, N. T. (2013). Staying ahead of the curve: Meeting Ghana's commitment to good governance in the mining sector. *Journal of Energy & Natural Resources Law*, 31(2), 147–170. <https://doi.org/10.1080/02646811.2013.11435326>
- Ahmadov, A. K. (2014). Oil, democracy, and context: A meta-analysis. *Comparative Political Science*, 47(9), 1238–1267.
- Ahmed, W. M. A. (2020). Corruption and equity market performance: International comparative evidence. *Pacific-Basin Finance Journal*, 60, 101282.
- Al Moumin, M. (2012). The legal framework for managing oil in post-conflict Iraq: A pattern of abuse and violence over natural resources. In P. Lujala & S. A. Rustad (Eds.), *High-value natural resources and peacebuilding* (pp. 413–435). Earthscan.
- Ali, A., Ramakrishnan, S., & Faisal. (2022a). Financial development and natural resources. Is there a stock market resource curse? *Resources Policy*, 75, 102457.

- Ali, A., Ramakrishnan, S., Faisal, F., Sulimany, H. G. H., & Bazhair, A. H. (2022b). Stock market resource curse: The moderating role of institutional quality. *Resources Policy*, 78, 102929. <https://doi.org/10.1016/j.resourpol.2022.102929>
- Amundsen, I. (2017). Nigeria: Defying the resource curse. In A. Williams & P. Le Billon (Eds.), *Corruption, natural resources and development: From resource curse to political ecology* (pp. 17–27). Edward Elgar Publishing.
- Andersen, A. D., Johnson, B., Marín, A., Kaplan, D., Stubrin, L. I., Lundvall, B. Å., & Kaplinsky, R. (2015). Natural resources, innovation and development. *Aalborg University*. <https://doi.org/10.5278/VBN/MISC/NRID>
- Andersen, J. J., & Aslaksen, S. (2008). Constitutions and the resource curse. *Journal of Development Economics*, 87(2), 227–246.
- Andersen, J. J., & Ross, M. L. (2014). The big oil change: A closer look at the Haber-Menaldo analysis. *Comparative Political Studies*, 47(7), 933–1021.
- Ascher, W. (1999). *Why governments waste natural resources: Policy failures in developing countries*. John Hopkins University Press.
- Asif, M., Khan, K. B., Anser, M. K., Nassani, A. A., Abro, M. M. Q., & Zaman, K. (2020). Dynamic interaction between financial development and natural resources: Evaluating the ‘Resource curse’ hypothesis. *Resources Policy*, 65, 101566.
- Aslaksen, S. (2010). Oil as sand in the democratic machine? *Journal of Peace Research*, 47(4), 421–431.
- Atkinson, G., & Hamilton, K. (2003). Savings, growth and the resource curse hypothesis. *World Development*, 31(11), 1793–1807. <https://doi.org/10.1016/j.worlddev.2003.05.001>
- Auty, R. (1993). *Sustaining development in mineral economies: The resource curse thesis*. Routledge.
- Auty, R. (1995). Industrial policy, sectoral maturation, and postwar economic growth in Brazil: The resource curse thesis. *Economic Geography*, 71(3), 257–272.
- Auty, R. (2001a). Introduction and overview. In R. Auty (Ed.), *Resource abundance and economic development* (pp. 3–16). Oxford University Press.
- Auty, R. (2001b). The political economy of resource-driven growth. *European Economic Review*, 45(4–6), 839–846. [https://doi.org/10.1016/S0014-2921\(01\)00126-X](https://doi.org/10.1016/S0014-2921(01)00126-X)
- Auty, R. (2001c). Transition reform in the mineral-rich Caspian region countries. *Resources Policy*, 27(1), 25–32. [https://doi.org/10.1016/S0301-4207\(01\)00005-8](https://doi.org/10.1016/S0301-4207(01)00005-8)
- Bäcklund, P., & Mäntyselä, R. (2010). Agonism and institutional ambiguity: Ideas on democracy and the role of participation in the development of planning theory and practice—the case of Finland. *Planning Theory*, 9(4), 333–350.
- Badeeb, R. A., Lean, H. H., & Clark, J. (2017). The evolution of the natural resource curse thesis: A critical literature survey. *Resources Policy*, 51, 123–134.
- Badeeb, R. A., Lean, H. H., & Smyth, R. (2016). Oil curse and finance–growth nexus in Malaysia: The role of investment. *Energy Economics*, 57, 154–165.
- Basedau, M., & Lay, J. (2009). Resource curse or rentier peace? The ambiguous effects of oil wealth and oil dependence on violent conflict. *Journal of Peace Research*, 46(6), 757–776.
- Basedau, M., & Richter, T. (2014). Why do some oil exporters experience civil war but others do not? A qualitative comparative analysis of net oil-exporting countries. *European Political Science Review*, 6(4), 549–574.
- Bazzi, S., & Blattman, C. (2013). Economic shocks and conflict: Evidence from commodity prices. *American Economic Journal of Microeconomics*, 6(4), 1–38.
- Beck, T. (2011). Finance and oil: Is there a resource curse in financial development? *European Banking Center Discussion Paper* (2011–004).
- Bellows, J., & Miguel, E. (2009). War and local collective action in Sierra Leone. *Journal of Public Economics*, 93(11–12), 1144–1157.
- Berdal, M. R., & Malone, D. (Eds.). (2000). *Greed & grievance: Economic agendas in civil wars*. Lynne Rienner Publishers.
- Besley, T., & Persson, T. (2010). State capacity, conflict, and development. *Econometrica*, 78(1), 1–34.
- Le Billon, P. (2006). FUELLING WAR: Natural resources and armed conflict. <http://www.tandfonline.com/toc/tadl19/45/373>. Accessed 10 Oct (2016).
- Boege, V., & Franks, D. (2012). Reopening and developing mines in post-conflict settings: The challenge of company-community relations. In P. Lujala & S. A. Rustad (Eds.), *High-value natural resources and peacebuilding* (pp. 87–120). Routledge.
- Brautigam, D., Fjeldstad, O. H., & Moore, M. (2008). *Taxation and state-building in developing countries: Capacity and consent*. Cambridge University Press.
- Broad, R. (1995). The political economy of natural resources: Case studies of the Indonesian and Philippine forest sectors. *The Journal of Developing Areas*, 29(3), 317–340.

- Brollo, F., Nannicini, T., Perotti, R., & Tabellini, G. (2013). The political resource curse. *American Economic Review*, 10(5), 1759–1796.
- Brown, O., & Keating, M. (2015). Addressing natural resource conflicts: Working towards more effective resolution of national and sub-national resource disputes. *Energy, Environment and Resources*.
- Bulte, E. H., Damania, R., & Deacon, R. T. (2005). Resource intensity, institutions, and development. *World Development*, 33(7), 1029–1044. <https://doi.org/10.1016/j.worlddev.2005.04.004>
- Busse, M., & Groning, S. (2013). The resource curse revisited: Governance and natural resources. *Public Choice*, 154(1–2), 1–20.
- Caselli, F., & Michaels, G. (2013). Do oil windfalls improve living standards? Evidence from Brazil. *American Economic Journal of Applied Economics*, 5(1), 208–238.
- Chaudhry, K. A. (1994). Economic liberalization and the lineages of the rentier state. *Comparative Politics*, 27(1), 1–25. <https://doi.org/10.2307/422215>
- Chukwuka, K. S., Alimba, C. G., Ataguba, G. A., & Jimoh, W. A. (2018). The impacts of petroleum production on terrestrial fauna and flora in the oil-producing region of Nigeria. In P. E. Ndimiele (Ed.), *The political ecology of oil and gas activities in the Nigerian aquatic ecosystem* (pp. 125–142). Academic Press.
- Collier, P., & Hoeffler, A. (2004). Greed and grievance in civil war. *Oxford Economic Papers*, 56(4), 563–595.
- Collier, P., & Hoeffler, A. (2005). Resource rents, governance, and conflict. *Journal of Conflict Resolution*, 49(4), 625–633.
- Collier, P., & Hoeffler, A. (2012). High-value natural resources, development, and conflict: Channels of causation. In P. Lujala & S. A. Rustad (Eds.), *High-value natural resources and post-conflict peacebuilding* (pp. 297–312). Earthscan.
- Collier, P., Hoeffler, A., & Rohner, D. (2009). Beyond greed and grievance: Feasibility and civil war. *Oxford Economic Paper*, 6, 1–27.
- Conde, M., & Le Billon, P. (2017). Why do some communities resist mining projects while others do not? *The Extractive Industries and Society*, 4, 681–697.
- Corrigan, C. C. (2014). Breaking the resource curse: Transparency in the natural resource sector and the extractive industries transparency initiative. *Resources Policy*, 40, 17–30. <https://doi.org/10.1016/j.resourpol.2013.10.003>
- Cotet, A., & Tsui, K. K. (2013). Oil and conflict: What does the cross country evidence really show? *American Economic Journal of Microeconomics*, 5(1), 49–80.
- Dou, S., Yue, C., Xu, D., Wei, Y., & Li, H. (2022). Rethinking the “resource curse”: New evidence from nighttime light data. *Resources Policy*, 76, 102617.
- Ding, Y. (2023). Does natural resources cause sustainable financial development or resources curse? Evidence from group of seven economies. *Resources Policy*, 81, 103313.
- Duruji, M., & Dibia, O. (2017). Crude oil, resource curse and the splintering of Nigeria into national pieces. *Covenant Journal of Business & Social Sciences*, 8(2), 60–75.
- Dwumfour, R. A., & Ntow-Gyamfi, M. (2018). Natural resources, financial development and institutional quality in Africa: Is there a resource curse? *Resources Policy*, 59, 411–426.
- EITI. (2016). The EITI standard 2016. <https://eiti.org/document/standard>.
- Esu, G. E. (2017). Assessing the resource curse question: A case of crude oil production in Nigeria. *Journal of Economic Research*, 22, 153–213.
- Fagerberg, J., Mowery, D. C., & Verspagen, B. (2009). The evolution of Norway’s national innovation system. *Science and Public Policy*, 36(6), 431–444. <https://doi.org/10.3152/030234209X460944>
- Farooq, A., Shahbaz, M., Arouri, M., & Teulon, F. (2013). Does corruption impede economic growth in Pakistan? *Economic Model*, 35, 622–633.
- Fearon, J. D. (2004). Why do some civil wars last so much longer than others? *Journal of Peace Research*, 41(3), 275–301.
- Fearon, J. D. (2005). Primary commodity exports and civil war. *Journal of Conflict Resolution*, 49(4), 483–507.
- Fearon, J. D., & Laitin, D. D. (2003). Ethnicity, insurgency, and civil war. *American Political Science Review*, 97(01), 75–90.
- Flyvbjerg, B., & Richardson, T. (2002). Planning and Foucault: In search of the dark side of planning theory. In P. Allmendinger & M. Tewdwr-Jones (Eds.), *Planning futures: New directions for planning theory* (pp. 44–62). Routledge.
- Frynas, J. G., & Wood, G. (2001). Oil & war in Angola. *Review of African Political Economy*, 28(90), 587–606.
- Galtung, J. (1965). Institutionalized conflict resolution: A theoretical paradigm. *Journal of Peace Research*, 2, 348–397.

- Gizelis, T.-I., & Wooden, A. E. (2010). Water resources, institutions & intrastate conflict. *Political Geography*, 29(8), 444–453. <https://doi.org/10.1016/j.polgeo.2010.10.005>
- Gokmenoglu, K. K., & Rustamov, B. (2019). Examining the world bank group lending and natural resource abundance induced financial development in KART countries. *Resources Policy*, 63, 101433. <https://doi.org/10.1016/j.resourpol.2019.101433>
- Gould, J. A., & Winters, M. S. (2012). Petroleum blues: The political economy of resources and conflict in Chad. In P. Lujala & S. A. Rustad (Eds.), *High-value natural resources and post-conflict peace-building* (pp. 313–336). Earthscan.
- Grzybowski, A. (2012). *Toolkit and guidance for preventing and managing land and natural resources conflict: Extractive industries and conflict*, The United Nations interagency framework team for preventive action.
- Guan, J., Kirikkaleli, D., Bibi, A., & Zhang, W. (2020). Natural resources rents nexus with financial development in the presence of globalization: Is the “resource curse” exist or myth? *Resources Policy*, 66, 101641.
- Gylfason, T., Herbertsson, T. T., & Zoega, G. (1999). A mixed blessing. *Macroeconomic Dynamics*, 3(2), 204–225.
- Hailu, D., & Kipgen, C. (2017). The extractives dependence index (EDI). *Resources Policy*, 51, 251–264. <https://doi.org/10.1016/j.resourpol.2017.01.004>
- Healey, P. (1992). Planning through debate: The communicative turn in planning theory. *The Town Planning Review*, 63(2), 143–162.
- Henri, P. A. O. (2019). Natural resources curse: A reality in Africa. *Resources Policy*, 63, 101406.
- Henry, A. (2019). Transmission channels of the resource curse in Africa: A time perspective. *Economic Modelling*, 82, 13–20.
- Hillier, J. (2003). Agonizing over consensus: Why habermasian ideals cannot beReal’. *Planning Theory*, 2(1), 37–59.
- Hilson, G. (2002). An overview of land use conflicts in mining communities. *Land Use Policy*, 19(1), 65–73. [https://doi.org/10.1016/S0264-8377\(01\)00043-6](https://doi.org/10.1016/S0264-8377(01)00043-6)
- Hoyos, S. C. (2015). Extractive industries and conflict prevention social intervention model for South America. *Business Peace and Sustainable Development*, 6, 31–48.
- Humphreys, M. (2005). Natural resources, conflict, and conflict resolution uncovering the mechanisms. *Journal of Conflict Resolution*, 49(4), 508–537.
- Humphreys, M., & SachsStiglitz, J. J. E. (2007). *Escaping the resource curse*. Columbia University Press.
- Hussain, M., Ye, Z., Usman, M., Mir, G. M., Usman, A., & Rizvi, S. K. A. (2020). Re-investigation of the resource curse hypothesis: The role of political institutions and energy prices in BRIC countries. *Resources Policy*, 69, 101833.
- Imi, A. (2007). Escaping from the resource curse: Evidence from Botswana and the rest of the world. *IMF Staff Papers*, 54(4), 663–699.
- Jack, J. T. C. B., Akujobi, C. T., Uchechukwu, D. A., & Azubuike, B. O. (2016). Crude oil exploration and underdevelopment in Nigeria: A resource curse analysis. *Technoscience Review*, 7(1–2), 31–44.
- Jiang, C., Zhang, Y., Kamran, H. W., & Afshan, S. (2021). Understanding the dynamics of the resource curse and financial development in China? A novel evidence based on QARDL model. *Resources Policy*, 72, 102091.
- Jones, M. (2007). The European landscape convention and the question of public participation. *Landscape Research*, 32(5), 613–633.
- Kadafa, A. (2012). Oil exploration and spillage in the Niger delta. *Civil and Environmental Research*, 2(3), 21–29.
- Karl, T. L. (1997). *The paradox of plenty: Oil booms and petro-states*. University of California Press.
- Kasekende, E., Abuka, C., & Sarr, M. (2016). Extractive industries and corruption: Investigating the effectiveness of EITI as a scrutiny mechanism. *Resources Policy*, 48, 117–128. <https://doi.org/10.1016/j.resourpol.2016.03.002>
- Kennedy, R., & Tiede, L. (2013). Economic development assumptions and the elusive curse of oil. *International Studies Quarterly*, 57, 760–771.
- Khan, M. A., Gu, L., Khan, M. A., & Oláh, J. (2020b). Natural resources and financial development: The role of institutional quality. *Journal of Multinational Financial Management*, 56, 100641. <https://doi.org/10.1016/j.mulfin.2020.100641>
- Khan, M. A., Khan, M. A., Ali, K., Popp, J., & Oláh, J. (2020c). Natural resource rent and finance: The moderation role of institutions. *Sustainability*, 12(9), 3897.
- Khan, M. A., Kong, D., Xiang, J., & Zhang, J. (2020a). Impact of institutional quality on financial development: Cross-country evidence based on emerging and growth-leading economies. *Emerging Markets Finance and Trade*, 56(15), 3829–3845.

- Knack, S. (2009). Sovereign rents and quality of tax policy and administration. *Journal of Comparative Economics*, 37, 359–371.
- Kolk, A., & Lenfant, F. (2010). MNC reporting on CSR and central Africa. *Journal of Business Ethics*, 93(2), 241–255.
- Kolstad, I., & Wiig, A. (2009). Is transparency the key to reducing corruption in resource-rich countries? *World Development*, 37, 521–532. <https://doi.org/10.1016/j.worlddev.2008.07>
- Koubi, V., Spilker, G., Böhmelt, T., & Bernauer, T. (2014). Do natural resources matter for interstate and intrastate armed conflict? *Journal of Peace Research*, 51(2), 227–243.
- Krause, L. B. (1995). Social capability and long-term economic growth. In B. H. Koo & D. H. Perkins (Eds.), *Social capability and long-term economic growth* (pp. 310–327). Palgrave Macmillan.
- Lachapelle, P. R., & McCool, S. F. (2005). Exploring the concept of “ownership” in natural resource planning. *Society and Natural Resources*, 18(3), 279–285.
- Lachapelle, P. R., McCool, S. F., & Patterson, M. E. (2003). Barriers to effective natural resource planning in a “messy” world. *Society & Natural Resources*, 16(6), 473–490.
- Lakshmi, G., Saha, S., & Bhattacharj, K. (2021). Does corruption matter for stock markets? The role of heterogeneous institutions. *Economic Modelling*, 94, 386–400.
- Lamb, J. N., Moore, K. M., & Smith, R. (2009). Pursuing community forestry in Liberia. *Environmental Policy and Governance*, 19(5), 296–308.
- Lane, M. B. (2005). Public participation in planning: An intellectual history. *Australian Geographer*, 36(3), 283–299.
- Law, S. H., & Moradbeigi, M. (2017). Financial development and oil resource abundance–growth relations: Evidence from panel data. *Environmental Science and Pollution Research*, 24, 22458–22475.
- Le Billon, P. (2001). The political ecology of war: Natural resources and armed conflicts. *Political Geography*, 20(5), 561–584.
- Le Billon, P. (2009). Natural resource types and conflict termination initiatives. *Colombia Internacional*, 70, 9–34.
- Li, Z., Rizvi, S. K. A., Rubbaniy, G., & Umar, M. (2021). Understanding the dynamics of resource curse in G7 countries: The role of natural resource rents and the three facets of financial development. *Resources Policy*, 73, 102141.
- Lujala, P. (2009). Deadly combat over natural resources gems, petroleum, drugs, and the severity of armed civil conflict. *Journal of Conflict Resolution*, 53(1), 50–71.
- Lujala, P. (2010). The spoils of nature: Armed civil conflict and rebel access to natural resources. *Journal of Peace Research*, 47(1), 15–28.
- Lujala, P., Gleditsch, N. P., & Gilmore, E. (2005). A diamond curse? Civil war and a lootable resource. *Journal of Conflict Resolution*, 49(4), 538–562.
- Lujala, P., & Narh, J. (2020). Ghana’s minerals development fund act: Addressing the needs of mining communities. *Journal of Energy & Natural Resources Law*. <https://doi.org/10.1080/02646811.2019.1686250>
- Lyytimäki, J., & Peltonen, L. (2016). Mining through controversies: Public perceptions and the legitimacy of a planned gold mine near a tourist destination. *Land Use Policy*, 54, 479–486. <https://doi.org/10.1016/j.landusepol.2016.03.004>
- Mähler, A. (2012). An inescapable curse? Resource management, violent conflict, and peacebuilding in the Niger delta. In P. Lujala & S. A. Rustad (Eds.), *High-value natural resources and post-conflict peacebuilding* (pp. 391–412). Earthscan.
- Mahon, J. E., Jr. (1992). Was Latin America too rich to prosper? Structural and political obstacles to export-led industrial growth. *The Journal of Development Studies*, 28(2), 241–263.
- Maystadt, J.-F., De Luca, G., Sekeris, P. G., & Ulimwengu, J. (2014). Mineral resources and conflicts in DRC: A case of ecological fallacy? *Oxford Economic Paper*, 66(3), 721–749.
- McNeish, J.-A. (2011). Rethinking resource conflict. *World Development Report*, 1–28.
- Mehlum, H., Moene, K., & Torvik, R. (2006). Institutions and the resource curse. *The Economic Journal*, 116(1), 1–20.
- Menaldo, V. (2016). *The institutions curse: Natural resources, politics, and development*. Cambridge University Press.
- Miguel, E., Satyanath, S., & Sergenti, E. (2004). Economic shocks and civil conflict: An instrumental variables approach. *Journal of Political Economy*, 112(4), 725–753.
- Mitra, P. (1994). *Adjustment in oil-importing developing countries: A comparative economic analysis*. Cambridge University Press.
- Mohammed, J. I., Karimu, A., Fiador, V. O., & Abor, J. Y. (2020). Oil revenues and economic growth in oil-producing countries: The role of domestic financial markets. *Resources Policy*, 69, 101832. <https://doi.org/10.1016/j.resourpol.2020.101832>

- Moore, M. (2004). Revenues, state formation, and the quality of governance in developing countries. *International Political Science Review*, 25(3), 297–319.
- Moradbeigi, M., & Law, S. H. (2017). The role of financial development in the oil-growth nexus. *Resources Policy*, 53, 164–172.
- Morrison, K. (2009). Oil, nontax revenue, and regime stability. *International Organization*, 63(1), 107–138.
- Mouat, C., Legacy, C., & March, A. (2013). The problem is the solution: Testing agonistic theory's potential to recast intractable planning disputes. *Urban Policy and Research*, 31(2), 150–166.
- Mouffe, C. (2000). *The democratic paradox*. Verso.
- Neumayer, E. (2004). Does the “Resource Curse” hold for growth in genuine income as well? *World Development*, 32(10), 1627–1640. <https://doi.org/10.1016/j.worlddev.2004.05.005>
- North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge University Press.
- OECD. (2016). *Corruption in the Extractive Value Chain: Typology of Risks, Mitigation Measures and Incentives (preliminary version)*. Retrieved from Paris: <http://www.oecd.org/dev/Corruption-in-the-extractive-value-chain.pdf>
- Offiong, D. A. (1997). Conflict resolution among the Ibibio of Nigeria. *Journal of Anthropological Research*, 53(4), 423–441.
- Ogwang, T., Vanclay, F., & van den Assem, A. (2018). Impacts of the oil boom on the lives of people living in the Albertine Graben region of Uganda. *The Extractive Industries and Society*, 5(1), 98–103. <https://doi.org/10.1016/j.exis.2017.12.015>
- Omeje, K. (2008). *Extractive economies and conflicts in the global south*. Ashgate.
- Østby, G., Nordås, R., & Rød, J. K. (2009). Regional inequalities and civil conflict in Sub-Saharan Africa. *International Studies Quarterly*, 53(2), 301–324.
- Pérez, C., & Claveria, O. (2020). Natural resources and human development: Evidence from mineral-dependent African countries using exploratory graphical analysis. *Resources Policy*, 65, 101535.
- Perreault, T. (2008). *Natural gas, indigenous mobilization and the Bolivian state*: United Nations Research Institute for Social Development Geneva, Switzerland.
- Pløger, J. (2004). Strife: Urban planning and agonism. *Planning Theory*, 3(1), 71–92.
- Polterovich, V., Popov, V., & Tonis, A. (2010). Resource abundance: A curse or blessing? *DESA Working Paper*, 93(1), 1–25.
- Pradhan, P. R., Arvin, B. M., Norman, R. N., & Hall, H. J. (2014). The dynamics of banking sector and stock market maturity and the performance of Asian economies: Time series evidence. *Journal of Economic and Administrative Sciences*, 30(1), 16–44.
- Regan, A. (2003). The Bougainville conflict: Political and economic agendas. In K. Ballentine & J. Sherman (Eds.), *The political economy of armed conflict: Beyond greed and grievance* (pp. 133–166). Lynne Rienner.
- Regan, A. (2018). Bougainville, Papua new Guinea. *The RUSI Journal*, 163(6), 44–54. <https://doi.org/10.1080/03071847.2018.1562020>
- Rich, E., & Warner, T. N. (2012). Addressing the roots of Liberia's conflict through the extractive industries transparency initiative. In P. Lujala & S. A. Rustad (Eds.), *High-value natural resources and postconflict peacebuilding* (pp. 201–209). Earthscan.
- Robinson, J. A., Torvik, R., & Verdier, T. (2006). Political foundations of the resource curse. *Journal of Development Economics*, 79(2), 447–468. <https://doi.org/10.1016/j.jdeveco.2006.01.008>
- Ross, M. L. (2001). *Timber booms and institutional breakdown in Southeast Asia*. Cambridge University Press.
- Ross, M. L. (2004a). Does taxation lead to representation? *British Journal of Political Science*, 34, 229–249.
- Ross, M. L. (2004b). How do natural resources influence civil war? *Evidence from Thirteen Cases. International Organization*, 58(1), 35–67.
- Ross, M. L. (2006). A closer look at oil, diamonds, and civil war. *Annual Review of Political Science*, 9(1), 265–300.
- Ross, M. L. (2012). *The oil curse: How petroleum wealth shapes the development of nations*. Princeton University Press.
- Ross, M. L. (2015). What have we learned about the resource curse? *Annual Review of Political Science*, 2015(18), 239–259.
- Rosser, A. (2006). The political economy of the resource curse: A literature survey. In *IDS Working Paper* (Vol. 268). Brighton, UK: Institute of Development Studies.
- Rovillos, R. D., Ramo, S. B., & Corpuz Jr. C. (2005). When “Isles of Gold” turn to isles of dissent: A case study on the Philippine mining act of 1995. In M. Colchest & E. Caruso (Eds.), *Extracting promises: Indigenous peoples, extractive industries and the world bank* (2nd ed., pp. 185–215).
- Rustad, S. A., Le Billon, P., & Lujala, P. (2017). Has the extractive industries transparency initiative been a success? Identifying and evaluating EITI goals. *Resources Policy*, 51, 151–162.

- Rustad, S. A., Lujala, P., & Le Billon, P. (2012). Building or spoiling peace? Lessons from the management of high-value natural resources. In P. Lujala & S. A. Rustad (Eds.), *High-value natural resources and peace-building* (pp. 571–621). Earthscan.
- Sachs, J. D., & Warner, A. M. (1995). *Natural resource abundance and economic growth*. Retrieved from Cambridge, MA.
- Samadi, A. H., & Alipourian, M. (2021). Measuring institutional quality: A review. In N. Faghih & A. H. Samadi (Eds.), *Dynamics of institutional change in emerging market economies: Theories, concepts and mechanisms* (pp. 143–171). Springer. https://doi.org/10.1007/978-3-030-61342-6_6
- Samset, I. (2009). Natural resource wealth, conflict, and peacebuilding. In *Report for the Program on States and Security*. New York: Graduate Center, Ralph Bunche Institute for International Studies at City University.
- Sandbu, M. E. (2012). Direct distribution of natural resource revenues as a policy for peacebuilding. In P. Lujala & S. A. Rustad (Eds.), *High-value natural resources and post-conflict peacebuilding* (pp. 275–290). Earthscan.
- Scheidel, A., Del Bene, D., Liu, J., Navas, G., Mingorría, S., Demaria, F., & Martínez-Alier, J. (2020). Environmental conflicts and defenders: A global overview. *Global Environmental Change*, 63, 102104.
- Schilling, J., Saulich, C., & Engwicht, N. (2018). A local to global perspective on resource governance and conflict. *Conflict, Security & Development*, 18(6), 433–461.
- Schilling-Vacaflor, A. (2012). Democratizing resource governance through prior consultations? Lessons from Bolivia's hydrocarbon sector. *German Institute of Global and Area Studies, GIGA* 184.
- Shahbaz, M., Naeem, M., Ahad, M., & Tahir, I. (2018). Is natural resource abundance a stimulus for financial development in the USA? *Resources Policy*, 55, 223–232.
- Shankleman, J. (2012). Mitigating risks and realizing opportunities: Environmental and social standards for foreign direct investment in high-value natural resources. In P. Lujala & S. A. Rustad (Eds.), *High-value natural resources and post-conflict peacebuilding* (pp. 49–67). Earthscan.
- Smith, B. (2004). Oil wealth and regime survival in the developing world. *American Journal of Political Science*, 48(2), 232–246.
- Solarin, S. A., Shahbaz, M., Khan, H. N., & Razali, R. B. (2021). ICT, financial development, economic growth and electricity consumption: New evidence from Malaysia. *Global Business Review*, 22(4), 941–962.
- Souleimanov, E. (2013). Theorizing on the causes of civil war and Ethnopolitical conflict. *Understanding Ethnopolitical conflict: Karabakh, South Ossetia, and Abkhazia wars reconsidered* (pp. 13–50). Palgrave Macmillan.
- Standing, A. (2014). Ghana's extractive industries and community benefit sharing: The case for cash transfers. *Resources Policy*, 40, 74–82. <https://doi.org/10.1016/j.resourpol.2014.03.003>
- Stead, J. G., & Stead, E. (2000). Eco-enterprise strategy: Standing for sustainability. *Journal of Business Ethics*, 24(4), 313–329.
- Stevens, P., & Dietsche, E. (2008). Resource curse: An analysis of causes, experiences and possible ways forward. *Energy Policy*, 36(1), 56–65. <https://doi.org/10.1016/j.enpol.2007.10.003>
- Thies, C. G. (2010). Of rulers, rebels, and revenue: State capacity, civil war onset, and primary commodities. *Journal of Peace Research*, 47(3), 321–332.
- Tornell, A., & Lane, P. R. (1999). The voracity effect. *American Economic Review*, 89(1), 22–46.
- Torvik, R. (2009). Why do some resource-abundant countries succeed while others do not? *Oxford Review of Economic Policy*, 25(2), 241–256.
- Van der Ploeg, F. (2011). Natural resources: Curse or blessing? *Journal of Economic Literature*, 49(2), 366–420.
- van Niekerk, A. J. (2020). Inclusive economic sustainability: SDGs and global inequality. *Sustainability*, 12(13), 5427.
- Wantchekon, L. (2002). Why do resource abundant countries have authoritarian government? *Journal of African Finance and Economic Development*, 5(2), 57–77.
- Wiens, D. (2014). Natural resources and institutional development. *Journal of Theoretical Politics*, 26(2), 197–221.
- Yıldırım, S., Gedikli, A., Erdoğan, S., & Yıldırım, D. Ç. (2020). Natural resources rents-financial development nexus: Evidence from sixteen developing countries. *Resources Policy*, 68, 101705.
- Zachrisson, A. (2004). *Co-management of natural resources: Paradigm shifts, key concepts and cases*. Retrieved from Umea: Mountain MISTRA Programme
- Zhang, Q., & Brouwer, R. (2020). Is China affected by the resource curse? A critical review of the Chinese literature. *Journal of Policy Modeling*, 42(1), 133–152.
- Zhu, J., & Wu, Y. (2014). Who pays more “tributes” to the government? Sectoral corruption of China's private enterprises. *Crime, Law and Social Change*, 61, 309–333.
- Zolnikov, T. R. (2020). Effects of the government's ban in Ghana on women in artisanal and small-scale gold mining. *Resources Policy*, 65, 101561.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.