Dynamics of Resource Governance, Climate Change, and Security: Insights from Nigeria and Norway

Francis N. Okpaleke
University of Waikato, okpalekefrancis@gmail.com

Magnus Abraham-Dukuma
University of Waikato, New Zealand, magnus.abrahamdukuma@gmail.com

Follow this and additional works at: https://digitalcommons.usf.edu/jss
pp. 123-140

Recommended Citation
Okpaleke, Francis N. and Abraham-Dukuma, Magnus. "Dynamics of Resource Governance, Climate Change, and Security: Insights from Nigeria and Norway." Journal of Strategic Security 13, no. 4 (2020) : 123-140.
DOI: https://doi.org/10.5038/1944-0472.13.4.1824
Available at: https://digitalcommons.usf.edu/jss/vol13/iss4/9
Dynamics of Resource Governance, Climate Change, and Security: Insights from Nigeria and Norway

Abstract
This study examines the nexus between resource governance, climate change and security in Nigeria and Norway against the backdrop of the resource curse. Based on the qualitative analysis of secondary data, aided by the eco-violence theory, the study posits that the prevalence of ecological conflict in resource curse countries thrives within the context of resource mismanagement characterized by lack of optimal resource governance frameworks. The study identifies corruption, poor resource utilization, rent seeking, resource disenfranchisement and over dependence on oil revenues as critical drivers of resource curse and eco-violence in Nigeria. With reference to the Norwegian governance model, the study analyses the possibilities of effective resource governance for cushioning the effects of existential climate threats and better resource management in Nigeria, noting that dealing with climate security threats requires not only addressing the root causes that perpetuate and incentivize them but adopting institutional mechanisms that promote better resource governance.

Acknowledgements
The authors heartily thank Dr. Mark Osa Igiehon for his preliminary advice on the direction of the article, and the Journal Editor as well as all the anonymous reviewers whose comments greatly contributed towards the improvement of the article.

This article is available in Journal of Strategic Security: https://digitalcommons.usf.edu/jss/vol13/iss4/
Introduction

Natural resources are vital for economic and industrial growth, yet their abundance can impede or incentivize development. Studies in macro-economic theory acknowledge the incapacitating effect of resource wealth on economies with lack of effective governance mechanisms and its impact on development outcomes. Many resource-rich countries expect the abundance and availability of natural resource wealth to translate into meaningful development outcomes. However, the incidences of corruption, dysfunctional institutions, and poor resource management have plagued this expectation. This trend has been associated with lack of effective and transparent natural resource governance frameworks, which has engendered the paradox of resource wealth.

The paradox posits that poor accountability in the management of resource endowment engenders contradictions that trigger resource curse and poverty. This article, premised on the eco-violence theory, explores the resource curse paradox based on a comparative analysis and insights from two countries—Nigeria and Norway—in the context of its nexus with climate change and security. It also establishes differences in the initiatives and policies on resource governance and climate change in the two resource-rich countries, with the purpose of drawing insights for ideal resource governance and climate security implications.

The article adopts a mix of regulatory and comparative analyses and a five-part structure. The first part introduces the study. The second part presents an overview of key themes on resource governance, historical contexts, and governance arrangements in the Nigerian and Norwegian petroleum industries. Part 3 discusses the theoretical framework, which the study adopts and teases out the eco-violence theory, human security concept, and the paradox of resource curse as they relate to the primary inquiry. Part 4 is a conceptual discussion on the nexus between resource governance and climate security. It also undertakes a comparative examination on resource governance and climate change in Nigeria and Norway to show how different resource governance regimes can influence both economic circumstances and climate security in resource-rich countries. Part 5 presents concluding remarks and policy insights.
Contextualizing Resource Governance

The term resource governance is a tool for safeguarding resource utilization and management. According to the Natural Resource Governance Framework of the International Union for the Conservation of Nature, it comprises the norms, institutions, and processes that determine the exercise of power and responsibilities over natural resources, as well as the decision-making and citizen participation process in benefitting from resource management. For resource governance to be effective, it requires democratic and mutually supportive institutions that are equitable, accountable, and transparent in the use of natural resources. Other key elements that characterize the concept include legitimate use, equity, inclusiveness, fairness, capability, adaptability, and functional and structural integration. This also includes the promotion of public welfare and the strengthening of civilian institutions.

The Resource Governance Index (RGI) of the Natural Resource Governance Institute (NRGI) provides a metric for scoring and evaluating the policies and practices that governments employ globally in the management of their resource endowments particularly in oil, gas, and mining. The RGI uses three key components--value realization, revenue management, and enabling environment--to assess approximately 89 countries that together produce 82 percent of the world’s fossil fuels. Together, these components determine the level of application of the key principles of resource governance in the management of natural resources.

It is possible to include multiple countries that fit the focus-description of this study. However, the article delimits its coverage to only two countries, using two defined parameters--two resource-rich countries in the Global South (Nigeria) and Global North (Norway). This delimitation helps to capture geographical representation and provide depth of analysis within a limited word count. Importantly, the study acknowledges the profound differences between the two countries such as population, colonial history, development progression, resource ownership, governance system, and political stability that potentially make any comparison between these countries lopsided and problematic. However, these countries are reputable as prominent petroleum producing jurisdictions in both the Global South and the Global North. Thus, they represent good examples for the study. The reliance on the petroleum sector as a major source of government
revenue and national economic development in both countries further justifies their comparison. In Norway, the oil and gas sector is reputable as the country’s largest revenue spinner, measured in terms of value added, government revenues, investments and export value, and accounts for 36 percent of the country’s share of total exports and 18 percent of its Gross Domestic Product (GDP). Likewise, Nigeria is one of the largest exporters of crude oil in sub-Saharan Africa and the petroleum sector accounts for 65 percent of governments’ revenue. It is possible to undertake further analysis using a broader scope of coverage. However, other countries with similar peculiarities may glean useful insights from this study.

Nigerian Overview

The Petroleum Act 1969 has been the primary legal framework for the governance of petroleum resources over the years. The regime has gone through a checkered history, but the Nigerian National Petroleum Corporation (NNPC) currently exists as the country’s national oil company (NOC) and instrument for both direct state participation and petroleum resource management. Pursuant to its establishment legislation, NNPC has powers relating to petroleum exploration, production, refining, and transaction.

Due to poor performance of the country’s NOC and the need to create a better investment framework for oil multinationals and prospective investors, there has been a regulatory reform process with the introduction of the Petroleum Industry Bill into the Nigerian parliament in the year 2000. The bill was an ambitious legislative project to overhaul the entire legal framework and amalgamate all the laws relevant to the Nigerian petroleum industry. The complex and voluminous nature of the bill occasioned long years of legislative consideration and debates. Consequently, the Nigerian parliament unbundled the bill into four different parts, namely:

- Petroleum Industry Governance Bill;
- Downstream Oil and Gas Administration Bill;
- Petroleum Fiscal, and Petroleum Revenue Management Bill; and
- Petroleum Host Community Fund (PHCF) Bill.

The Nigerian parliament passed the Petroleum Industry Governance Bill (PIGB) into law on May 25, 2017 after 17 years. At the time of
writing, it awaited presidential assent. The other three bills meant to take care of fiscal; administrative and community issues are yet to complete the legislative cycle leading to the emergence of a comprehensive new regulatory regime.

From a historical context, Nigeria’s colonial history has adversely affected the development of the country’s petroleum industry, particularly in terms of resource governance and ownership. This is because colonialism engendered the subordination and domination of Nigeria’s oil resources in the hands of multinational corporations (MNCs) and transnational elites. This resulted in the inequitable power relation in the production of oil and the pervasive commoditization and appropriation of its benefits in post-colonial Nigeria. As Cyril Obi argues, this is evident in the “deepened social contradictions, unequal power relations and inequities in Nigeria’s oil wealth at two levels: State-society and local-global.” At the state-society level, these contradictions, spurred the rise of a petro-bourgeoisie class heavily interested in the unbridled appropriation of oil wealth accrued from the rents paid by MNCs. At the local-global level, it consigned Nigeria to the supply of cheap oil at the global market due to lack of infrastructure to refine its raw petroleum resources. Thus, perpetuating the dependency theory, which explains how the export of natural resources from poor and underdeveloped periphery nations to the core wealthy states impoverishes the former and enriches the latter.

Furthermore, the economic and environmental impacts of resource exploitation in Nigeria have received uncomplimentary remarks in the literature. From an economic perspective, the country typifies an example of a poverty-stricken region and state failure. From an environmental perspective, incidences of greenhouse gas emissions, pollution, environmental degradation, and oil spillage have characterized oil and gas activities in the country. It is a common fact that venting and flaring of gas contribute significantly to greenhouse gas emissions and consequent climate change, with devastating environmental and health implications. Despite this scientific fact, gas flaring has persisted in the country for decades. On environmental performance, the country has a poor record. As of 2018, it ranked 100 out of 180 countries in global environmental performance index, with a score of 54.76. These factors clearly show incidences of the resource curse theory, and inspire calls for a paradigm shift in the resource governance framework of the country.
Norwegian Overview

The Norwegian model for petroleum resource governance is an administrative design that separates commercial, policy, and regulatory functions in hydrocarbons management. Accordingly, the Norwegian Petroleum Directorate exercises regulatory functions; Norway’s Ministry of Petroleum and Energy is responsible for policymaking; while commercial functions lie within the purview of Equinor (formerly Statoil), the Norwegian independent NOC. This model has helped Norway to manage its resources effectively and pitched its NOC high as an international oil company carrying out hydrocarbon operations beyond the confines of Norway. There is a strong argument on the possibility of exporting the Norwegian model as best practice for petroleum resource governance to other resource-rich jurisdictions.

The major attractive features of the Norwegian model are transparency, a sovereign wealth fund (SWF), establishment of a vibrant national oil company and institutions, and clear division of tasks between respective institutions. These entrench democracy, technical expertise, and effectiveness in resource administration in Norway.

It is also important to highlight the economic implication of resource governance in Norway and the country’s environmental performance as a resource-rich country. On economic effect, its resource governance model has helped the country to avoid incidences of resource curse and for economic development. Norway presently has the world’s highest SWF, with managed assets of over one trillion USD. On environmental performance, the country has been able to reduce environmental issues associated with petroleum activities over the years. As of 2018, it ranked 14 out of 180 countries in global environmental performance index, with a score of 77.49.

Theoretical Exploration

Eco-violence

This article adopts the eco-violence theory as an analytical framework to explain the nexus between resource wealth, climate change, and security. From an epistemological viewpoint, the theory is rooted in contemporary scholarship on eco-survivalism, conflict studies, and ethnography. The key idea of the eco-violence theory is that
environmental pressure arising from the extraction of natural resources engenders conflicts.\textsuperscript{28}

Proponents of eco-violence theory argue that the scarcity—and not the abundance of natural resources—drives and sustains environmental conflict. They posit that this phenomenon manifests in two ways. First, scarce resources compel powerful groups to brazenly capture and seek to appropriate and redistribute natural resource wealth to their cronies or their interests. This situation causes the marginalization of the powerless, the disenfranchisement of many from the collective resource wealth such as seen in Zapatista uprising between the indigenous people and the subsistence farmers in Chiapas, Mexico and in Venezuela where local crime syndicates combined with Colombian guerrilla groups are fostering conflicts due to gold deposits in south Venezuela.

Second, it construes eco-survivalism as a manifestation of resource depletion and a precursor for environmental-induced violence. In addition, it perceives the overdependence on primary commodity exports as an indicator of economic vulnerability and a catalyst for unbridled resource competition. The arising struggle due to the displacement, disenfranchisement, and dislocation of individuals from resource benefits, results in environmental conflicts. This pre-empts a violent security situation emerging from ecological conflicts. This is akin to what Indra Sosya termed the shrinking resource pie to explain how scarcities serve as catalyst for conflicts.\textsuperscript{29} The case of blood diamonds in Sierra Leone, the activities of the Niger Delta militants in southern Nigeria and the conflict timber civilian crisis in Cambodia, Democratic Republic of Congo, and Liberia are classic examples that buttress the eco-violence theory.

Yet, there is an opposing view that affirms, the abundance honey pot of natural resources—and not their scarcity—is the precursor for environmental conflict.\textsuperscript{30} Contrary to eco-violence theorists, some scholars in development studies and macroeconomics think that higher levels of conflict and lower levels of human and institutional development emerge because of the struggle for abundant natural resources and not its scarcity.\textsuperscript{31} They posit that the natural capital wealth accruing from the appropriation of resources incentivizes loot-seeking and environmental pressures for resources. There however remains a paradox of resource wealth and a human security dimension.
The next subsections that follow will present an overview of these concepts as they relate to the present inquiry.

**Human Security**

The United Nations General Assembly Resolution 66/920 defines human security as “people-centered, comprehensive, context-specific, and prevention-oriented responses that strengthen the protection and empowerment of all people.” The Human Development Report published by United Nations Development Programme, underscores human security as comprising seven core elements: Economic, food, health, environmental, personal, community and political security. This means human security is a composite of the political, social, economic, cultural, environmental system that gives people the building blocks of survival, livelihood, and dignity.

Therefore, exclusion of individuals and communities from these core elements is essentially a threat to their human security.

Likewise, parsing resource curse as an issue of human security is the recognition that the disenfranchisement of people from resource wealth engenders impacts that threaten their livelihood and survival. This is analogous to Mary Kaldor’s conceptualization of human security at three levels. The first refers to the everyday security of individuals and communities. The second refers to the enabling factors that threaten human freedom and cause fear, and the third is the interrelatedness of security in different places.

**Paradox of Resource Curse**

The idea that resource wealth translates into economic growth is often grossly erroneous. As evidence shows, several resource rich countries are worse off than their resource-poor counterparts. Countries like Japan, South Korea, and Singapore have demonstrated that resource wealth is not a prerequisite for economic growth. The concept of resource curse or the paradox of plenty, as coined by Richard Auty, explains that countries with abundant resources often develop slowly, more corruptly, more violently, and with more authoritarian governments than others without resource abundance. The core idea in the resource curse theory is that natural resources can be either a blessing or a curse, depending on its judicious use for national development. Several theoretical models explain the resource curse
hypothesis: Dutch disease model, rent-seeking model, and the institutions model.

The Dutch disease model posits that the co-existence of a thriving sector and lagging sub-sector of traded goods engenders a negative correlation between resource wealth and economic growth.\(^{37}\) The resulting impact is a monocultural economy that depends heavily on natural resources export. This also underdevelops other sectors of the economy. The rent-seeking model explains the syndrome in resource-rich countries to rely heavily on rents and remittances paid by external clients as the main source of national revenue.\(^{38}\) This results in a rentier predatory state that perpetuates an underdevelopment that subjects the country’s economic structure to external windfalls and wealth shocks that emanates from global fluctuations in demand and supply. The institutions model sees the reason for the lag and poor economic performance in resource-rich countries because of inferior institutional arrangements.\(^{39}\) This stems from the notion that institutions serve as key mechanism for moderating resource governance and driving developmental initiatives.

Discussion: Conceptual and Practical Relationships

In interrogating the nexus between resource governance and climate security, a critical consideration is to determine whether countries experiencing the resource curse are more likely to experience higher levels of eco-violence than their counterparts with better resource management are. Piecing this puzzle together requires understanding the realities in these countries and the disproportionate share of resource wealth, which engenders outcomes that trigger conflicts, environmental violence, and local contestations for the share of oil resources. Poor economic performance, rise in poverty levels, and low infrastructural development are some of the main features of countries that rely preponderantly on resource rents. The presence of the natural resource is however not the curse itself, but the poor governance structures for their management and equitable distribution of the benefits accruing from them.

*Climate change, Climate security, and Eco-Violence*

The existential threat of climate change portends catastrophic consequences for the environment, with attendant security implications. The rise in sea level, desertification, poor agricultural
yield, increased migration, drought, and reduced economic activities could drive scarcity and undue competition for natural resources that potentially create conflict and instability. This links to climate security. Climate security is the idea that climate change related threats amplifies existing risks in the society that imperils human security, the environment, economy, and global infrastructure.40 Climate security risks emanate from the potential food crisis due to shortages and scarcities, health emergencies and environmental catastrophes that are likely to occur when climate change threats exacerbate. As the foregoing analysis suggests, resource rich countries with poor governance arrangements are unlikely to weather the shocks compared to countries with good resource governance mechanisms.

Contextualizing eco-violence within the ambit of climate security presupposes that the scarcity or the abundance of natural resources could drive conflicts in the absence of an intervening variable to forestall its impacts. Situating this within the purview of the eco-violence theory implies that the exacerbation of climate change effects, together with the depletion of natural resources, incentivizes conflict and violence. The potential triggers of violence in this regard include poor resource governance, undue resource appropriation, corruption, inequity, and lack of transparency in the utilization of resource wealth. The ongoing herder-farmer conflict in Nigeria highlights this. The loss of arable land in northern Nigeria because of climate change has caused ongoing violent confrontations between farmers and nomads. This has resulted in significant human death toll and the militarization of nomadic pastoralism.41

Likewise, in the Niger Delta, the alienated indigenous people continually threaten the Nigerian government for their share of resource rents. These disenfranchisement conflicts—violent confrontations arising from alienation from resource rents—create adverse outcomes such as instability, vandalization of oil infrastructure and arable lands which further deepen the resource curse. The inherent dilemma for climate security is that the abundance of these resources potentially creates human security crisis, which would most likely occur in resource scarcity if poverty and underdevelopment were pervasive. This implies that, as climate change threat worsens, countries with natural resource endowment have higher propensity to encounter crisis when competition for abundant resources increases.
In countries with poor resource governance, these changes could increase vulnerabilities and lower resilience to climate adaptation compared to countries with effective resource governance mechanisms. Additionally, environmental institutions working in fragile states face an increased risk of human security conflicts in the absence of a proper management of interventions for environmental problems in those countries. In this case, a move towards renewable energy sources to reduce fossil fuel emissions such as increased biofuels, land grabs of communal lands for energy decentralization initiatives could spark up conflict and local resistance due to lack of transparent and effective governance structures. This resistance could be in form of insecurities, speculations, and suspicion as to unfair exploitation of resources, corruption, or a misunderstanding of the intended benefits the project could have on the community.

In Nigeria, this situation is already apparent in the Niger Delta, where the exclusion and the marginalization of the local communities from the wealth and benefits from the resources extracted from their lands and waters have caused the rise of militancy and proliferation of small arms and light weapons. The situation is similar in Kazakhstan, Mexico, and Iraq where the exclusion of the people from the benefits of resource wealth fosters disenfranchisement conflicts. In Sierra Leone, for example, issues relating to diamond extraction have led to one of the most violent armed conflicts in communities that claimed many lives. One key question asked by Sierra Leone citizens relates to the utilization, management, and translation of the benefits of their resource wealth for their development. The other relates to the economic exclusion from enjoying the benefits derived from the country’s mining industry due to corruption and poor management. The situation underlies the impact of weak resource governance.

Resource Governance in Nigeria and Norway: Comparative Assessment

The case of Nigeria and Norway—which are two countries with enormous petroleum resource wealth—buttresses the resource curse and, secondly, escaping eco-violence threats. While Norway has been able to avoid both the resource curse and eco-violence threats by turning the resource wealth into blessing, Nigeria, on the other hand, has suffered from these twin problems. The Norwegian GDP per capita is one of the highest in the world and thirty five times higher than that of Nigeria. A comparative assessment of both countries’
economic performance reveals fundamental disparities. In terms of Human Development Index (HDI), Norway ranks first globally, while Nigeria ranks 157.45 Natural resources from petroleum hydrocarbons constitute the main stay of both countries’ economy. In terms of institutional settings in the oil sector, both countries have national companies representing state interests in oil and gas activities—Equinor for Norway and NNPC for Nigeria. Both countries also generate significant oil revenues.

Although there are fundamental historical differences in the political and socio-economic realities of these countries, they share a common ground in their production capacity and the role of natural resources in driving their economy. As afore stated, the colonial past and the post-colonial character of the Nigerian state have preserved the peripheral structure of the country’s petroleum resources and the distribution of its oil wealth. As Cyril Obi posits, “Nigeria’s resource curse is a manifestation of the class relations, contradictions and conflicts rooted in the subordination of its oil wealth and resources to transnational processes and elites embedded in globalized capitalist relations.”46 Whereas the Norwegian economy has benefitted from its Continental Shelf’s oil wealth to earn the top place in the Human Development Index 2019 rankings (0.954), top one percent in World Development Indicators; and a high-income and a high-developed country both in GDP and economy.47

In addition, both countries have a well-established SWF, but not in equal measure. As of 2018, Nigeria’s SWF ranked 62 while the Norwegian variant ranked first. As the article earlier noted, Norway currently has the highest SWF globally. Norway, through the management of its SWF, has demonstrated its ability to ensure responsible and long-term management of its oil and gas revenues for the benefit of its current and future generations.48 The SWF, which is the accumulated savings of a financial instrument owned by the state or the foreign exchange reserve earnings by a state for specific purposes without explicit liabilities, has, since its investment, become one of the world’s largest funds.49 The Norges Bank Investment Management estimates the current value of this fund to be approximately 10,000 billion Kroner ($1.09 trillion), spreading across 70 percent in global equities and the rest in real estate and fixed asset.50

In contrast, Nigeria has a different experience with managing the benefits accruing from its petroleum oil endowments. Its post-colonial
antecedents have played a huge part in the allocation and appropriation of its resource wealth. Richard Joseph attributes this to the prebendal politics prevalent in the Nigerian polity, where elected officials share government revenues and use them to benefit their cronies or ethnic groups. Nigeria currently has an HDI ranking index of 0.534 (which is 158 out of 189 countries) and classified as a low-income and a developing economy by the World Bank despite producing more than 10 million gallons of crude oil per year and a huge natural gas reserve. Nigeria’s high dependency on crude oil ostensibly shows through its presently predominantly mono-cultural economy despite the abundance of other natural and mineral resources such as coal, uranium and copper; thereby increasing the country’s vulnerability to international crude price volatility.

The pervasive manifestation of the resource curse accounts for the high levels of institutional corruption, poor management of resources, and weak resource governance mechanisms. This explains why oil-rich nations experience poor development outcomes compared to their counterparts. Poor resource governance is also a critical factor that has blighted development outcomes. The same period in 2019 when Norway’s SWF grew to the trillion-dollar mark, Nigeria made deductions from its Excess Crude Oil accounts to the tune of $325 million. However, the economic benefits of this wealth are not translating to meaningful economic growth, despite Nigeria having an SWF of 1.6 billion dollars. Approximately 41 percent of Nigerians (about 83 million of Nigeria’s over 200 million population) live in poverty or less than 1 dollar a day. Accordingly, several factors explain Nigeria’s resource curse. These include dependence on oil rents from MNCs, poor resource governance arrangements, prebendal allocation and appropriation of resource wealth, primitive accumulation of natural resources, pervasive commoditization and subordination of oil production by transnational and political elites, export dependency, post-colonial character of the Nigerian state and institutional corruption in the petroleum sector.

Many factors account for Norway’s success in its resource governance and management. As Section 1 above suggests, Norway’s petroleum sector management highlights sound regulatory framework, institutional quality, and governance as key principles influencing policy implementation and allocation of economic value from its natural resources. These principles also account for Norway’s market competitiveness and resilience, investor confidence, national
development, and inflow of foreign direct investments. Another critical factor is the application of the Nordic model in the governance of their oil resources. The model consists of three prongs: A dynamic process of creative destruction and innovation, bridging wage differentials and high spending on public welfare. Arguably, this has accounted for high quality institutions focused on stabilizing oil-related political and social issues and facilitating wealth distribution. In addition, Norway adopts a democratic framework for its oil industry that unites relevant petroleum actors under a broad co-operation program and encourages organizational development together with embedding industrial influence and technical development across board.

Norway is also implementing the Paris Agreement, United Nations Sustainable Development Goals and aims to reduce its emissions by 40 percent by 2030 in line with the European Union (EU) climate commitments. Although its membership of the EU influences its regulatory framework, its country-level resource governance trajectory shows a serious commitment to environmental, economic, and sustainable development outcomes. While there are other countries such as the United Arab Emirates and Saudi Arabia, converting their oil wealth into meaningful economic outcomes, Norway is a classic case of how the effective management of resources can prevent disenfranchised conflicts while also ensuring the utilization of the resource endowment for collective good.

Countries like Nigeria can take a cue from Norway to incorporate a good framework that ensures optimal resource management and prevent eco-violence. Options may include the application of a Nordic model to the Nigeria’s resource governance regime. This is a common theme in the literature. This does not necessarily attach a status of miracle to the Norwegian model. Its implementation is not an incontrovertible and impeccable guarantee for optimal resource management. However, a similar model may foster an oil industry that seeks the public good beyond the exclusive interests of a selective few. This way, resource rent benefits are distributed and utilized for societal development and improving human capacity. There is also the prospect to diversify the economy away from oil to focus on the development of other sectors to prevent the pervasive manifestation of the Dutch Disease. Furthermore, managing the triggers and drivers of environmental violence and conflicts can come by way of better resource exploitation and utilization. This would require the
involvement of stakeholders in various local communities within and around the oil site in the decision-making process over the resources on their lands and increasing sensitization on climate adaptation strategies.

These are lessons for countries experiencing the resource curse, which serve useful policy purposes for averting the catastrophic effects of climate change. It follows that the optimal management of resources and resource rents could incentivize development and help communities to better adapt to climate change threats. There is also the positive outcome of de-escalating tensions that trigger eco-violence.

Concluding Remarks and Policy Insights

This article set out to analyze the nexus between resource governance, climate change, and security in Nigeria and Norway. The analysis, based on the theories of resource curse and eco-violence, establishes that poor resource governance exacerbate climate security concerns. It demonstrates that the prevalence of the resource curse in countries incentivizes eco-violence and induces disenfranchisement conflicts. Additionally, it shows that an effective resource governance regime engenders better resource wealth distribution and development outcomes.

There are options for countries that suffer the resource curse to undo their current situation. First, there is a need for more action towards promoting the institutionalization of effective resource governance regime in the petroleum and natural resources industry as a panacea and strategy towards climate change response and de-escalation of communal and local tensions. Second, diversification of the economy would also open avenues that reduce dependence on resource rents and engender a more equitable national development of other sectors. This addresses issues regarding sustainable development, which ensures the extractive industries consider the needs of their immediate environment, citizens, and future generations. Third, there is a likelihood that climate change would cause a new ecological threat that affects oil demand, and consequently affect the exports and GDP of countries blighted by the resource curse. Increasing the size of the investment of the SWFs, as in the case of Norway, may help cushion the effects in the rainy day.
As the dwindling of oil price in recent times has shown, especially amidst the recent coronavirus pandemic, resource endowment offers no bail out option for resource-rich countries and their citizens if they have not effectively managed their resources over the years. It is however interesting to mention that resource rich countries with good resource governance mechanisms have equally been affected by the crash in oil prices due to the fall in global demand. Arguably, the effects in these countries compared to those with poor resource governance arrangements differ. Embracing a more adaptable Nordic Model, despite its imperfections, in the Nigerian context could potentially drive a better regulatory framework for the management and utilization of resource wealth for public good. It could also reduce the chances of eco-violence and climate security.

Endnotes

1 Hirdan Katarina De Medeiros costa, Edmilson Moutinho, and Dos Santos, “Institutional Analysis and the ‘Resource Curse’ in Developing Countries,” Energy Policy 60 (December 2013): 788, http://dx.doi.org/10.1016/j.enpol.2013.08.060.
2 Claudia Pahl-Wostl, “A Conceptual Framework for Analysing Adaptive Capacity and Multi-level Learning Processes in Resource Governance Regimes,” Global Environmental Change 19, no. 3 (2009): 354. doi:10.1016/j.gloenvcha.2009.06.001.
3 Jessica Campese, Barbara Nakangu, Allison Silverman, and Jenny Springer, “Natural Resource Governance Framework Assessment Guide: Learning for Improved Natural Resource Governance,” IUCN Working Paper Series 2016.12, IUCN, Gland, Switzerland, December 2016. https://www.iucn.org/sites/dev/files/content/documents/the_nrgf_assessment_guide_working_paper.pdf.
4 Michael Lockwood, Julie Davidson, Allan Curtis, Elaine Stratford, and Rod Griffith, “Governance Principles for Natural Resource Management,” Society and Natural Resources 23, no. 10 (2010): 986, https://doi.org/10.1080/08941920802178214.
5 Campese, Nakangu, Silverman, and Springer, “Natural Resource Governance Framework Assessment Guide,” 2.
6 “2017 Resource Governance Index,” Natural Resource Governance Institute, last modified July 13, 2017 https://resourcégovernance.org/sites/default/files/documents/2017-resource-governance-index.pdf.
7 “The Government’s Revenues,” Norsk Petroleum, last modified October 7, 2020, https://www.norskpetroleum.no/en/economy/governments-revenues/.
8 “Nigeria: Overview,” Extractive Industries Transparency Initiative, last modified June 10, 2020, https://eiti.org/en/implementing_country/32.
9 Petroleum Act of 1969, CAP P. 10 LFN (2004).
10 Ukoha Ukiwo, “Governance Regimes of Oil in Nigeria: Issues and Challenges,” Centre for Research on Peace and Development (CRPD) Working Paper Series 2018.12, CRPD, Leuven, Belgium, December 2018. https://soc.kuleuven.be/crpd/files/working-papers/crpd-no-69-ukiwo-full.pdf.
11 Peter Olaoye Olalere, “When Stepping Back Is a Panacea to Moving Forward: The Legislative Story of the Nigerian Petroleum Industry Bill,” Mondaq, last modified November 27, 2017, https://www.mondaq.com/nigeria/oil-gas-electricity/649902/when-stepping-back-is-a-panacea-to-moving-forward-the-legislative-story-of-the-nigerian-petroleum-industry-bill.
12 James Ferguson, *Global Shadows: Africa in the Neoliberal World Order* (North Carolina: Duke University Press, 2006), 13.

13 Cyril Obi, "Oil as the 'Curse' of Conflict in Africa: Peering through the Smoke and Mirrors," *Review of African Political Economy* 37, no. 126 (December 2010): 483, https://doi.org/10.1080/03056244.2010.530947.

14 Obi, "Oil as the 'Curse,'" 485.

15 Keith Griffin and John Gurley, “Radical Analyses of Imperialism, the Third World, and the Transition to Socialism: A Survey Article,” *Journal of Economic Literature* 23, no. 3 (September 1985): 1089, https://www.jstor.org/stable/2725460.

16 Jesse Salah Ovadia, “Local Content and Natural Resource Governance: The Cases of Angola and Nigeria,” *The Extractive Industries and Society* 1, no. 2 (November 2014): 137, https://doi.org/10.1016/j.exis.2014.08.002.

17 Onah R. Ogri, "A Review of the Nigerian Petroleum Industry and the Associated Environmental Problems," *Environmentalist* 21, no. 1 (March 2001): 11, https://doi.org/10.1023/A:1010633903226.

18 O Saheed Ismail and G Ezaina Umukoro, “Global Impact of Gas Flaring,” *Energy and Power Engineering* 4, no. 4 (July 2012): 290, https://doi.org/10.4236/epe.2012.44039.

19 Odigie Egon and Koso I Idigbe, “Injection of Natural Gas into Reservoirs: A Feasible Solution to Gas Flaring in Nigeria,” *Academic Research International* 4, no. 5 (September 2013): 90, http://www.savap.org.pk/journals/ARInt./Vol.4(5)/2013(4-5-12).pdf.

20 “2018 Environmental Performance Index,” Yale University Yale Center for Environmental Law & Policy, last modified October 12, 2020, https://epi.yale.edu/downloads/epi2018policymakerssummaryv01.pdf.

21 Olabode A. Oyewunmi and Adebukola E Oyewunmi, “Corporate Governance and Resource Management in Nigeria: A Paradigm Shift,” *Problems and Perspectives in Management* 16, no. 1 (March 2018): 259, https://doi.org/10.21511/ppm.16(1).2018.25.

22 Barbara Doric and Vlado Dimovski, “Managing Petroleum Sector Performance – a Sustainable Administrative Design,” *Economic Research-Ekonomiska Istraživanja* 31, no. 1 (January 2018): 119, https://doi.org/10.1080/1331677X.2017.1421995.

23 Mark C Thurber, David R Hults, and Patrick R P Heller, “Exporting the ‘Norwegian Model.’" The Effect of Administrative Design on Oil Sector Performance," *Energy Policy* 39, no. 9 (September 2011): 5366, https://doi.org/10.1016/j.enpol.2011.05.027.

24 Diderik Lund, “State Participation and Taxation in Norwegian Petroleum: Lessons for Others?,” *Energy Strategy Reviews* 3 (September 2014): 49, https://doi.org/10.1016/j.esr.2014.02.001.

25 Steinar Holden, “Avoiding the Resource Curse: The Case of Norway,” *Energy Policy* 63 (December 2013): 870, https://doi.org/10.1016/j.enpol.2013.09.010.

26 Magdalena Szimgiera, “Leading Global Sovereign Wealth Funds, by Managed Assets,” Statistica, 2019, https://www.statista.com/statistics/276617/sovereign-wealth-funds-worldwide-based-on-assets-under-management/.

27 Yale, “2018 Environmental Performance Index.”

28 Thomas F. Homer-Dixon, *Environment, Scarcity, and Violence* (New Jersey: Princeton University Press, 1999), 47.

29 Indra de Soysa, “Ecoviolence: Shrinking Pie, or Honey Pot?,” *Global Environmental Politics* 2, no. 4 (November 2002): 1, https://doi.org/10.1162/1526380202302080605.

30 Fournier Jean-Benoit, “In the Wilderness with a Honey Pot and a Shrinking Pie: An Overview of the Ecoviolence Debate,” *Undecurrent* 5, no. 1 (2008): 1, https://web.a.ebscohost.com/abstract?direct=true&profile=ehost&scope=site&aut htype=crawler&jrnid=17120934&AN=36363918&h=CLMpGzfSpZxsEjhrWTja7SWJ 6vNEqFV1KzrMlqU0jEqYeYMwiamegmPwvkVPrrt3xbdHuPzQF%2FPeIgCQ Gg%D%5D&crl=f&resultNs=AdminWebAuth&resultLocal=E.

31 Agha Bayramov, “Review: Dubious Nexus between Natural Resources and Conflict," *Journal of Eurasian Studies* 9, no. 1 (January 2018):76, https://doi.org/10.10539/j.euras.2017.12.006; Jonathan M. Harris, “Ecological Macroeconomics: Consumption, Investment, and Climate Change,” Global Development and Environment Institute Working Paper Series 2008.02,
32 “What is Human Security” United Nations Trust Fund for Human Security, last modified 2 September 2017, https://www.un.org/humansecurity/what-is-human-security/.

33 Commission on Human Security, Human Security Now (New York, USA: Commission on Human Security, 2003), https://reliefweb.int/sites/reliefweb.int/files/resources/91BAEEDBA50C6907C1256D9006A9353-chs-security-may03.pdf.

34 Mary Kaldor, “Human Security in Complex Operations,” Prism 2, no. 2 (March 2011): 3.

35 Paolo Gala, Jhean Camargo, and Guilherme Magacho Fundação Getulio Vargas, “The Resource Curse Reloaded: Revisiting the Dutch Disease with Economic Complexity Analysis,” Real-World Economics Review 81 (2017): 118, https://rwer.wordpress.com/comments/rwer-issue-no-81/.

36 Ole Andreas Engen and Preben H. Lindoe, “The Nordic Model of Offshore Oil Regulation: Managing Crises through a Proactive Regulator,” in Policy Shock: Recalibrating Risk and Regulation after Oil Spills, Nuclear Accidents and Financial Crises, ed. Edward J. Balleisen, Lori S. Bennear, Kimberly D. Krawiec, and Jonathan B. Wiener (Cambridge University Press, 2017), 181, https://doi.org/10.1017/978-1-316-49263-5.008.

40 “GDP per capita, PPP (current international $)” The World Bank, accessed 15 April 2020, https://data.worldbank.org/indicator/NY.GDP.PCAP.PP.CD.

44 UNDP, Human Development Report 2019 (New York, USA: United Nations Development Programme, 2019), http://hdr.undp.org/sites/default/files/hdr2019.pdf.

46 Cyril I. Obi, “Oil Extraction, Dispossession, Resistance, and Conflict in Nigeria’s Oil-Rich Niger Delta,” Canadian Journal of Development Studies 30, no. 1-2 (2010): 219, https://doi.org/10.1080/02255189.2010.6669289.

47 UNDP, “Human Development Report 2019.”

48 Gurneeta Vashdeva, Lilac Nachum, and Gui Deng Say, “A Signaling Theory of Institutional Activism: How Norway’s Sovereign Wealth Fund Investments Affect Firms’ Foreign Acquisitions,” Academy of Management Journal 61, no. 4 (August 2018): 1583, https://doi.org/10.5465/amj.2015.1141.

49 Geoffrey Wood, Noel O’Sullivan, Marc Goergen, and Marijana Baric, “The Norwegian Government Pension Fund Global and the Implications of Its Activities for Stakeholders,” in The Oxford Handbook of Sovereign Wealth Funds, ed. Douglas Cumming, Geoffrey Wood, Igor Filatotchev, and Juliane Reinecke (Oxford
University Press, 2017), https://doi.org/10.1093/OXFORDHB/9780198754800.013.14.
50 "About the Fund," Norges Bank Investment Management, accessed 12 April, 2020, https://www.nbim.no/.
51 Richard A. Joseph, Democracy and Prebendal Politics in Nigeria (Cambridge University Press, 2014), 147.
52 Khalid Alsweilem and Malan Rietveld, Sovereign Wealth Funds in Resource Economies: Institutional and Fiscal Foundations (Columbia University Press, 2017), 40.
53 Obi, “Oil Extraction, Dispossession, Resistance, and Conflict in Nigeria’s Oil-Rich Niger Delta,” 224.
54 OSSAP-SDGs, Nigeria: Integration of the SDGs into National Development Planning: A Second Voluntary National Review (The Office of the Senior Special Assistant to the President on SDGs, June 2020), https://sustainabledevelopment.un.org/content/documents/26308VNR_2020_Nigeria_Report.pdf.
55 Elise Marie McCourt, “Governance in Norwegian Petroleum-Related Assistance” (master’s thesis, University of Oslo, 2010), http://www.biofund.org.mz/wp-content/uploads/2018/12/1545380919-Governance%20in%20Norwegian%20Petroleum-Related%20Assistance%20Moz_EliseMcCourt.pdf.
56 Roberto Iacono, “The Nordic Model of Economic Development and Welfare: Recent Developments and Future Prospects,” Intereconomics 53 (August 2018): 185, https://doi.org/10.1007/s10272-018-0747-2.
57 Ole Andreas Engen, Erland Osland Simensen and Taran Thune, “The Evolving Sectoral Innovation System for Upstream Oil and Gas in Norway,” in Petroleum Industry Transformations: Lessons from Norway and Beyond, ed. Taran Thune, Ole Andreas Engen and Olav Wicken (Routledge, 2019), 23.
58 Niklas Höhne, Takeshi Kuramochi, Carsten Warnecke, Frauke Röser, Hanna Fekete, Markus Hagemann, Thomas Day, Ritika Tewari, Marie Kurdziel, Sebastian Sterl, and Sofia Gonzales, “The Paris Agreement: Resolving the Inconsistency between Global Goals and National Contributions,” Climate Policy 17, no. 1 (2017): 16, https://doi.org/10.1080/14693062.2016.1218320.