Impact of Sustainable Resource Governance on Resource Utilisation and Sustainable Development in Africa: The Natural Resource Charter in Perspective

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Abstract
In economic and developmental terms, the general belief is that resource-rich countries tend to be worse-off than those which are resource-deficient. This is because of the disruptive phenomena of the resource curse, the Dutch disease and rent-seeking. This belief is supported by overwhelming evidence from many countries across the world, especially in Africa. This study found, however, that this result is not inevitable if appropriate and sustainable natural resource governance mechanisms are put in place and implemented by resource-rich countries. This argument appears to be validated in this study based on a comparative study of selected countries that have been implementing the Natural Resource Charter (NRC) framework and those not implementing it across the world. This is in order to underline the importance and benefits of having a sustainable resource governance framework in resource utilisation and sustainable development in Africa. The NRC is a framework of twelve tried and tested economic principles developed and drafted by world-class experts in economically sustainable resource extraction law and practice with a view to helping resource-rich but poor countries to harness and more effectively manage and utilise their natural resources for the overall development and benefits of state and citizens. The NRC framework speaks to the situation of many resource-rich countries in Africa who are poor because of the absence of sustainable resource governance mechanisms. The study finds that economies implementing the NRC framework in the management and utilisation of their natural resources are faring much better economically and socially than those not adopting it.

Keywords: resource-rich economies, economic growth and development, sustainable resource governance mechanisms, the Natural Resource Charter

1. Introduction

I think the critical question is: what did we do with our oil? Today, we are a country that cannot feed ourselves. Today, we are a country that cannot provide

education for our children. Today, we have become a country that is unable to generate and distribute electricity. Today, we have become a country that cannot provide railway lines (*The Punch*, 2018 August 18).

The above quotation aptly captures the challenges facing many resource-rich but poor African countries who are not implementing sustainable resource management strategies. Evidence indicates that this result is not a feature of resource-rich but poor African countries alone but also a problem faced by many other resource-rich countries across the world. A recent case in point is Venezuela, a country with the world's largest oil reserves but poor revenue management strategy and is currently undergoing serious economic and political crisis (*The Independent*, 2018 August 18). The ultimate question for resource-rich countries without sustainable resource governance strategies might be: 'What have we done with our oil money?' This question should be asked in the light of the triple phenomena of the resource curse, the Dutch disease and rent-seeking. Thus, the purpose of this study is to demonstrate that this is not invariably the case where resource-rich countries implement sustainable resource management strategies. The study elucidates the principles of the NRC framework while examining and analysing how the selected resource-rich countries across the world are using certain features of the framework to foster economic growth and sustainable development in their respective countries. The article also investigates the impact and implications of non-implementation of a sustainable resource governance framework in selected resource-rich entities in Africa and elsewhere in order to underlie the importance and relevance of implementation of the NRC framework to sustainable resource utilisation and management.

The article has five sections, including this introduction. Section two describes and elucidates the principles of the NRC framework and why and how it aids economic growth and development in resource-rich countries. Section three examines how the selected resource-rich countries are using pertinent features of the NRC framework to foster economic growth and sustainable development in their countries. Section four assesses the impact of non-implementation of sustainable resource governance models in the selected countries and economies. Section five concludes the article.

2. Brief Introduction and Analysis of the NRC Framework

There are different resource management models for sustainable development as utilised by resource-rich countries across the world, with most countries taking cognizance of their own specific contexts in choosing a model. The Community

Participation and Public Environmental Inquiries model, for instance, integrates public participation and environmental concerns (Oke, 2016: 6-7), while the Contractual Based Resource Management model operationalised in Australia and Canada prioritises engagements, dialogues, negotiations and agreements to foster collaboration and partnership between government, resource companies and resource-bearing communities (Oke, 2016: 7-8). There is also the Local Government Based resource management model, which is in use in Papua New Guinea and Uganda and devolves resource management responsibility to the grassroots for a sustainable resource management system (Oke, 2016: 8-9). On its part, the Future Generation Fund model found in Kuwait, Papua New Guinea and the American state Alaska focuses on saving a portion of oil revenue for the post-oil boom and future generations (Oke, 2016: 9-10).

The NRC is a twelve-principle framework which consolidates the enviable features of some of the other models. It was developed and drafted by world-class experts in economically sustainable resource extraction strategies to help resource-rich but poor countries to harness and more effectively manage their natural resource revenues for the overall development of the state and its citizens (NNRC, 2010 July 15). The NRC has no ideological or political underpinnings or sponsorship. The Technical Advisory Group which developed the NRC was chaired by Michael Spence, a Nobel Laureate in Economics. The main objective of the NRC framework is to assist resource-rich but poor countries all over the world to "transform assets under the ground into development above the ground" via application of the framework's twelve broad principles (NNRC, 2017: 5). The twelve broad principles of the NRC framework are highlighted below.

2.1 Principle relating to strategy, legal framework and institutions

The first principle of the NRC framework requires that there be a comprehensive, participatory and inclusive national resource governance strategy, which is to be formulated with full and open participation of the general public through a well-debated plan across every strata of the society (Natural Resource Governance Institute, 2014: 7-9). The strategy should consider the decision whether to extract natural resources at all, since not every decision to extract will be beneficial in the long run. The social, economic and environmental costs of extraction should therefore be considered. The strategy to be formulated is also required to consider the long-term impact and effects of resource extraction on present and future generations and factor in future uncertainty in the utilisation and sustainability of natural resources. After formulation, the strategy should be translated into clear

and coherent legal and institutional frameworks to concretise and reflect the national consensus on the resource management regime.

2.2 Principle on transparency and accountability

The second principle recognises that it is one thing to have institutions and laws but quite another to obey such laws and allow the institutions to work according to established rules and parameters. This is where transparency and accountability in the management of natural resources becomes critical. As has been observed, resource extraction and management of accruing revenues occurs out of immediate public glare, is very difficult to monitor and therefore susceptible to corruption and poor management (Natural Resource Governance Institute, 2014:10). Transparency and accountability in resource governance is therefore also crucial. Thus, this principle of the Charter requires that governments disclose all relevant information about extraction, exploitation and management of natural resources. Information required to be disclosed include: volume of reserves, reports on environmental and social impacts of extraction, licenses issued and who they are issued to, correct and detailed natural resources earnings and expenditures, correct and accessible information on savings, natural resources contracts, names of resource companies operating in the jurisdiction, information about bidding and investment in extractive assets, names of beneficial owners of extractive assets, and detailed information on the operations of state-owned resource companies, among others (Natural Resource Governance Institute, 2014: 10-11). This is because timely and transparent disclosure of relevant information is a necessary prelude to creating an informed public that is able to use critical information to hold government accountable. Governments must also be willing to support the critical mass of the people to demand good governance as a necessary complement to transparency in the extractive sector (NNRC, 2012: iii). Furthermore, the government must be willing to enforce the rules and punish identified infractions to dissuade corrupt or criminal activity in the sector (Natural Resource Governance Institute, 2014: 11).

2.3 Principle on exploration, licencing and monitoring operations

The third principle deals with pertinent issues that should preoccupy a government after a decision to explore and exploit natural resources has been made. The principle has the following components: (a) government is to ensure that it has jurisdiction and authority over the location to explore and exploit the resources; (b) government is to determine the quantum and geographical spread of the natural resources to be exploited; (c) government is to secure property rights over the areas to be licenced and opened for exploration and consider

whether it is environmentally, economically and socially desirable to exploit; (d) government is to decide on exploration and production modalities and under what terms and conditions that is to take place; (e) government is to ensure development plans of resource companies are consistent with government objectives; (f) government is to keep accurate accounts of proven reserves, production volumes and subsequent exploration potential of the reserves (Natural Resource Governance Institute, 2014: 13-15). Adherence to this principle is important to ensure government(s) get(s) a fair deal and that operations are conducted with the least injurious effect on the environment and the host community.

2.4 Principle on taxation and other company payments

While the focus and objective of the third principle is obtaining a fair and beneficial deal through well-negotiated and well-structured contracts, the fourth objective is about the need for government to design and implement taxes, royalty and other payment regimes in ways that maximise the overall value of the natural resource for the country and its citizens. In order to achieve this objective, this fourth principle encourages countries to establish transparent, stable and robust tax regimes while avoiding tax incentives and waivers to resource companies and ensuring competent tax administration, among others.

2.5 Principle on local impacts

The fifth principle requires natural resources to be managed for the benefit of the people, especially those in resource--bearing communities, who inevitably bear a disproportionate burden of resource extraction. The focus of this principle is therefore on ensuring that natural resources are managed in ways that minimise the costs and enhance the benefits of resource extraction to resource-bearing communities. The principle outlines several modalities through which this objective can be successfully achieved (Natural Resource Governance Institute, 2014, pp 20 – 21). One way to achieve this is to make the voice of the local community count and to involve them in governmental decision-making processes. Another way is to appropriately mitigate, remediate and compensate for the deprivation and damage suffered by the local community as a result of the extraction in order to avoid conflicts and restiveness in the affected communities. A third way is to ensure that local communities derive concrete benefits from resource extraction. This may be in terms of infrastructural development, training, development and employment of local labour force and utilisation of local service providers. Lastly, there can be continuing dialogue with and capacity building of

local communities to participate, which is a *sine qua non* for achieving continuing peace in and development of affected areas.

2.6 Principle on state-owned enterprises

The sixth principle concerns the governance of state-owned enterprises in the extractive sector, which are considered essential for a number of reasons: (i) to more adequately capture rent for government where the tax system is weak and deemed insufficient; (ii) to enable a more effective transfer of extractive knowledge and technology; (iii) to influence operations in the extractive industries, among others (Natural Resource Governance Institute, 2014: 22). To be able to effectively meet these objectives, however, state-owned enterprises must be well-governed, appropriately structured, be free from political interference and be commercially viable. Where these *indicia* of effectiveness are lacking, state-owned enterprises may become a drain on state resources and an avenue for graft, as is the case with the state-owned Nigerian National Petroleum Commission (NNPC) (NNRC, 2012: iv).

2.7 Principle on investing for growth

The seventh principle concerns four inherent contradictions or challenges of resource revenue. First, because of the non-renewable and finite nature of natural resources, revenues from natural resources are equally finite and do not last forever. Second, revenues from natural resources oscillate between times of large boons and long spells of decline. Three, natural resource commodity prices are unpredictable and volatile, changing from year to year. Four, unregulated natural resource revenue flow into the economy may lead to the Dutch disease, a situation where erstwhile productive sectors of the economy are neglected and abandoned because of abundance of temporary revenue from natural resources (Natural Resource Governance Institute, 2014: 25). Lastly and more importantly, the world is fast moving away from fossil fuel as a source of energy. Thus, in about a decade or so, fossil fuel as sources of energy will most likely become obsolete. As a result, resource-bearing countries and sub national entities must endeavour to invest natural resource revenues for sustainable growth while the resources last.

Thus, the seventh principle of the NRC framework contains two objectives that should inform the decision to invest (Natural Resource Governance Institute, 2014: 25-27). First, governments should invest resource revenues to equitably benefit present and future generations. The interests and welfare of the present generation must not be at the expense of future generations and vice versa. Also,

in expending or in investing resource revenues, government must do equity among the different classes of the present generation, i.e. resource revenues must benefit all classes of citizens equitably. Second, resource revenue spending and investment must also be done in ways that will maximise the welfare of the citizens as a whole. In other words, investment options must be efficient.

2.8 Principle on stabilising expenditure

The eighth principle proposes that resource-rich countries should stabilise their expenditure through an even spending pattern during both periods of boon and lean times to insulate the economy from volatility in commodity prices. This can be done through several mechanisms: use of an appropriate resource tax regime, use of hedging contracts by which the government insures itself against commodity price fluctuations in the short-term or investment in foreign assets and diversification of government revenue base, among others (Natural Resource Governance Institute, 2014: 28-29). The main aim of this principle is that resource-rich countries should not be dependent on natural resource revenues.

2.9 Principle on public spending

The ninth principle concerns infrastructure, which is essential to productivity and economic development. In a study of the impact of the quality of infrastructure on productivity of firms in 26 African countries from 1999 to 2005, Escribano et al. (2010) established a direct relationship between the quality of infrastructure and productivity of manufacturing companies and investments within the period under review. What this means is that qualitative infrastructure is a necessary precondition of productivity, economic growth and investment. The ninth principle of the NRC framework thus notes that public spending must be done in ways that increase the absorptive capacity of a country to grow the economy through investment in critical infrastructure (Natural Resource Governance Institute, 2014: 31-32).

2.10 Principle on private sector development

The tenth principle recognises the private sector as a critical driver of economic growth and development in any country. As such, the principle requires that resource-rich countries facilitate private-sector participation and investments. The objectives of this could be to increase domestic value added in the extractive industry as well as to diversify the economy (NNRC, 2012: v). Private-sector involvement and facilitation could be done through targeted assistance or creation of an enabling environment through putting the necessary infrastructure for the

flourishing of the private sector in place (Natural Resource Governance Institute, 2014: 33-35).

2.11 Principle on role of extractive companies

The eleventh principle focuses on the role of International Oil Companies (IOCs) in designing resource management mechanisms. The principle requires IOCs to respect the highest environmental, social and human rights standards in conducting their operations (Natural Resource Governance Institute, 2014, p 37). IOCs are also required to refrain from corruption and corrupt practices, be transparent and accountable through disclosure of all relevant records, contracts and reports having to do with their projects and operations, and to support the developmental efforts of their host countries and communities (Natural Resource Governance Institute, 2014: 37-38).

2.12 Principle on the international community

The twelfth principle relates to the role of the international community in resource governance in resource-rich countries. The principle requires international organisations to support sustainable development and best practices in resource governance in the following ways: by promoting and monitoring compliance of IOCs and governments with the transparency and accountability requirements of the extractive industry; monitoring and enforcing compliance of governments and IOCs with international human rights standards; ensuring that extractive operations comply with environmental and social health protection standards; ensuring compliance with anti-money laundering and anti-corruption standards to curtail illicit financial flows and corruption in resource-rich countries and encourage knowledge and skill transfer (Natural Resource Governance Institute, 2014: 38-39).

Having briefly examined the twelve principles of the NRC framework above, I proceed to interrogate how countries across the world are using the NRC precepts or similar principles to transform assets under the ground into development above the ground.

3. The NRC framework and delivery of economic growth and sustainable development globally: Examples of countries implementing NRC or similar principles

Many countries are using the NRC framework or similar economic principles to facilitate and promote economic growth and sustainable development in various ways. However, this article examines only four of the pertinent features or

principles of the framework being used to advance economic growth and sustainable development.

3.1 Sovereign Wealth Funds

Sovereign Wealth Fund (SWF) mechanisms are being used to foster economic growth and development, as outlined in principles seven and eight of the NRC framework, which encourages resource-rich countries to invest resource revenues for growth and stabilise expenditure. Luckily, SWF is a popular resource management strategy in many resource-rich countries across the world. As at December 2013, 54 such countries across the world had established some kind of SWF. Norway established it in 1990 with an assets value of over $926 billion as at 2015, making it the world's largest SWF at that date (Natural Resource Governance Institute, 2018 December 10). Chile established hers in 2006 and 2007 with a total assets value of $22.9 billion as at December 2013. Saudi Arabia established hers in 1952 and 1971 with a total assets value of $681.2 billion as at December 2013 (Bauer, 2014: 9-10).

Studies reveal that SWF mechanisms can be used to achieve a number of developmental and economic growth objectives. One, they can be used to improve public spending efficiency by smoothening over public expenditures to avoid the boom-and-bust cycles of commodity prices. Two, they can be used to help governments conserve resource revenues and prevent waste either when resource-rich countries have no absorptive capacity for large revenues inflow or when there is no immediate need for the extra spending. Three, they can be used to stabilise the economy as well as prevent inflation and onset of the Dutch disease by helping to absorb and save large foreign exchange earnings in foreign assets. Four, by making less money available for spending, SWF mechanisms can also help in limiting the spending discretion of government and assist in earmarking spending for infrastructural and capital developmental projects such as roads, hospitals, education, etc. Five, SWF mechanisms can also aid the prevention of misappropriation and mismanagement of resource revenues by helping to separate resource revenues from the general revenues of government and ensuring transparency and accountability in the management of resource revenue inflows and investments. Six, buoyant foreign reserves and savings provided by SWFs can also help to guarantee the political leverage, power and autonomy of resource-rich states from foreign influence and adverse market forces (Bauer, 2014: 13-15).

While it is clear that SWFs can be put to ignoble use when not properly operationalised, there is evidence to suggest that a well-organised and well-structured SWF will help to achieve many of the above-mentioned objectives in resource-rich countries across the world. For instance, SWFs stabilised the budgets of countries like Chile, Norway and Saudi Arabia despite unexpected rise and fall in government revenues. SWFs also protected the economies of Norway and Saudi Arabia from volatile commodity prices and sterilised capital inflows. SWFs also helped Timor-Leste to smooth over public spending and mitigate the Dutch disease, while it enabled countries like Ghana, Kazakhstan, Kuwait and North Dakota (USA) to save so that future generations can benefit from today's resource exploration and production (Bauer, 2014: 16).

3.2 Fiscal rules

Fiscal rules have also been used by resource-rich countries to foster economic growth and sustainable development. As noted in principles eight and nine, fiscal rules encourage resource-rich countries to smooth over their expenditure and invest in critical infrastructure to grow the economy. In this context, fiscal rules do not refer to tax matters but to a permanent constraint on government finances generally. According to Mihalyi and Fernandez:

> A fiscal rule is a permanent quantitative constraint on government finances. It provides a numerical ceiling or target for some key budget aggregate, such as the budget balance, debt, or spending for many years ahead. Governments use them to contain spending pressures, to signal a commitment to fiscal responsibility and tie the hands of politicians who may be tempted to overspend, including to win elections (Mihalyi and Fernandez, 2018, June, p. 3).

There are four types of fiscal rule: (i) the debt rule which sets a ceiling on public borrowing, often as a percentage of GDP; (ii) the budget balance rule which places limits on budget balances and is the most common fiscal rule across the world; (iii) the expenditure rule which places limits on public expenditure, often as a percentage of GDP; (iv) revenue rules which set a cap on the amount of resource revenue that will enter the budget for expenditure purposes (Mihalyi and Fernandez, 2018, June, p. 4).

There is growing recognition of fiscal rules as being essential to sustainable resource management and economic growth. Out of 79 countries assessed in the 2017 RGI, 34 (43%) have fiscal rules in place ((Mihalyi and Fernandez, 2018,

June, pp. 5-12). The type of fiscal rule with the most potential to impact and stabilise resource-rich economies is the non-resource budget balance rule, which is a variant of the budget balance rule. It is used in Norway, Tanzania, Botswana, and Ecuador. The non-resource budget balance mandates a balance between expenditures and all revenues excluding resource revenues. In Norway, all resource revenues must be saved or invested and the government is permitted to spend only the interests accruing from invested resource revenues. In Tanzania, resource revenue beyond 3% of the GDP must be saved for the rainy day. In Ecuador, resource revenues and borrowing are only for developmental and capital projects. Fiscal rules insulate resource-rich economies from volatility in commodity prices and thus help to foster economic stability and growth (Mihalyi and Fernandez, 2018, June, pp. 9-10). Evidence of usefulness of the non-resource budget balance rule in fostering stability was highlighted in the 2015-2016 crash in commodity prices, as half of the resource-rich countries whose economies remained stable and were able to follow their fiscal rules were implementing a non-resource budget balance rule, e.g. Norway, Botswana, and Colombia (Mihalyi and Fernandez, 2018, June, pp. 21-22).

For overall effectiveness, responsiveness and flexibility, however, there may often be need to craft the rules in such a way that it will still be able to respond to emergencies and other unforeseen circumstances. One way to ensure this is to insert escape clauses in the rules, i.e. circumstances under which the rules can be departed from or disregarded (Mihalyi and Fernandez, 2018, June, pp. 19-21). Examples of such escape clauses may be found in Uganda, where section 7(1) of the country's Public Finance Management Act 2015 provides for circumstances under which the fiscal rules in the Ugandan Charter of Fiscal Responsibility may be departed from.

3.3 Leveraging private sector investment for economic diversification

Diversifying the economy away from oil is a crucial requirement to ensure sustainable economic growth and development of resource-rich economies. One of the most popular means to do this is through leveraging the private sector as specified in principle 10 of the NRC framework. The principle requires that resource-rich countries facilitate private-sector participation and investments for diversification of the resource economy.

Botswana recognised quite early the importance of leveraging the private sector for economic diversification and is therefore a good illustration of principle 10 of the NRC framework (Stephens 2016, March). The southern African country has a

population of about 2.292 million as at 2017. Diamond deposits were discovered in the country in 1967. Attempts to diversify Botswana's resource economy thus date back to 1968 following the emergence of policies and laws that were aimed at developing the private sector through targeted incentives and support mechanisms as a pathway to economic diversification (Sekwati, 2012). However, in 2009, the slow pace of the diversification process since 1968 influenced renewed efforts to diversify the economy through private-sector involvement with a variety of policies, including the Economic Diversification Drive of 2011 (Stephens, 2016: 3). Botswana's diversification policies and initiatives include a 50/50 share in profits from diamond with the Debeers—the resource company—through a joint-venture agreement, as well as exclusive reservation for local firms of 30% of government's annual budget for purchases, and mandating local value addition in Botswana through the creation of a local company to sort, value, market and distribute diamonds in the country—things that were previously done by the resource company in London (Stephens, 2016, pp; 3-4) .

Outcomes reported include the facts that increased local employment (97% of the resource company's employees are local citizens) and 80% of the resource company's 250 million dollars annual budget is also spent locally. With regard to the latter outcome, a study noted that "At the time of independence there was close to no capacity to provide any services other than unskilled labour to the mines, and so this represents a significant leap in local capacity" (Stephens, 2016: 4). In addition, studies indicate that the local value addition initiated by the government created 3,000 more jobs and brought about technology transfer, while the government's joint-venture agreement with Debeers also led to an increase in government revenue (Stephens, 2016, pp. 4-5). Although Botswana is still largely dependent on diamond revenue, if it complements its diversification efforts with necessary reforms, the country will soon achieve diversification of its resource economy.

3.4 Managing resource extraction to benefit local communities

There can be no sustainable economic growth or development in a degraded or polluted environment, just as there can be no economic growth in a conflictual or militarised setting; moreover, sustainable development cannot happen where there is a low standard of living. All these are manifestations of poor local impacts management. Principle 5 of the NRC mandates resource-rich countries to manage oil exploration and exploitation in ways that minimise the negative effects while maximising the benefits of resource extraction and exploitation for resource-bearing communities. Managing local impacts has five different components: (i)

involvement of resource-bearing communities in assessment and decision-making processes; (ii) anticipating and mitigating negative effects of resource extraction; (iii) defining and delimiting resource ownership and rights over adjacent and connected lands and property; (iv) ensuring that resource extraction benefits local communities; (v) and carrying along and empowering local communities for engagements (Natural Resource Governance Institute, 2014: 20-23).

Evidence from Ghana suggests that managing resource extraction to benefit local communities has contributed significantly in promoting peace and cordiality among the national government, mining companies and host communities while reducing to the barest minimum conflict, disruptions and resort to self-help by the host communities. Ghana is rich in gold as well as oil and gas, with the latter discovered in commercial quantity only in 2010 (Natural Resource Governance Institute, 2018 May 30). The Ghana mining regime protects and preserves the rights of local communities and owners or occupiers of resource-bearing lands, allowing them to continue to use the land productively. For instance, section 70(3) of the Minerals and Mining Law 1986 of Ghana provides thus:

> The lawful occupier of any land within an area subject to a mineral right shall retain the right to graze livestock upon or to cultivate the surface of such land in so far as such grazing or cultivation does not interfere with the mineral operations in the area.

In addition, section 17(2) (d) of the law requires applications for grant or renewal of mining rights to contain explicit proposals and commitment to employing and training Ghanaians, while section 78 requires resource companies to patronise local brands supplying goods and services. Studies indicate that these explicit guarantees of the participation and stakes of the local community in Ghana's resource extraction and management processes have in no small measure helped to foster peace and harmony in the country's resource extraction environment (Oke, 2016: 45). It is worth pointing out that Ghana has an enviable resource governance record in Africa (Natural Resource Governance Institute, 2018 May 30), with its sovereign wealth management mechanism being acclaimed worldwide (GhanaWeb, 2014 September 10).

4. The NRC framework and delivery of economic growth and sustainable development globally: Examples of countries not implementing the NRC principles

When evaluating the consequences of non-implementation of sustainable resource management mechanisms, Nigerian oil-producing states are often a good illustration of the failures and negative impacts. For instance, reports indicate that Rivers State earned 5.02 billion US dollars between 1999 and 2014, just as Akwa Ibom State earned 4.57 billion US dollars in the same period of time. Similarly, within the same period, Delta State earned 3.9 billion US dollars, Bayelsa State 3.6 billion US dollars, Ondo State 0.88 billion US dollars, Imo State 0.28 billion US dollars, Edo State 0.24 billion US dollars, Abia State 0.24 billion US dollars and Abia State 0.19 billion US dollars (*Quartz Africa*, 2016 May 5). In spite of these humongous resource revenue earnings, however, these oil-producing states have almost nothing to show for it in terms of development and improvement of the welfare of residents. Currently, many of these states cannot even pay workers' salaries (*Quartz Africa*, 2016 May 5). The humongous resource revenues have vanished as a result of poor resource revenue management.

Furthermore, non-compliance with principle 5 of the NRC framework with regard to minimising the negative impact of resource extraction while maximising the benefits to local communities in Nigeria's oil-producing states has also led to unprecedented levels of environmental pollution and degradation. Just as well, local communities who feel short-changed by the federal government from the benefits of resource extraction have also routinely resorted to self-help in form of oil bunkering and illegal refining of oil to redress perceived resource benefit injustices. Oil bunkering and illegal refining of oil in the Niger Delta have resulted in calls for the establishment of modular refineries in the region to benefit the resource-bearing communities—an endeavour that is believed in some quarters not to be environmentally, commercially or economically viable if thrown open to illegal 'drum' refiners as envisaged by the calls and advocacy (*The Guardian*, 2017 November 16).

Lastly, studies also suggest a nexus between agitation for restructuring of Nigeria's political structure, resource control and ownership and pre- and post-election violence and militancy in some of the states in question, with predictions made for such electoral violence and militancy in states like Rivers, Akwa Ibom, Imo and Abia states in the run-up to the 2019 general elections (SDN, 2018-2019). The above are some of the issues surrounding the absence of properly managed and monitored sustainable resource governance mechanisms, such as the NRC framework, in Nigeria's oil-producing states.

Zambia is another example of non-implementing countries which illustrate quite well the failures and negative impacts of non-implementation of sustainable resource management strategies. Zambia is one of the world's most endowed mineral resources-rich nations. Zambia has the second largest deposit of copper in Africa, after the DRC, in addition to other mineral resources like cobalt, gold, manganese, iron, emeralds and other types of gemstones and industrial minerals, as well as uranium, coal and hydrocarbons (Werner, 2016: 35). As a result of its huge deposits of minerals and humongous earnings from natural resources, Zambia has the highest GDP in Africa. As at 1969 the country was classified as a middle-income nation (Werner, 2016: 33-34).

Today, however, the story is different. By 1995, Zambia had accumulated a national debt of $6.5 billion USD. It now has a crippled economy and is desperately trying to raise revenues through volatile tax policies. This is in addition to high levels of poverty and exclusion, forced eviction of resource-bearing communities without adequate compensation, as well as high levels of environmental degradation, pollution and water contamination threatening the health and well-being of the citizens. There is also civil unrest leading to avoidable loss of lives alongside many other problems faced by a battered and crumbling economy (Werner, 2016; Manley, 2017 November 29; *The Guardian*, 2017 May 28; Lifegate, 2017 January 10). So how did Zambia get to this sorry pass from a glorious and enviable start?

The answer is to be found in the ways the country has governed its natural resources wealth and managed its earlier prosperity. Key features of Zambia's resource governance strategy have been identified by various studies. First, there was the nationalisation of the mines in 1979. The 20-year period within which the mines were nationalised was reported to have caused the Zambian economy about $45 billion USD in production losses (Werner, 2016: 35). Second, there is lack of accountability and transparency in the management of resource revenues. While there are initiatives aimed at transparency, there is little transparency in government spending and corruption is rampant (Werner, 2016: 45). The tax regime is also volatile, unstable and cumbersome and not structured to maximise resource revenues for the country (Manley, 2017 November 29). The Zambian natural resource framework has also failed to ensure that resource extraction and production benefit local businesses and services or develop local content (Werner, 2016: 41). Although provisions for skill transference and local personnel development are contained in the Zambian resource management framework, they were largely unenforced. The country also did not smooth over public

expenditure, with the result that government expenditure was tied to the boom and bust of commodity prices (Manley, 2017 November 29). Worst of all, the country did not save for growth and development during the time of revenue boom; neither did it diversify the country's resource base, with the result that the country is now broke and indebted and mineral resources remain the mainstay of the economy decades after discovery of mineral resources in the country (Werner, 2016; Manley, 2017 November 29). As can be gathered from the foregoing, the Zambia natural resource governance strategy violates almost all of the principles of the NRC framework. It is little wonder therefore that the country has remained in the current state of low economic development.

Another example illustrating the effects of non-implementation of sustainable resource management mechanisms is Ite, a sub national entity in southern Peru that is rich in copper and whose natural resource revenues rose from $500,000 to more than $13 million annually owing to resource revenue transfers from the national government to Ite (Bauer, July 2013). As a result of this huge rise in its income, Ite embarked on what has been described as a 'spending glut' (Bauer, July 2013) without attempting to smooth over its spending as required by principle 9, or invest for growth as required by principle 7 of the framework. The result of the spending glut had been to raise construction wages and divert farmers and agricultural labourers from the fields into the construction sector and thereby lower agricultural outputs (Bauer, July 2013)—a classic case of the Dutch disease. Although the spending by Ite has benefited the residents in the short term, not investing for growth or saving for the rainy day has resulted in Ite lacking "both the long-term public investments and the financial savings to maintain the current standard of living far into the future…" (Bauer, 2013, July, p. 2).

Yet another illustration is Alberta, a resource-rich province of Canada. The province, rich in oil sands, decided between 2004 and 2008 to spend rather than save its over $10 billion sand oil price windfall—as required by principles 7 and 9 of the NRC framework. The situation of Alberta at the time is closely related to that of Lagos State today where oil has just been discovered. The situation is aptly captured by Bauer thus:

> Even prior to the boom, Alberta was Canada's richest province, with few public spending needs relative to other Canadian provinces or most other parts of the world; in 2011, per capita GDP was more than $78,000 …. Today, with oil prices dropping, Alberta is facing a fiscal crisis; its

> government expects a 2013 budget deficit of $6.3 billion (Bauer, 2013, July, p. 3).

Thus, the failure of Alberta province to delink its expenses from resource revenue and stabilise its expenditure, as required by principle 8, or invest for growth and save for the rainy day, as required by principle 7, exposed it to the vagaries of commodity prices and the boom and bust cycle of resource revenues, attendant consequences of debt and financial crises.

5. Conclusion

This article has shown that natural resources can in fact be a blessing rather than a curse for resource-rich countries or entities, if they adhere to sustainable resource governance frameworks and principles. Based on a comparative assessment of how selected resource-rich economies across the globe are using or not using pertinent features and principles of the NRC framework to foster economic growth and sustainable development in their jurisdictions, the study finds that resource-rich countries implementing the NRC framework or similar principles are generally faring better in economic and social terms than those not implementing the framework or similar principles. In the light of this, it is recommended that resource-rich countries in Africa adopt and implement tried and tested economic principles of the NRC framework for sustainable economic development and growth for the benefit of the present and future generations of the state and citizens alike.

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