Frames of Environmental Justice: Government Policies on Oil Drilling and Gas Exploration

- with case studies of the US and Nigeria

A Thesis
presented to
The Faculty of Social and Behavioural Sciences
Erasmus University Rotterdam

In Partial Fulfilment
of the Requirements for the Degree of
Master of Science

Name: Tanja Tüffers
Student number: 579411
Master of Science: International Public Management & Public Policy
Supervisor: Professor Darren McCauley
2nd reader: Professor Asya Zhelyazkova
Date: 25.06.2021
Word count: 19,994

ERASMUS UNIVERSITEIT ROTTERDAM

Summary

This research paper revolves around indigenous communities facing injustices with regards to oil and gas exploration activities. These communities, including their historically and culturally-significant ways of living with nature, are burdened with injustices and displacements due to governments lack of recognition of their location-specific ways of life. This study focuses on the environmental justice frames by governments within policy documents. Thereby, it tries to explain the linkages between environmental justice, local communities and the oil and gas sector while focussing on key paragraphs in those policies. With the help of theories of framing, capabilities and recognition, as well as concepts laid out in the literature review, the policies were analysed using a coding scheme, specified for this study. The results of this research shows the significant position of recognition with regards to local communities capabilities, rights and cooperation. This analysis has demonstrated essential steps that governments need to take in order to ensure recognition and basic community capabilities for environmentally-just surroundings. This study has also shown that frames are crucial in understanding governments articulation of goals and objectives but it has also become clear that these frames are globalising and changing, along with public opinion. Therefore there is a need for more monitoring and strategic management within the policy-making process in order to achieve environmental and climate justice while at the same time expanding on the role of the state to satisfy their citizens fundamental rights and capabilities and recognising all different kinds of cultural developments and customs.

Key words: environmental justice, local communities, oil and gas, government, policies, recognition, capabilities, framing, justice

Preface and Thanks

Writing this paper has not been easy in Covid-times. For instance, not being able to go to university, interact with my fellow students or meet in person with my supervisor. Writing this paper fully at home was hence challenging. But I am grateful for the people who put up with me in the last months, listened to me, helped me and supported me in my writing stages. I therefore thank my friends and my family who encouraged me to write this paper, kept me motivated and offered me room to unwind after a day of writing. I also thank my supervisor Darren McCauley for his constructive feedback and my fellow students from my supervisor group of IMP with whom I exchanged opinions, ideas and worries. I am very curious about the time that is ahead of me, finding a full-time job and entering real-life as a MSc graduate.

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List of Abbreviations

Damaging Hegemonic Environmental Discourses	DHED
Environmental Justice	EJ
Environmental Justice Indicator	EJI
Environmental Protection Agency	EPA
Groundedness	Gr
National Environmental Standards and Regulations Enforcement Agency	NESREA
United Nations	UN
United States	US
Non-Governmental Organisation	NGO
United States Framework Convention on Climate Change	UNFCCC

1 Introduction

"We have to paint a more compelling picture of the good life in an environmentally and socially just society and develop policies that will bring this vision about"
(Bell, 2014,p.232; Little, 2015,p.419).

1.1 Background and Problem Statement

Environmental justice (EJ) has been on the research agenda for about three decades and is gaining increasing global relevance. Governments do not address issues of possible environmental injustice in their policies. Besides, policies and newly introduced regulations have barely made a positive difference in this regard (Bell, 2011). The conceptualisation of environmental justice is often too simplistic and without theoretical basis due to either broad statistical research or only small-scale local participatory research. Particularly regarding the energy sector, these irregularities become apparent. Oil and Gas extraction has been used to win energy for several decades since the 70s. Especially, when oil was found in the wetlands in Nigeria and Alaska, US, both governments were faithful for long-term economic stability and rising wealth of their economy. Moreover, depending on government structure and priorities, specific policies become weaker, enabling environmentally harmful activities. Next to dealing with left-over gas, the communities at site suffered most and only gained around 10% from oil and gas exploration (UNCTAD, 2006). Consequently, governments have often failed to properly acknowledge community members' welfare and cultural way of life in their oil and gas-based energy policies, thereby leading to environmental injustices.

Environmental Justice is inherently linked to climate change as a transnational and global issue, and thus connected to justice when considering the burdens that some people have to take over others. Marginalised, and often indigenous, communities, originating from historical colonialism or exploitation, are often lacking in resources to tackle consequences from climate change while reparations from richer countries are a way to rectify injustices. However, recognising and addressing these issues on a national and global scale is limited. The communities exist in both Nigeria and the US. These communities are residing in areas close to oil fields where drilling and exploration practices are taking place and are thus affected by environmental injustices. These activities interfere with their way of life and interdependence with nature. Moreover, both Alaska and the Niger Delta display interesting areas of research linked to national policies. Furthermore, the oil and gas sector poses both opportunities and threats to the people at site, which is why it is stimulating to investigate thoroughly what the policies focus on and how they enable peace and rights for all citizens. Next to the to focus on the energy sector, environmental justice gained substance with the increasing debates about how humans treat nature and how we can make sure to limit global warming and climate change. In this regard, indigenous communities also display insights how they interact with nature. In two very

different countries, the same problem inherently poses the same questions about justice and in this research. Therefore, I will research this topic with the help of two case studies to exemplify my findings and arguments and see in which way these cases might differ or concur, and how the findings can be applicable on a broader scale.

1.2 Objective of the study

In this research, I would like to investigate the causes and implications of environmental (in)justice by focusing on the context of injustice in policies using two case studies in order to understand the background of how injustice has appeared and how it affects certain indigenous communities. By looking into significant frames in those policies, I will also utilise the theoretical frameworks of capabilities and recognition, including political, economic, and social features. The theories will help in explicitly looking into the impacts next to structural, distributional, and procedural causes. *Distributional* refers to contextual social and economic factors linked to socio-spatial inequality. In contrast, *procedural* relates to decision-making processes, which might be subject to unequal power politics. *Structural* refers to government structures of states which influence the (in)justice trajectory. Moreover, framing environmental justice, especially on the government's side, can have impactful effects on local communities, regardless of their marginalisation or varying cultural backgrounds. *Recognition* and *Capabilities* take these dimensions one step further and delve deeper into environmental justice's ethical and normative factors.

The debate about environmental justice has evolved based on unfair exposure to pollution and race in the United States in the 1980s and has subsequently spread around all continents. Countries, besides the US, have experienced similar issues and are experiencing those today. Moreover, the focus has been increasingly set on distributional inequalities linked to racism. I will explore the context-specific, recognitional side of environmental justice that has not been researched much in previously.

Many factors play a role in investigating the impacts of environmental injustice; therefore, it is crucial to delve deeper into the country's cultural, social, economic, and political context at stake and its effects of unequal exposure of environmental pollution from oil and gas exploration. Furthermore, I will look into government approaches that make it possible to solve wicked issues, achieve environmental justice and sustainable transitions for the future.

Overall, I want to explore policies and the contextual changes and differences among the citizens, thus affecting local community's life capacities as well as their political stance towards governments decisions. It will become clearer throughout the paper that the importance of difference, as well as lack of awareness for change are vital in understanding why policies are framed in a way suggesting links to environmental injustices for certain groups in a country, often indigenous groups.

1.3   Research Question and Sub-questions

The research question will be: *"To what extent do oil and gas exploration policies impact local communities regarding environmental justice and how are they framed by governments?"*

In order to answer the research questions, there are several sub-questions which help to answer the research question throughout the paper.

Sub-questions:

- ❏ *What is the capability theory and how does it relate to environmental justice?*
- ❏ *What is the recognition theory and how does it relate to environmental justice?*
- ❏ *In what way are climate change and environmental protection connected to environmental justice?*
- ❏ *In what way are oil/gas explorations connected to environmental justice?*
- ❏ *How do the theories relate to oil and gas energy systems and environmental protection?*

1.4   Societal relevance

The issue of environmental justice is not just in the selected countries Nigeria and the US. Instead, it is a worldwide and global concern. Besides being a global issue that is constantly changing, it is also a movement connected to politics, economics, and social equality. Because these dimensions are constantly in flux, it is essential that everyone knows about the movement and how much it can impact people's everyday lives. By writing this paper, I want to encourage marginalized communities, city-dwellers and villagers to engage in environmental justice, the power it has to change the world negatively and positively. By participating and voicing environmental justice issues in politics, universities, schools, and on the streets, it will be possible to make connections beyond the ordinary experiences that many people are facing worldwide. It will become easier to find solutions suitable for everyone to make a transition to a just society in which the environment is a crucial part, worth protecting and respecting.

1.5   Scientific relevance

Literature about environmental justice has mainly circulated distributional and structural injustices, particularly investigating environmental racism. However, policies change, issues change, and the way they should be analysed is also changing and globalising. Therefore, choosing the recognition and capabilities approach in this paper will be the innovative feature of this paper. Research within these two areas is somewhat limited, and only a handful of academics have actively used those approaches as a theoretical base for their research. By taking out this research, I will provide a more thorough base for these two theories, which will be helpful for future scientific research in this area. In this way, research by academics such as Schlosberg, Walker, Fraser, Sen and Nussbaum will be

supplemented with fruitful material that will put these rather ethical and normative theories of recognition and capabilities on to the same degree of importance as the previously-mentioned dimensions of environmental justice. Besides, instead of wide-spread statistical research, the focus on qualitative methods and national policies is innovative. Consequently, environmental justice's globalising development is also reflected in literature and can become a basis for further research beyond environmental racism and distributional injustices. By applying these theories to specific cases, it will be possible to expand the theories to upcoming injustices in the world whereby the widened scope of issues related to environmental justice becomes manifested throughout society and academia.

1.6   Thesis Guide

I will start this thesis with a broad background on the issue and the concept of environmental justice. Then, in the literature review, previous research on this topic will be explored. The paper will follow with a theoretical framework, the methodology section that will include the case studies' description. I will then analyse the cases using the theory at hand. The results, discussion, and conclusion follow the analysis.

2 Literature Review

2.1 Definitions

Before reviewing existing literature, basic terms about the concept of environmental justice will be delineated. The term *environment* is defined as inherently naturalistic, wild, and detached from everyday life (Schlosberg& Collins, 2014). Environmentalism and the environmental movement thus aimed to protect the environment and its nonhuman inhabitants. Davies (2020) defined *environmentalism* as "a general term to refer to concern for the environment and particularly actions or advocacy to limit negative human impacts on the environment" (p.259). With its emergence, the environment became associated with the realm of humans and nonhumans in their everyday lives.

Similarly, the term justice with its diverse variables in mind, can be defined as virtue and equality towards another individual. Moreover, it is understood as an element of morality, *what we owe to each other* (Miller, 2017). It is applied to ethics, laws, and politics and ranges over different types of justice, including distributive, procedural or comparative justice (ibid.). Its scope varies from nonhumans to individuals and institutions. Therefore, justice is accepted and applicable to a wide range of socio-political areas. Subsequently, "justice is at the centre of environmentalism, but there are two ubiquitous attitudes toward nature that cannot perspicuously be taken up in the language of justice. The first sees nature as "radically other"; the second sees humans as "part of nature." Both of these attitudes are ancient and remain influential" (Pezzullo, 2007,p.93).

2.2 Environmental justice trajectory

EJ can be defined as "the principle that all people and communities are entitled to equal protection of environmental and public health laws" (Kowers, 2013,p.7). The concept appeared as a grass-roots movement in the US in the 1980s as a response to a landfill construction in Warren County, North Carolina. Thousands of litres of toxic chemicals (PCBs) were found in the soil. This landfill was situated in an area where the majority was low-income and of African-American descent. Therefore, the origins of environmental injustice in the 80s US were mainly based on race (Holifield, 2015). Due to the privately-owned landfill, inhabitants of this area had no say in the siting and were unwillingly exposed to polluting chemicals. The movement emerged from associations of civil rights and church members, and were followed by many other protests of local communities (Banzhaf, Ma& Timmins, 2019; Sapat, Vos& Thai, 2002). This movement led to alliances with national environmental associations fighting for environmental justice, regardless of race, culture, or income.

The notion of environmental racism subsequently appeared, linking discriminations and environmental injustices to people with different backgrounds who are socially underrepresented. Theories of race, such as the theory of racial formation by Omi and Winant (1994), became increasingly

prominent (Holifield, Porter& Walker, 2009). Laura Pulido argued that the "poor and marginalized of the world who often bear the brunt of pollution and resource degradation—whether a toxic dump, a lack of arable land, or global climate change—simply because they are more vulnerable and lack alternatives" (Dobson, 1998,p.20). Bryant also worked extensively on environmental racism concerning low-income and spatial distribution of hazardous waste sites in the 1990s (Heinz, 2005). Furthermore, Kurtz used the critical race theory by Goldberg to investigate the role of the state in the discourse of environmental racism. She thereby proved that the state had a central position in decision-making of policies for mitigating racial inequality (Kurtz, 2009).

The environmental alliances and increased awareness of discriminatory behaviour in decision-making processes were two factors leading to the First National People of Colour Environmental Leadership Summit in 1991. In this summit, environmental hazards and race were combinedly debated as well as public health and social empowerment (Sambo, 2012). "The recommendations and policy prescriptions generated at this conference served as the basis for [EPA's] efforts to address environmental inequities" (Sapat et al., 2002,p.148). The civil environmental movement was initially framed as a movement against environmental racism but changed into environmental justice (Heinz, 2005). Consequently, in the 90s, theories and policies were increasingly linked to this new concept.

2.2.1 Distributional Dimension

The social justice theory by Harvey (1973; 2009) was conjugated with EJ. Harvey was Marxist-inspired and researched socially unequal *distribution* patterns of social processes linked to urban areas by constructing a "normative theory of spatial or territorial allocation based on social justice" (Holifield, 2015; Harvey, 2009,p.97). He took an economist approach and argued that "in the long run it will be most beneficial if efficiency and distribution are explored jointly" (ibid.). Social justice is inherently connected to efficiency and relates to the "particular application of just principles to conflicts which arise out of the necessity for social cooperation in seeking individual advancement" (ibid.). These principles include the just "division of benefits and allocation of burdens" (ibid.) and institutional arrangements for production and distribution. Furthermore, Dobson (1998) connected scarcity of understanding and scarcity of sufficient resources to distribution within the notion of EJ and sustainable development by arguing that sustainable development had henceforth "become a vehicle for a wider movement for greater social justice" (p.14).

2.2.2 Structural Dimension

Young (1990) researched *structural* conditions and argued that distributional injustice needs to be evaluated more thoroughly through structural eyes (Holifield, 2015). Furthermore, conditions leading to disproportionate impacts and undermining of indigenous communities were taken on by Ranco and Suagee (2007). They claimed that the state's legal dynamics determined this systemic

separatism, and referred to it as 'internal colonialism' (Holifield et al., 2009). Cases showing links to environmental as well as climate justice include, e.g. the environmental burden on communities in the Arctic where "indigenous populations disproportionately suffer the environmental consequences of global warming, generated largely by emissions of greenhouse gases" (ibid., p.595).

2.2.3 Procedural Dimension

Moving on to the *procedural* dimension of environmental justice, Bell (2014) incorporates citizen actions into decision-making processes of environmental justice to engage all levels of government cross-nationally. By developing the Environmental justice Indicator (EJI) framework, she made it possible to measure EJ. In this way, the framework can be used to critically challenge the so-called "Damaging Hegemonic Environmental Discourses (DHED)," a theoretical perspective justifying and reinforcing political systems such as capitalism to damage environmental resources. She argues that we should eliminate risks of EJ by explaining market dynamics, cultural backgrounds, and discrimination within a nation by permitting more citizen participation.

2.2.4 Capabilities Dimension

Sen and Nussbaum introduced *capabilities* as an alternative, normative notion within justice. The capabilities approach focuses on functionalities and "the actual living that people manage to achieve" (Brighouse& Robeyns, 2010,p.2). This theory bases itself on the needs of people in diverse environments (ibid.,p.3). This approach is increasingly used by governments, in contemporary political philosophy and normative economics. Nonetheless, Sen and Nussbaum received criticism on the difficulty of measuring justice. The authors argue the following: "[…] a capability metric is superior to any subjective metric because only an objective metric, such as capability, can satisfy the demand for a public criterion of justice for the basic structure of society. [It] is superior to a resource metric because it focuses on ends rather than means, […] is properly sensitive to individual variations in functioning that have democratic import, and is well-suited to guide the just delivery of public service" (ibid.,p.7).

2.2.5 Recognition Dimension

Another normative dimension can be attributed to Nancy Fraser (2011), who investigated the notion of *recognition* within the justice discourse. She researched social exclusion and injustice in post-socialist societies, and claimed that exclusion is not just about inequality and poverty but about denial of recognition and respect. Her view of justice is "three-dimensional […] encompassing economic, cultural and political considerations, it treats redistribution, recognition, and representation as three analytically distinct facets of justice […] although they are practically intertwined" (ibid.,p.455). Therefore, injustice is considered institutional subordination, preventing some people from full participatory parity (Holifield, 2015; Fraser, 2011).

2.3 Recent Developments of Environmental Justice

Since the emergence of the concept of environmental justice, much has changed. Racial injustice is not just in the US but appears globally (Sugla, 2020). The Environmental Protection Agency (EPA) recently introduced areas in which environmental justice has become a prominent issue. These include areas where air - and water quality lead to overburdened communities. However, environmental injustices spread much further. According to the Environmental Justice Atlas, referred to by Martinez-Alier et al. (2016), other correlated areas include land justice or food sovereignty. Generally speaking, overarching concepts are climate justice, energy justice, or environmental refugees.

At the beginning of the 2000s, Crutzen came up with the idea that we are now in a new era called the Anthropocene, in which impacts of climate change are caused by human activities (Houston, 2013; Holified, Chakraborty& Walker, 2017; Coventry& Okereke, 2017). Houston argues that the "Anthropocene emphasises a rapidly diminishing window of opportunity to prevent key ecological tipping points associated with unknowable environmental change" (Houston, 2013,p.440). Within this era, climate justice or energy justice are becoming an amplifying topic of debate among international organisations, policymakers, and citizens.

2.3.1 Climate Justice

Climate Justice emerged in the 2000s as a grass-roots and NGO movement subsequently linked to the EJ movement. After the COP6 meeting of the UNFCCC, the first Environmental Justice and Climate Change Initiative was founded in 2001 (Schlosberg& Collins, 2014). Consequently, the Bali Principles were introduced in 2002, containing actions to move away from fossil fuels and finding alternatives to neoliberal ways of addressing climate change. Furthermore, experts claimed that hurricane *Katrina* in 2005 was a turning point, after which environmental justice and climate change consolidated. Linked to this,

> "there is a growing recognition, post-Katrina, that the environment is no longer simply another symptom of existing social injustice, along with poverty, health issues, and substandard housing. Instead, many in the environmental justice community are starting to look at the relationship between environment and justice in a different way—that the environment and climate system are not simply symptoms of existing injustice, but instead the necessary conditions for the achievement of social justice" (Schlosberg& Collins, 2014,p.363).

Similar to EJ, the aforementioned dimensions can also be found in climate justice literature. In a changing climate with extreme weather events, vulnerability of poor citizens rises. Climate justice, therefore, proposes implications for climate governance and specifically dives into the effects of climate change concerning social, ecological, economic, and political aspects. In this regard, climate justice deals with the inequality between and within nations regarding the effects of greenhouse gas emissions

(Holifield et al., 2017). While developing countries have contributed little to these emissions, they have suffered most from negative impacts. The difficulty in assessing these emissions and where they are coming from is that "at a basic level carbon emissions are not problematic – they only become harmful when multiplied to levels" (Holifield et al.; Coventry et al., 2017,p.364). Because of this, ongoing debates assert the polluter-pays principle and the demand that developed countries should pay for their "ecological debt" to developing countries (ibid.). This is the case in the oil-rich Nigeria, which will be explained more thoroughly at a later stage.

Houston (2013) predominantly investigated the Anthropocene and introduced the idea of looking at climate justice through the lenses of anticipatory history, in which cultural narratives between past and future climate events are investigated. The relationship between "time and space [opens] up different possibilities for understanding human-environment relationships" (ibid.,p.442). Within the context of the Anthropocene and green politics, socio-ecological effects of climate events, e.g. after the Katrina Hurricane, are highlighted as the centre of the climate justice discourse, whereby people, places, or animals are all centrally positioned.

Regarding climate governance and underlying inequality between and within countries, the hegemonic position of developed over developing countries leads to disproportionate governance patterns, particularly linked to neoliberal development and capitalism. While developed countries are generating most carbon emissions largely through big corporations set up in the Global South, advocates of climate justice in the Global North, such as NGOs or international organisations, on the other hand, also enable and empower policymakers to introduce new legislation for climate equality. There are, however, also groups who oppose the power of corporations and the hegemonic role of governments. Additionally, referring to the 1992 Earth Summit in Rio, where the UNFCCC was agreed and signed by all parties, it becomes clear that the "UNFCCC is certainly inclusive in principle, but […] has allowed different national positions on what is or would be fair to feature heavily in discussions, and has generated power dynamics that complicate the realisation of climate justice" (Holifield et al.; Coventry et al., 2017,p.368). Furthermore, the local connotations of climate justice has changed. As the effects are visible on global scale, "climate change is an unavoidably global issue, which encourages discussion of global inequalities and established economic and power structures" (Holifield et al., 2017,p.366).

2.3.2 Energy Justice

A vital theme within the EJ discourse, going beyond environmentalism, is the area of energy justice. Just as within climate justice, governments and international organisations have introduced regulations to move away from fossil fuels and towards limiting carbon emissions in the oil and gas-based energy sector. Energy transition can be defined as a "fair and equitable process" (McCauley& Heffron, 2018,p.2) of moving beyond the carbon economy. However, there are obvious injustices and factors of historical embeddedness with regard to structures, policies, and spatiality within the transition

process. Bickerstaff (2017) argued that there are uneven consequences of the production of greenhouse gas emissions directly linking to the concepts of distribution, procedure, and recognition.

Energy transition requires technologies and large-scale sites for infrastructure and waste which can also lead to a "disproportionate impact on low-income energy consumers" (Bickerstaff& Holifield et al., 2017,p.389). Experts argue that these sites are directly or indirectly set in places targeting vulnerable and poor communities. Also within the renewable energy sector, e.g. solar energy, distributional inequalities occur through the extensive land use. According to Mulvaney, "processes and components involved in the production of PV technologies rely on toxic materials and waste flows similar to those in the electronics industries, [...] such technological innovations may disproportionately impact workers and communities distant from sites of consumption [...], rising conflicts with other uses for land, with possible damage to ecological and cultural resources" (ibid., p.391).

Regarding policy procedures, Bickerstaff emphasised participation and engagement within decision-making. However, "the policy and research emphasis on promoting (more) participation remains distant from procedural justice issues such as power, voice, access to early decision-making and recognition of difference in fundamental values and beliefs" (Bickerstaff & Holifield et al., 2017,p.392). Moreover, procedural justice could lead to more engagement, particularly in site-specific and local contexts (McCauley et al., 2018). Sources of energy injustices can be studied locally in different sectors ranging from mining to solar energy. Academics stress that protests are an integral part of the procedural process having led "to a mechanism for ensuring the long-term acceptability of renewables in communities" (ibid.,p.4).

Linked to values and cultural beliefs is the notion of recognition. Marginalised groups claim the need to be recognised and their risks evaluated in order for them to enjoy fairness and justice. Bell, among others, argued that low-income communities are getting less say in policy matters. This is due to emphasis and power being put in the hands of big corporations that focus on economic targets and close cooperation with governments. Recognition is hence also articulated beyond the political, referring to "the democratic adequacy of procedures for low carbon (energy) policy in general" (Bickerstaff & Holifield et al., 2017,p.393) in which competing ideologies are foreshadowed by a technocratic and neoliberal governance regime that excludes opposing views. Fraser thereby added the notion of misrecognition within energy justice by claiming that marginalised groups are often misrecognised and ignored (McCauley et al., 2018). Consequently, this drive for neoliberal competition has led to an oligopolistic energy marketplace dominated by a small number of corporations indicating increased social exclusion and inequality (ibid.).

2.3.3   Environmental refuges

One of the impacts that vulnerable, indigenous communities face, concerning environmental burdens, is displacement. *Environmental refugees* experience direct and indirect climate change effects such as flooding, droughts, soil and air pollution, or similar. Therefore, the environmental justice

discourse can be associated with forced displacement. Furthermore, "poverty serves as an additional 'push' factor associated with the environmental problems that displaces people" (Myers, 2002,p.610). Westra (2009) hereby argues:

> "All of these disasters [disproportionately affect] the poorest people in the world, as they have no infrastructure or social services to protect them or to mitigate the environmental disasters' effects. In addition, land degradation and desertification also render various regions in the South uninhabitable, as does deforestation, as these phenomena generate a mass exodus from the affected region. Hence it is easy to understand why other countries and their governments, beyond the areas where the disasters occur, are not eager to open their doors, but content themselves with sending aid, at best" (p.5).

This form of environmental injustice links to the effects of climate change and how certain parts of the world have to deal with these consequences differently. Oftentimes, due to resource-rich living spaces, local communities are forced to leave their homes for resource extraction by big corporations for the winning of gas or oil. These methods lead to the pollution of soil, air, or water. Local communities, who are dependent on these resources and their close proximity, are thus forced to find resources elsewhere, leading to involuntary displacement and migration. Sometimes, this is caused by direct impacts which threaten people's safety and living environment, but other times, communities are indirectly affected. Experts argue that the wave of refugees is only rising in times of increased intense human-induced climate events (Gill, 2010). The underlying issue is that there is not a specific law that protects citizens in these areas. As the term environmental refugee is highly debated in its definition in judicial and political terms, its extension into migration laws is complex. Migration is a different area involving various dimensions and dynamics. In this case, the focus is specifically on the forceful relocation of indigenous or tribal communities due to injustices related to man-made anthropogenic changes to the environment.

3 Theoretical framework

3.1 Selection of Theories

The concept of environmental justice has been increasingly adopted. Since its emergence, it has spread around the globe, where it has acquired new dimensions. Several theoretical frameworks have been introduced, presenting insights and suitable aptitude to explain environmental justice phenomena. Since there is an abundance of research about environmental justice, particularly distributive injustice, I will be looking into the newer, more intricate theories of recognition and capabilities to investigate public policies in a more normative way. Moreover, while looking into narratives of environmental justice and injustice, the underlying theory of framing will be helpful. Due to its less prevalent nature, the recognition and capability theory add an innovative feature to this paper, specifically combined with the framing theory. This theory triangle is resourceful when investigating how policy narratives are formulated and framed with regards to the target group of communities. In this part of the theoretical framework, I will therefore explain three theories.

3.2 Capabilities Theory

What is the capabilities approach?

The capabilities approach sets a basis for assessing inequality and injustices while adjoining it to human well-being. The notion of well-being connects to the so-called *functionings,* which indicate "the pursuits and states of being that a person is actively engaged in" (Day, 2017,p.124). These functionings show a difference between what people can do and what they achieve, especially regarding justice. Consequently, capabilities describe the possibility for humans to engage in these functionings, thus representing a notion of freedom or well-being. The capability approach emphasises "the importance of individuals functioning within a base of a minimal distribution of goods, social and political recognition, political participation" (Walker, 2011,p.53). Both Sen and Nussbaum published slightly different versions but following the same objective. Nussbaum's approach features a set of capabilities to which everyone should be "entitled to as a matter of justice", while Sen's version emphasises the relative use of capabilities without a set of central capabilities (Day, 2017,p.127).

Schlosberg argued that distributional, procedural, recognition, and capability approaches to environmental justice are inherently intertwined (Walker, 2012; Holifield, Chakraborty& Walker, 2017). It is argued that distributional and procedural scopes of analyses are insufficiently affiliated with justice which the capability approach tries to adjust. Unlike distributional dimensions focussing on inputs and uneven allocation of resources, the capabilities approach measures outcomes in terms of people's abilities. This is because the conversion of resources and outcomes depends on several factors,

including cultural contexts, environment, and social attributes (Day, 2017). This approach also shows links to procedural dimensions of justice in which decision-making is emphasised.

What is the link to environmental justice?

Several scholars so far have found close links between the capabilities approach and environmental justice. Sen (2010) describes the connectivity between the environment and human well-being as already exemplified and highlighted. Furthermore, Sen and Nussbaum consider "environmental conditions as instrumental to capabilities" (Day, 2017, p.128). Rosie Day puts it relatively simply: "If justice is about capabilities, and capabilities involve environmental conditions, then it is a short step to conclude that environmental conditions can be a matter of justice [...]" (ibid.). Furthermore, as part of the fundamental capabilities, environmental conditions form a prerequisite necessary to realise these capabilities, providing a clear link between the two. This link works partly for Nussbaum's approach in which environmental conditions are indirectly mentioned. In contrast, in Sen's approach, capabilities are not predefined, making it possible to deliberate environmental justice and context-based capabilities.

How to apply this approach?

Capabilities are measured on the individual level in both approaches. The scope of the application, however, differs. In Nussbaum's approach, the state is central in ensuring fundamental capabilities to realise well-being. The state sets the standards in legislations and policies and ensures that people are treated equally to avoid injustice and inequality. This approach considers the state-level vital while finding out if specific populations are mistreated within policy terms. Sen's approach is more flexible and can therefore also focus on the local level, in which capabilities are openly deliberated. He argues that capabilities vary depending on the context. If applied to a specific case, it is, therefore, possible to investigate if the situation is unjust based on a set of agreed capabilities in this scope of analysis. A set of capabilities makes contextualisation easier and allows for inter-regional differences.

The same goes for the individual as the basis of analysis, which allows for a more in-depth analysis of individual inequalities. Sen argues that "[...] nothing in the approach [...] excludes the notion of group capabilities, but they are only ascribed value within the approach to the extent that individuals ascribe value to them" (Day, 2017, p.132). Linked to that, Schlosberg argued that this framework works in the international arena and can be used to make claims relating to transnational phenomena such as climate justice (ibid.). The capability approach is therefore applicable to a multidimensional environment. Therefore, the approach considers various characteristics and cultural backgrounds to determine whether (in)justice is apparent and what is necessary to realise basic functionings.

3.3 Recognition Theory

What is the recognition approach?

The recognition approach acts as a paradigm referring to proving systematic wrongdoing by societal institutions, such as governments or multinational corporations. This systematic injustice is mainly directed at the failed acknowledgment and respect towards people's differences within a country. The approach takes on a trivalent application of the concept of justice, in which also distributional and procedural paradigms play a vital role (Walker, 2011). Justice paradigms usually focus on how institutions ensure that all citizens are treated equally before the law and are equally protected from environmental hazards. Moreover, they ensure participatory justice for all citizens in decision-making processes affecting them. The recognition paradigm, however, emphasises not sameness but difference. The focus of injustice is thus on the institutions giving unequal recognition to different social groups. However, it also "occupies social and cultural space beyond the bounds of the state" (Walker, 2011,p.50). Scholars, such as Young, and Fraser, often talk about misrecognition. "At the core of misrecognition are cultural and institutional processes of disrespect which devalue some people in comparison to others, meaning that there are unequal patterns of recognition across social groups" (ibid.). This systemic failure of recognising differences in terms of cultural oppression extends the notion of identity and links to ecological connectedness as part of cultural integrity and health needs.

What is the link to environmental justice?

Unlike in other EJ theories, the recognition approach aims attention at the environment and ecological injustices affecting communities' identity and their traditional way of life. Some of these include political self-perception, traditional practices, language, and symbols. According to Whyte, misrecognition also inquiries about the non-human world. Schlosberg argues that "in order to attain both environmental and ecological justice, we must be sure that views from the margins, the remote and the natural world are recognised and represented" (Whyte, 2017, p.119). Only by recognising elements crucial in people's lives, will it be possible to achieve mutual justice.

How to apply this paradigm?

The recognition paradigm has not been used often in environmental justice policies and their analysis. However, misrecognition of cultural differences are primarily institutional, connected to decision-making power, and often misunderstood in policies. Thereby narratives are created that are profoundly unjust and ignore honouring of cultural rights of indigenous communities. When applied to case studies, it is crucial to examine these narratives of legislation linked to the institutional rhetoric of equality for all citizens and explore the source of (mis)recognition in all levels of society. Nonetheless, the recognition paradigm also applies to policies enabling multinationals to extract resources and thereby failing to recognise and respect local people's need for these.

3.4 Framing Theory

What is the framing theory, and how does it link to environmental justice?

Framing is an approach in which phenomena are interpreted with symbolic principles. Meaning is intentionally given to an event or a condition, and assertions and blames are made motivating specific actions (Fuller& McCauley, 2016; Walker, 2011). Another definition of the activity of framing "is to select some aspects of a perceived reality and make them more salient in a communicating context, in such a way as to promote a particular problem […]" (Matthes et al., 2008,p.264).

To construct a frame, injustice is a prerequisite, which means that injustice rather than justice is openly perceived and articulated through frames (McCauley, 2017). Injustices as a prerequisite can be linked to the relationship between social inequality and the environment. Environmental frames have diversified to aspects of the environment where one can perceive injustice (Walker, 2011; Holifield et al., 2010). The Anthropocene can be considered the centre of the environmental frame, particularly people "who are marginalised economically and politically as well as environmentally" (Walker, 2011,p.20). EJ frames are often a product of people or movements, while they claim to identify victims of injustice and call attention to those for action (Walker, 2009). Consequently, EJ frames are also considered collective action frames (ibid.). Organisations, as well as governments and activists, often engage in framing activities as a way to create meaningful content to mobilise their supporters as well as to demobilise antagonists (Fuller& McCauley, 2016).

Since frames have globalised, framing is used along different spatialities and different scales, thus creating a so-called discursive frame offering a multi-scalar and multi-spatial perspective (Holifield, Porter& Walker, 2010; Walker, 2011; McCauley, 2017; Kurtz, 2003). Walker claims that there are horizontal and vertical developments, whereby the vertical axis explains the multi-scalar developments and the horizontal axes explain the multi-spatial expansion of the environmental justice frame.

Figure 1: Vertical and Horizontal Scale Frames

'Vertical' scaling-up to international and global issues and to international activist networks

'Horizontal' transfer or emergence of environmental justice framing in new places, countries and cultures

(Walker, 2011,p.17)

With regards to scale, frames are attributed at the state level looking at state policies and laws. Linked to that, Kurtz introduced scale frames, allowing for a more effective analysis within multi-scalar dependencies (Kurtz, 2003; McCauley, 2017). These frames aim to "encapsulate the discursive practices that construct links between the scale at which a social problem is experienced and the scale(s) at which it could be solved" (McCauley, 2017, p.9). On a local scale, Capek (1993) chose a different scale and focuses on the environmental justice frame of local communities and as a grassroots movement being able to frame their demands more clearly.

The focus within environmental frames is at the horizontal level of space, and it has been argued that scale frames are increasingly used across horizontal spaces. McCauley (2017) asserted in this regard that "place is not space" (p.12). Networks are used as a bridge between space and scale, and thus "allow[ing] us [...] to question more effectively the key agents in network centred explanations of the spatiality of scale" (ibid.).

Nonetheless, due to competing frames and varying ways of analysing frames, counter-frames can describe the adversary correlation between a frame of a societal problem and its solution. Therefore the relationship between scale frames and counter-frames "recall the attributional (i.e., blame and problem construction) and prognostic (solution) framing processes" (McCauley, 2017, p.10).

How to apply this theory?

A frame is analysed as a claim. When determining societal phenomena to be unjust, one party makes a claim whereby the situation is categorised, but "it [also] implies a strategy for action" (Capek, 1993, p.7). When making a claim linked to environmental justice, it needs to combine an unequal societal event with a normative position of injustice (Walker, 2011). A claim can be done by anyone regardless of scale and is inherently a socially constructed normative claim. It is argued that "a master frame encompasses the contextual boundaries, interaction and normative claims of more than one organization or one movement" (McCauley, 2017, p.4) and is based on empirical evidence. Furthermore, claim-making includes how the issue at stake and solutions are approached (Fuller & McCauley, 2016).

Due to the normative nature and spatial differences of a frame, one needs to define the boundaries of environmental frames when applying them to a case. Setting the boundaries means contextualizing the frame and explaining how the party is experiencing and demarcating the frame. "In this way, the frame acts as an articulation mechanism whereby various elements of the object in question are tied together purposely in order to achieve the conveyance of one set of meanings or 'story' over another" (Fuller & McCauley, 2016, p.2).

Setting the boundaries of a frame and making normative claims are related activities within the theory and articulating an environmental frame. Frames have evolved and globalised, both horizontally and vertically. Due to the issue of empirically-based conceptions of the framing theory and justice in general, it is therefore vital to focus on several frameworks of environmental (in)justice to represent its

multi-spatial and multi-scalar nature (Walker, 2011; McCauley, 2017). Therefore, framing can be combined with the theory of recognition and capabilities approach to environmental justice, making it possible to prove its systemic and institutional relevance.

3.5   **How do these three theories interact?**

The theories form the basis to answer the research question mentioned above. In this paper, the theories complement each other. In other words, they are intertwined. Through the combined use of these in the analysis, it will be possible to come to conclusions which are theoretically supported and empirically correct. While the EJ concept has already been outlined extensively in the literature review section, the framing theory builds the backbone of the analysis representing political-strategic actions within government policies. Capability and recognition theory are at the forefront directing the frame towards specific themes and codes. Framing can be combined with many different theories, but while combining it with more recent theories, the outcome can be very different from traditional EJ theories.

Regarding conceptual novelty, the combination of theories with government policies provides new insights into the normative dimensions of policies. While policies generally focus on facts and statistics, with the selected theories, I will delve deeper into the meaning of some of the objectives written out in the policies and explore to what extent they are present and meaningful.

The combination of capabilities and recognition in one framework provides an innovative feature for sustainable transitions in the future. With the help of the framing, capabilities, recognition triangle, it is possible to look more in depth into the policies and immediately notice where change needs to appear. Normative claims can be made whereby capabilities and recognition can help to investigate the local and social context while the interaction of the three theories signifies its systemic, and institutional relevance in the field.

As all theories are based on contexts, the adaptation to practice is much easier. After having identified frames and their impact on local communities, it will be feasible to come up with practical ideas for innovative change. Capabilities and recognition are theories based on reality. In contrast to those two, framing is rather abstract, but due to its condition as a backbone of the theoretical framework, it does not influence the practical novelties and prospects. With this theoretical framework in mind, both policy makers, lobbyists, and citizens are able to understand current issues and can act upon them. The framework therefore generate tangible and representative results set for a wide audience.

4 Research Design and Methodology

4.1 Introduction

This chapter deals with the methods used to conduct this research. This is done by explaining case studies as a research strategy. Moreover, the research design entailing the method of analysis and data collection, and subsequently, the coding scheme will be outlined. With regards to the research question and its variables, according to Blatter and Haverland (2012): *"To what extent do oil and gas exploration policies impact local communities regarding environmental justice and how are they framed by governments?",* the independent variable (y - causal variable), accounts for government frames, whereas the dependent variable (x - effect variable) accounts for environmental justice towards local communities. After concluding literature review and theoretical framework, one can come to the natural conclusion in what way the theories operationalise the variables in the research question. The qualitative method in this paper provides an innovative way of dealing with policy documents in normative manner whereby it is summed up quantitatively. While existing research uses mainly quantitative methods and theories to explain environmental justice, this paper delves deeper into the policies' content. This method of analysing will bring about new, interesting insights about policy documents, in which the focus lies on the meaning of the policies and how these might have differing implications.

4.2 Case selection

To understand complex social phenomena, case studies are selected that aim to investigate real-life processes holistically (Kohlbacher, 2006). It has been argued that "case studies seem to be the preferred strategy when "how or "why" questions are being posed when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real-life context" (Kohlbacher, 2006, p.4). In order to conduct a thorough small-N research using content analysis, case studies must be selected carefully to avoid randomisation. The case studies will be used to test the aforementioned theories. They also imply that the "case study strategy is ideally suited to the exploration of issues in-depth and following leads into new areas [of theory constructions], the theoretical framework at the beginning may not be the same one that survives to the end" (ibid., p.5).

This paper will orientate around the 'most similar systems design' by Przeworski and Teune. The selected cases must therefore be similar regarding the effect variable (y). However, they must differ in its causal variable (x) to determine if x has caused y as this research is not about finding whether y alone has caused x but focuses on how y has impacted x (ibid.). This is why the most similar systems approach is not strictly applied but utilised as an orientation for case selection. Environmental justice towards local communities is the variable that needs to be controlled and hence has to be similar in both

cases. The policy frame variable needs to vary. Two case studies will be used. The analysis will entail ten policy documents for each of the two cases. The timeframe is dependent on the chosen policy documents. Therefore, the timeframe accounts for the documents used for the analysis, ranging from 1982 until 2021. It fits the context of production peaks and oil crises of the 1970s and the corresponding policies published after. Since the policies of one case study are made up of more pages, the natural consequence is that there will also be more quotations than for the other one.

Case description

The wetland in the Niger Delta, in the south of Nigeria is considered "the third largest wetland in the world and the largest river delta and mangrove ecosystem in Africa, [and] has been degraded due to oil and gas exploration, dredging, invasive plant (Nypa palm) infestation, logging and reclamation for residential, industrial, and other developments (Adekola, 2012,p.667). Just in the Delta, the population is around 27 million people, of which "75 per cent rely on natural endowments for a living" (Atanda, 2015,p.3). The main problem with regard to oil and gas exploration in those areas is that "oil pollution [...] has plagued the Nigerian environment since the exploration and exploitation of crude oil within Nigeria's borders" (Atanda, 2015,p.2f). "[...] Between 1996 and 2006, the total volume of oil spills was 124,377 barrels. These spills have affected the livelihood and socio-economic activities as well as the environment of the people. For instance, fishing, which is the predominant occupation and livelihood of the people, does not yield many benefits anymore (Ipingbemi, 2009,p.8).

The North Slope in Alaska, US, is residence to many Alaskan Natives whose lifestyle revolves around traditional fishing practices, diets, and the close connection to marine life. These communities are lacking awareness of their cultural practices by policymakers who facilitate the oil and gas exploration. PCBs and other chemicals contaminate the water and surroundings that are vital for the rural communities resulting in displacement and resource depravity (Kovacs, 2019; UNDP, 2014). They have suffered generations of social exclusion "often intimately connected to the process of exploiting the environment, as the appropriation of natural resources by state and corporate actors are a driving force historically in the disempowerment of tribal and indigenous peoples" (UNDP, 2014).

In the Niger Delta as well as in Alaska, there are still a lot of indigenous communities who live in areas where oil extraction activities are facilitated by governments. These activities bring economic growth and employment, however, they also impact the local people residing close to extraction sites. In the case of Alaska, indigenous communities living close to the North Slope are forced to move away or continue with their traditional living habits due to water pollution due to on and offshore extraction sites. Residents of the Niger Delta are also negatively impacted by corporations being allowed to drill for oil, leading to oil spills that are not being cleaned up. In both countries, agriculture, forestry, and fishing are the leading employers, which is why they need to remain intact. This is only possible with proper management and sustainable utilisation of resources. "Furthermore, in this era of participatory development, the oil companies [and governments] should not single-handedly proffer solutions to oil

spillage; they need the active participation of the rural communities. Their cooperation is cardinal to implementing any remedial measures (Ipingbemi, 2009,p.21). In order to investigate how policies use language and framing, I will be able to explore to what extent these frames impact the overarching concept of environmental justice towards citizens residing close to areas of interest.

4.3   Data collection, measurement and sampling

Data in this paper was collected using desk research. Both literature review and theoretical framework consisted of secondary literature, for instance, research articles, books, or websites of governments and other international organisations. Primary sources included newspaper articles and government legislations and other policy documents. The analysis was completed using primary policy documents published by the governments of Nigeria and the US. All sources were found in online databases, e.g. university libraries (Erasmus University Rotterdam, Leiden University, University of Amsterdam, Vrije Universiteit Amsterdam), Google, and Google Scholar. Moreover, by looking at the reference list of academic articles, it was possible to identify additional sources.

Furthermore, "as an unavoidable part of all qualitative approaches, both researchers and readers should be helped to look for alternative interpretations. Credibility, dependability, conformability, and transferability are the most common measures to achieve rigour in qualitative studies" (Vaismoradi, Turunen & Bondas, 2013,p.403). In order to avoid confounding variables that may affect the correlation between the selected dependent and independent variables, these must be controlled.

The sampling unit in this paper accounts for the Nigerian and US government. The document sources were collected using desk research. With the help of search terms on government websites and UN-related websites, it was possible to gather a set of policies that focus on the topic of interest. These will account for 20 policy documents in total, whereas ten are assigned in each case. In this paper, government policies were selected as a basis for comparison. Both countries have been chosen as regions of interest due to their oil wealth and high amounts of oil exports each year. Moreover, there are salient issues within the oil and gas exploration and production regarding the residents in both regions. Based on the concepts laid out in the literature review, the documents were searched with the help of keywords. A list of the specific sources for the analysis can be found below in Table A.

As the policy documents will be coded based on previously outlined themes and codes, the coding unit (N=706) relates to answering the research question. The coding unit will be reached by looking into specific quotes within policy documents of the two jurisdictions directed at the content of the facilitation of oil drilling in the selected areas. The documents must clearly show its connection to the topic of interest, and this is also how the documents were filtered out. This was done by looking for keywords and the initial set of codes using the data analysis software ATLAS.ti. Since the policies of the US case study include more pages than the Nigerian case, the natural consequence is that there will also be more quotes (*n)* for that one compared to the other. However, since the frequencies are tested

and analysed in percentages, it will not hamper the results when looking at the total numbers in the end. In order to reach the coding unit, importance sampling must be applied to the documents at hand, which will enable us to find most relevant sections. In this regard, there were several phases within the research. Selecting a code, exploring the frequencies within the policy documents, followed by a selective approach of the codes, the codes appeared too much. In this way, the more significant codes and quotes were selected while at the same time trying to be as complete as possible. Besides, it is possible to test and measure how many times the codes appear in the policy documents. Consequently, it is possible to come up with trends and patterns of framing concerning the central concept of environmental justice and the associated theories of recognition and capabilities. Due to the aforementioned criticism to measure justice objectively, this paper combats this criticism by combining qualitative and quantitative methods with a previously outlined set of capabilities for both cases and will make this measurement feasible.

Table 1: Sampling of Policy Documents

Sampling Unit	Unit of Analysis	Date	Coding Units
US Government	1. Federal Oil and Gas Royalty Management Act	1982	13
	2. Oil Pollution Act	1990´	37
	3. Energy Policy Act	2005	41
	4. American Indian and Alaskan Native Policy	2007	10
	5. Bureau of Ocean Energy Management, Regulation and Enforcement; Federal Register: Oil and Gas and Sulphur Operations in the Outer Continental Shelf—Revisions to Safety and Environmental Management Systems	2011	11
	6. Code of Federal Regulation: Title 40 - Protection of Environment; PART 300— National Oil and Hazardous Substances Pollution Contingency Plan	2015	77
	7. Coastal Plain Oil and Gas Leasing Program Environmental Impact Statement	2019	179
	8. Council of Environmental Quality Final Rule: Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act	2020	45
	9. Executive Order 13990: Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis	2021	13

	10. Executive Order 14008: Tackling the Climate Crisis at Home and Abroad	2021	27
			n=453
Nigerian Government	1. Federal Environmental Protection Agency Act	1988	18
	2. Environmental Impact Assessment Act	1992	14
	3. Environmental Guidelines and Standards for the Petroleum Industry in Nigeria	2002	76
	4. National Oil Spill Detection and Response Agency (Establishment) Act	2006	14
	5. National Environmental Standards and Regulations Enforcement Agency (Establishment) Act	2007	22
	6. National Environmental (non-metallic minerals manufacturing industries sector) Regulation	2011	15
	7. National Environmental (Energy) Regulation	2014	19
	8. National Gas Policy	2017	27
	9. National Petroleum Policy	2017	23
	10. Nigerian Economic Sustainability Plan	2020	25
			n=253
			Total N=706

4.4 Method of analysis

The method of analysis will be a content analysis. In this way, large texts, such as policy documents, can be explored and analysed (Vaismoradi et al., 2013). Using content analysis, previously identified and categorised themes and codes will make it possible to cover a large data set. Moreover, the data will be collected qualitatively, however, the codes will be counted quantitatively when generalising results (ibid.). This means that the research will have both quantitative and qualitative features, while the quantitative dimension is used to display the frequencies of the qualitative analysis. So far, there has not been much qualitative research being done on policy documents and legislation concerning environmental justice topics (Hall & Steiner, 2020). Most policy-related content analyses have been used to inform policymakers (Howland, Becker& Prelli, 2005). The majority of policy content analyses covered policy newspapers or speeches by policy experts (Hall & Steiner, 2020). Therefore, this paper investigates 20 policy documents in total, whereby these are divided over two case

studies over two different jurisdictions. It has been argued that qualitative content analysis is "an approach to documents that emphasises the role of the investigator in the construction of the meaning of and in texts. There is an emphasis on allowing categories to emerge from data and on recognising the significance for understanding the meaning of the context in which an item being analysed" (Kohlbacher, 2006,p.10). In this respect, the two selected case studies will be applied in a cross-sectional (cross-national) mode, whereby different spatialities will be compared. These comparisons across cases will be analysed using the same timeframe, based on the selected policy documents, yet with spatial variation (Blatter& Haverland, 2012). By studying systematic codes and themes, it will be possible to "[...]determine trends and patterns of words used, their frequency, their relationships, and the structures and discourses of communication" (Vaismoradi et al., 2013,p.400). The content of the documents will be examined deductively using themes and codes and for testing derived from the theories above (Matthes& Kohring, 2008,p.262). "Qualitative content analysis claims to synthesize two contradictory methodological principles: openness and theory-guided investigation" (Kohlbacher, 2006,p.10). Content Analysis is a suitable method in this paper to understand social phenomena and solve policy problems (Howland et al., 2005; Haverland& Becker, 2012).

4.5   Themes and Codes

In order to create and categorise codes, I will be looking at the literature review and the theoretical framework. Since the literature outlines concepts, such as environment, energy, and justice, I will be selecting themes based on academic literature within the field. Furthermore, the codes associated with the theme need to be more context and theory-specific. Therefore, I will be selecting the codes based on case background and theoretical framework through "applying a systematic, theory-guided approach to text analysis using a category system" (Kohlbacher, 2006,p.9). To come up with suitable codes for both cases, a set of context-specific capabilities for each specific case study was created, each differing slightly (Appendices A&B). The capabilities were then formulated into a set of codes that can be applied coherently to both cases (Kushmerick, Young & Stein, 2007). Consequently, the theories complement each other and build the backbone of the coding scheme (Appendix C). There are four main categories (themes) to which codes are applied. These will be used as tags in the policy content analysis. When engaging with the codes, it becomes clear that some themes contain similar codes. In order to combat this similarity, it is vital to understand that the theme of climate and the environment, as well as the theme on oil and gas-based energy systems, provide more fundamental codes and help the reader to understand the background of the policies. In contrast, the community capabilities and recognition themes are more specific and theory-related. Having both fundamental and precise codes to look for in the policy documents makes it easier for the reader to understand the research problem and follow the line of argument throughout the analysis.

For both case studies, the same codes will be used. Because the wording in government documents usually remains ostensible, the codes cannot be too specific; otherwise, this would hamper the results. In this way, coherence and reliable comparison can be achieved. The codes are tested and refined using a sample out of the coding unit with the help of Atlas.ti. Moreover, a reliability test will be completed. I will be using a deductive approach by applying the aforementioned categories of codes and theories and bringing those into connection with the selected documents as part of the qualitative content analysis. This can look similar to the graphic below.

Figure 2: Coding Process
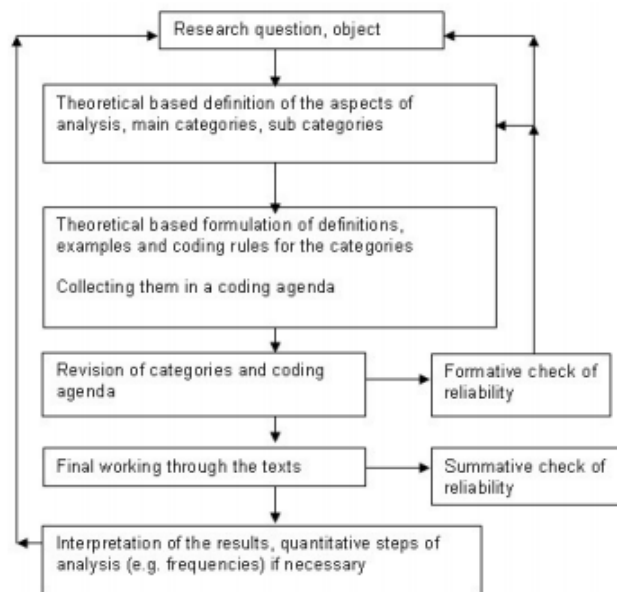
Source: Kohlbacher, 2006,p.16)

4.6   Reliability and Validity

The measured data needs to be as reliable, objective, and valid as possible. Therefore, interconnected validity and reliability criteria laid out in this section. These help to prevent methodological biases. Since content analyses can be subjective, validity may be influenced.

The problem of inferences and the problem of reliability need attention. The former relates to the drawing of conclusions based on small text samples and the principal theoretical constructs apparent in the text. By focusing solely on small text samples, external and internal validity can be threatened—the latter bases itself on the trustworthiness, stability, and accuracy of coding. To avoid reliability problems, it is crucial to look closely at the coding activities. These include selected categories or their distinct features (Kohlbacher, 2006).The reliability problem also links to external validity, while the inference problem can be associated with internal validity.

Furthermore, frames are an abstract variable within content analyses and, therefore, difficult to measure and "to neutralize the impact of the researcher in framing research" (Matthes et al., 2008,p.258). Framing can also be a concern for reliability and validity. "Approaches try to capture latent

or cultural meanings of a text, which can be problematic in terms of reliability. Other approaches provide sharp and reliable measures but may fall short in terms of validity. [...]To measure a frame in a valid and reliable way, it is therefore important to identify the single elements of a frame" (ibid., p.263). This is done by splitting up the frame into single segments, using synonyms. These are easier to apply to text documents and thus help to achieve validity and reliability. Moreover, using coding tools such as Atlas.ti, an automatic reliability check is made (Skalski, Neuendorf & Cajigas, 2017,p.227). Besides, to produce reliable work, "the easiest solution is to work with clearly demarcated segments of the text, such as sentences or paragraphs" (MacPhail, Khoza, Abler & Ranganathan, 2016,p.202).

Qualitative research is context-specific which assures concept validity (Blatter& Haverland, 2012). Since the focus is on two case studies, it is possible to conduct research on variables in a multi-dimensional manner through data analysis tools and integrated theories. Moreover, by analysing few cases, social phenomena can be dealt with in detail. Since the analysis is theory-guided, the data at hand will constantly be linked to the theory (Kohlbacher, 2006). Consequently, "theory-guided analysis also offers the chance to compare and complement the primary data collected within the research project with secondary data" (ibid.,p.19). Content-analysis hence adds to and enhances internal validity.

External validity is about the generalisation of the method of analysis and the resulting adaptation to similar cases. Within qualitative research, this generalisation is generally more limited than in quantitative research due to context-specific analyses. However, due to its qualitative nature, generalizability concerning theory can be achieved; hence, theories can be adopted analytically (Kohlbacher, 2006). As not much research has been done concerning government policy documents about environmental justice, this paper thus provides orientation for further studies. Moreover, it can also be used as a base for a quantitative analysis within a similar field.

4.7   Limitations

Although the research design provided a relevant base to find an answer to the research questions, there are a number of limitations. First, in a deductive approach, it is difficult to give a neutral point of departure for frames as they are built up of claims, often subjective. Moreover, there is a certain flexibility with frames, as they need to be known beforehand in order to make them suitable for the topic of research, which means that the researcher needs to have a clear idea, which frames and codes need to be used, based on the established theoretical framework and literature review. The researcher might miss codes and frames which might only become apparent when analysing (Matthes et al., 2008).

Second, due to the relatively small sample size and small coding scheme, the results might not be fully representative of what it could be with a bigger sample size. The sampling was limited to several twenty policy documents. If sampling allowed more documents, the study could have been extended, resulting in more specific and valid results. Nonetheless, in this small-N-study, the sampling size was sufficient. Thirdly, due to a limited amount of time, it was impossible to conduct a second analysis for parts of the study, ensuring higher validity and reliability.

5 Analysis & Results

5.1 Introduction

This chapter presents the findings of the analysis using Atlas.ti. Combining the aforementioned sections, the coding scheme will be utilised to analyse government policies. Consequently, patterns and frequencies can be discovered, analysed and then compared. Graphic code help the reader understand the patterns of conduct. After completing the analysis, the codes are added up thereby creating the frequencies and patterns necessary for the discussion. Gr (Groundedness) accounts for the quotations in which the code has been applied, while GS accounts for the number of coded documents. It will become apparent that the Gr for the US is higher than Nigeria. This is due to a larger volume of US policy documents resulting in more quotations. Therefore, the case studies will not be compared by row but by column (for each case study separately).

5.2 Climate & Environment

Nigeria

Within the selected paragraphs, the codes regarding climate and environment were prominent, resulting in a total of 123 quotations (Gr=123) covered from the total of 253 quotations. This equals a frequency of 26,45% of the quotations being about climate and the environment, relative to the other themes. Within the theme itself, discussions circled mostly around the codes of protection/harm of the environment and pollution, which accounts for 37,1%, while the code of climate change was only mentioned in 1,08% of the total codes used (n=186). The environment as such is an important theme within government policies, but in the case of Nigeria, it stays rather superficial with general themes such as oil drilling harming and polluting the environment and the policies do not specify particular emissions and impacts the environment, including water, soil and air quality. An exemplary code for this theme has been taken from Atlas.ti to prove its relevance.

14:7 p 2 in Nigeria_Environmental_Protection_Agency_Act _1988

"The Agency shall, subject to this Act, have responsibility for the protection and development of the environment in general and environmental technology, including initiation of policy in relation to environmental research and technology; and without prejudice to the generality of the foregoing, it shall be the duty of the Agency to— (a) advise the Federal Military Government on national environmental policies and priorities and on scientific and technological activities affecting the environment; (b) prepare periodic master plans for the development of environmental science and technology and advise the Federal Government on the financial requirements for the implementation of such plans" (Atlas.ti, 2021).

1 Codes:

○ protection/harm of the environment

This quote from the EPA Act of 1988 states a fundamental responsibility to protect the environment through environmental research and technology. The role of the state is highlighted whose cooperation is necessary to achieve this policy goal. It is not specifically mentioned what the frame of protection of the environment entails, but evidence shows that the focus lies on research and technology rather than animal species and biodiversity. It emphasises the need for policies and guidelines around which governments, as well as citizens and companies can orientate themselves.

United States:

The coding group climate and environment accounts for 34,13% with a total of 258 quotations (Gr=258) used. This is relative to the other coding groups. In the policy documents about climate and the environment, the range of codes are evenly distributed. General codes about the protection and harm of the environment account for 25,07% with a number of 94 codes used, while emissions account for the lowest relative number of 11,73% with 44 codes used. Animal species and biodiversity as well as soil, air and water quality are emphasised. One example for a code within this theme is the following.

24:43 p 157 in PART 300 - National Oil and Hazardous Substances Pollution Contingency Plan 2015

"Identify appropriate federal and state agency contacts and alternates responsible for coordination of fish and wildlife rescue and rehabilitation and protection of sensitive environments; identify and provide for required fish and wildlife handling and rehabilitation permits necessary under federal and state laws; and provide guidance on the implementation of law enforcement requirements included under current federal and state laws and corresponding regulations. Requirements include, but are not limited to procedures regarding the capture, transport, rehabilitation, release of wildlife exposed to or threatened by oil, and disposal of contaminated carcasses of wildlife" (Atlas.ti, 2021).

2 Codes:

○ animal species and biodiversity / ○ protection/harm of the environment

In this quote, the salient issue of loss of wildlife and biodiversity due to oil activities becomes apparent. Linked to that is the issue of these activities harming the environment as well. Protection of the environment and biodiversity is essential to sustain resources needed for local communities to survive. The codes are inherently intertwined but only become visible when spelled out

explicitly. By referring to activities under state and federal laws requiring proper handling and guidance of animal species endangered by oil and its associated waste and discharges, the pivotal issue is highlighted. Furthermore, this example is representative as it links many codes to this specific quotation.

20:1 p 1 in Executive Order 13990 of January 20, 2021 Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis 2021

"In carrying out this charge, the Federal Government must be guided by the best science and be protected by processes that ensure the integrity of Federal decision-making. It is, therefore, the policy of my Administration to listen to the science; to improve public health and protect our environment; to ensure access to clean air and water; to limit exposure to dangerous chemicals and pesticides; to hold polluters accountable, including those who disproportionately harm communities of colour and low-income communities; to reduce greenhouse gas emissions; to bolster resilience to the impacts of climate change; to restore and expand our national treasures and monuments; and to prioritize both environmental justice and the creation of the well-paying union jobs necessary to deliver on these goals" (Atlas.ti, 2021).

9 Codes:

○ climate change / ○ communities / ○ compensation / ○ emissions / ○ health / ○ protection/harm of the environment / ○ recognition / ○ rights + fairness / ○ soil, water, air quality

In this paragraph, the interconnectivity of the selected codes within the four themes is obvious. Unlike the previous quotation, this quote spells out the salience of various topics connected to the impacts of environmentally- polluting hazards and puts them on equal level. It also becomes clear that the state government plays a pivotal role in making sure that processes and structure regarding these codes are fulfilled and enforced. By mentioning that public administrators need to listen and act, shows the urgency of cooperation between state agencies and citizens who are facing the burden described above.

Comparison:

While the policies in the US focus on the themes about climate and the environment quite equally, the codes within Nigeria's policies are rather dispersed. As visible in the table below, Nigerian policies barely mention climate change and emissions. Generally, the range of codes lies between 37,01% and 1,08%. This more macro-oriented view thus relates to Nigeria, while the US uses a more micro-oriented view when it comes to the salience of environmental protection within the policies on oil and gas

exploration and looks at a wider range of topics. Here the range lies between 25,07% and 11,47%, resulting in the margin between them being much smaller than in the Nigerian case. This shows that the issues are being addressed more equally.

Figure 3: Coding Results Climate & Environment
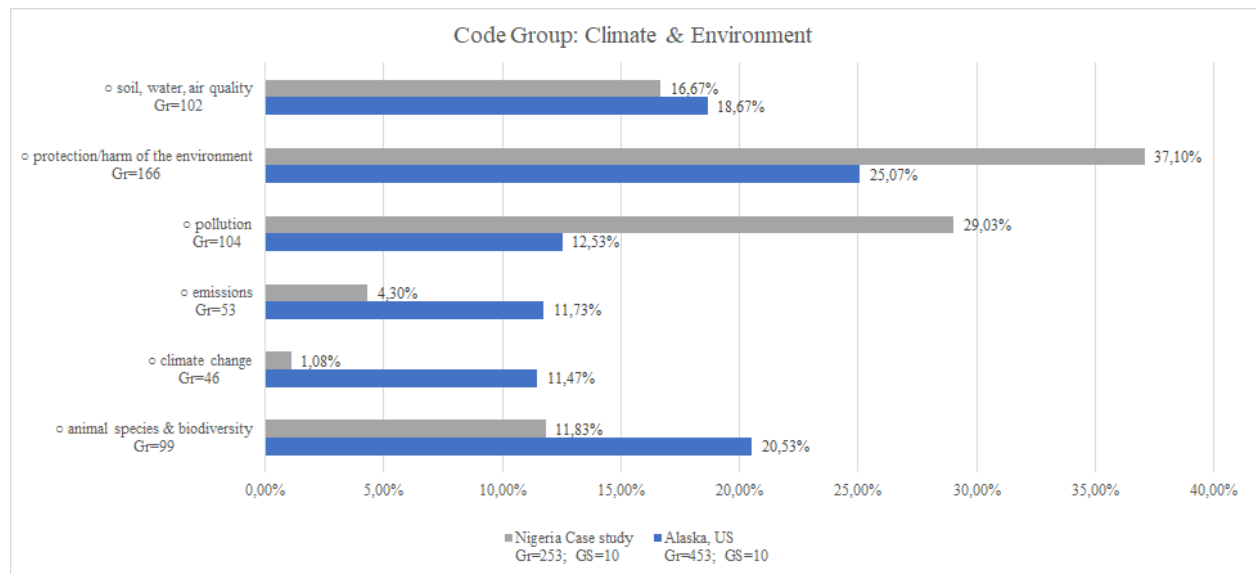
5.3   Community Capabilities

Nigeria

Within the code group of community capabilities, the codes aimed to find out how frequently the notion of community appeared while also regarding the capabilities laid out before. Capabilities include basic functionings of local and tribal communities to survive. The code group of community capabilities in relation to the other themes and code groups accounted for 32,47% with 151 quotations within this theme. In the case of Nigeria, health appeared most frequently (n=57; N=237) adding up to 24,05% of all eight codes used within this group. It made more sense to associate one code for health alone due to its significance. The more specific code of the interdependence of culture and nature appeared least frequently with n=10, accounting to 4,22%. Communities in general as well as local and tribal communities are focused upon within the policies, ranging between 15,61% and 17,3%. It can be argued that the focus of these policies lies on the associated health issues resulting from oil drilling and less on the access of resources for local communities which make basic capabilities for life possible. Consequently, some capabilities are fulfilled while others are regarded as insignificant.

9:1 p 10 in NATIONAL ENVIRONMENTAL STANDARDS AND REGULATIONS ENFORCEMENT AGENCY (ESTABLISHMENT) ACT, 2007

"The Agency may make regulations setting specifications and standards to protect and enhance the quality of Nigeria's air resources, so as to promote the public health or welfare and the natural development and productive capacity of the nations' human, animal, marine or plant life including, in particular: minimum essential air quality standards for human, animal, marine or plant health" (Atlas.ti, 2021).

6 Codes:

○ access to resources / ○ animal species & biodiversity / ○ capabilities of well-being / ○ health / ○ protection/harm of the environment / ○ soil, water, air quality

By establishing this agency in 2007, the Nigerian government ensured to promote health of all citizens and a satisfactory degree of welfare, associated with humans as well as biodiversity. Furthermore, this policy was also directed towards the communities suffering from bad air quality due to hazardous substances. It does not become clear in the quote what exactly is included in public welfare and how it is measured. Nonetheless, it is evident in this quote that health and decent possibility for human life is valued. This is particularly relevant for air quality. Capabilities are referred to as basic functionings for human beings. While the aforementioned capabilities (see appendix) go beyond the basics of air quality, they can be combined under the capability category of guaranteeing bodily health.

United States

The overall theme of community capabilities represents 29,89% relative to the four coding groups with an absolute frequency of 226 quotations. Local and tribal codes appeared most frequently with 27,68% out of all codes within this group. The codes appeared in 98 out of 354 quotations. Local and tribal is followed by the community codes with 17,8%. The US policies put less emphasis on people's capabilities of wellbeing and economic stability, but the least emphasis on safety and security. By community, especially tribal communities such as Alaskan Natives are meant and these results show that they are partly representative in the policies.

16:109 p 279 in Coastal Plain Oil and Gas Leasing Program Environmental Impact Statement U.S. Department of the Interior Bure[1021]

"The principal activities in Arctic Alaska contributing to cumulative effects on polar bears and other marine mammals are subsistence harvesting and changes in the activities of local communities, existing oil and gas development, commercial transportation, and management and research actions by federal and state agencies" (Atlas.ti, 2021).
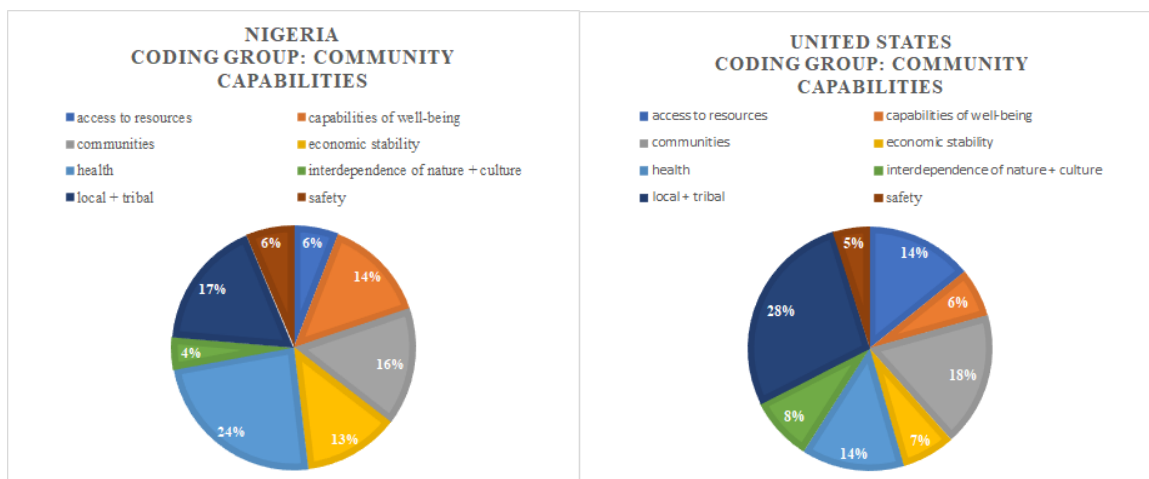
4 Codes:

○ animal species & biodiversity / ○ communities / ○ local + tribal / ○ oil and gas based energy systems

In this quote, the issue of the impacts of existing oil and gas development is amplified. Besides the effect on flora and fauna, local communities and their daily activities are influential. Although oil and gas developments generate income, changes in their daily activities are slowly changing their environment. While positive economic effects for the local communities are often highlighted by state or federal government, environmental burdens are downplayed. The particular interest lies on polar bears and marine mammals being an existential part in the lives of tribal communities.

Comparison

The salience of community codes in both cases diverge. While Nigeria focuses on health and basic capabilities, such as economic stability and well-being, the US looks closer at the local and tribal communities living close to oil fields and exploration settings. The US documents do not go that much into detail linking the capabilities to local communities at site. Specific community capabilities are not mentioned regularly and therefore stay superficial, as visible in the pie chart below. In both cases, the issue of safety is least frequently mentioned. In total, the theme of community capabilities is represented quite equally with regards to the other themes representation. In both cases the theme is depicted around 30% in total, relative to the other themes.

Figure 4: Coding Results Community Capabilities

5.4   Oil and Gas-based Energy Systems

Nigeria

The theme of energy represents the codes ranging from oil exploration and drilling over toxic waste and hazardous substances to energy innovation and compensations for oil spills. This coding group represents 26,45% (N=123) of all four coding groups and therefore has fundamental significance,

similar to climate and environment. With regards to general codes, such as energy systems with oil and gas as well as hazardous substances and toxic waste related to the energy system appeared most frequently with hazardous substances and toxic waste accounting for 35,29% and oil and gas-based energy systems 20,26%. Looking more specifically, oil spills and discharge appeared 15,59% in total. This is mainly due to certain policy documents being directed at oil spill events in the past. Nonetheless, codes concerning compensation, as well as the issue of flaring and innovation towards renewable energy scored rather low between 6,54 and 9,15%.

10:13 p 60 in National Gas Policy 2017

"The flaring of natural gas that is produced in association with oil is one of the most egregious environmental and energy waste practices in the Nigerian petroleum industry. While gas flaring levels have declined in recent years, it is still a prevailing practice in the petroleum industry. Billions of cubic meters of natural gas are flared annually at oil production locations resulting in atmospheric pollution severely affecting host communities. Gas flaring affects the environment and human health, produces economic loss, deprives the government of tax revenues and trade opportunities, and deprives consumers of a clean and cheaper energy source. Effective action on gas flaring would address a long held grievance for the Niger Delta region" (Atlas.ti, 2021).

5 Codes:

○ communities / ○ flaring / ○ hazardous substances & toxic waste / ○ health / ○ pollution

Still today, flaring has a major impact on local communities in Nigeria due to the huge amount of hazardous waste produced in flaring activities. Several regulations have introduced a ban on flaring however enforcement strategies are not strict. While the effects of flaring are in line with the coding theme of climate and environment, they are to a certain degree intertwined. The locations where gas is flared are often located close to residential areas where people live who have to take the burden of effects. This atmospheric pollution relates to the code of harming the environment but focuses specifically on oil exploration and drilling, oil spills and energy waste or in this case flaring activities. This quote helps to understand a common issue within policies. They mention issues like flaring but the enforcement strategies are too weak resulting in weak or no action.

United States

In the US, the coding demonstrates different results. Oil and gas-based energy systems, as well as exploration and drilling and oil spills and discharge appear most frequently within the selected policy documents and quotations. The code of oil spills and discharge accounts for 28,64% while exploration

and oil drilling represents 16,99%. Flaring is barely mentioned with 0,97% while compensation for oil spills as well as energy innovations also score comparatively low with 7,77% and 6,8% respectively. Overall, the coding group oil and gas based energy systems equates to 22,35% with an absolute frequency of 103 which is slightly lower than the representation of previous themes.

16:33 pp 91 – 92 in Coastal Plain Oil and Gas Leasing Program Environmental Impact Statement U.S. Department of the Interior Bure[1021]

"During exploratory drilling and pad construction, emissions would be produced mainly by drilling equipment required for exploratory and delineation wells. Additional sources of emissions would be equipment required to build ice roads, support equipment and vehicles to bring personnel, materials, and supplies to the well pad locations, and intermittent activities such as mud degassing and well testing. Pollutant emissions would be dominated by nitrogen oxides, with more moderate levels of VOCs (volatile organic compounds) and CO (carbon monoxide), and lower levels of other criteria and hazardous pollutants. Exploration of the first lease area is anticipated to occur within 2 to 4 years of the first lease sale. Emissions from exploration activities would be short term and temporary" (Atlas.ti, 2021).

2 Codes:

○ emissions / ○ exploration + drilling

The emissions of gas exploration and oil drilling are explained in a way in which emissions are either set on temporary or long-term. This frame constitutes the question of significance regarding the effects temporary emissions make on the environment and the community. It is framed in a way that due to its temporary nature, it won't harm the environment. Moreover, the pollutants described above pose significant risks to air and sea quality, particularly for marine life. In this quote, the significance of framing is highlighted. Governments frame issues of gas exploration so that it sounds less harmful than it realistically is.

Comparison

It becomes clear that both countries have their focus on particular issues. Nigeria emphasises issues of hazardous substances coming from oil spills but also from gas flaring while the US focuses primarily on oil spills. Both however have similar foci circling around these two issues. The other codes show less relative frequencies and thus could be regarded as less crucial. The issue of flaring however is more apparent in Nigeria as it still is a bigger issue than in the US where legislations have been introduced to stop flaring and the burning of gas. Little emphasis is put on compensation and clean-up as visible in the table below. Compensation entails the compensatory costs to communities or governments who are

affected by oil spills or other oil and gas-related accidents. Moreover, the code of energy development and innovation which researches renewable energy possibilities remain rather limited.

Table 2: Coding Results Oil and Gas-based Energy Systems

Codes	Nigeria	United States
compensation	9,15%	7,77%
energy development and innovation	6,54%	6,80%
exploration and drilling	5,88%	16,99%
flaring	7,19%	0,97%
hazardous substances and toxic waste	35,29%	16,99
oil and gas based energy systems	20,26%	21,84%
oil spills and discharge	15,69%	28,64%
Total	**100%**	**100%**

5.5   Recognition

Nigeria

Recognition is the least represented theme within the policy documents but because of that maybe the most noteworthy. It accounts for 14,62% with an absolute frequency of $n=68$. This is rather low compared to the aforementioned themes and codes. Monitoring programmes and political participation of people affected by the policies appear most frequently with 31,71% and 29,27% respectively. This is followed by recognition of local communities as well as inclusion, representation and engagement. The least frequent code encompasses rights and fairness as well as the code regarding unequal distribution of environmental harm. These codes only represent 6,10% and 4,88% of all codes within this group. While rights and fairness constitute to the overall discussion of justice for communities at stake, speaking from the frequencies, it seems rather insignificant and nonessential. One exemplary quote was found in the regulation of 2011.

8:13 p 45, 364 × 73 in National Environmental (Non-Metallic Minerals Manufacturing Industries Sector) Regulation 2011

> Look for opportunities to build awareness; to educate and train personnel; to test procedures; to involve all levels of management, all departments and the community in the planning process; and to make emergency management part of what personnel do on a day-to-day basis.

(Atlas.ti, 2021).

3 Codes:

○ communities / ○ inclusion + representation + engagement / ○ local + tribal

Emphasis is put on the equal inclusion of all levels of society. This includes building awareness, educating everyone equally and providing safety procedures as an integrated part of managing environmental regulations. By mentioning emergency management, the quote automatically provokes a sense of urgency. Moreover, the notion of looking for opportunities to build awareness demonstrates the need that all levels of government need to cooperate with each other and be open and receptive for change.

United States

Similarly to the case of Nigeria, the theme recognition in the US policy documents also only accounts for 13.62% with an absolute frequency of $n=103$, which is considerably lower than the previous themes. The US puts more emphasis on codes such as recognition (20,61%), inclusion, representation and engagement (25,29%) as well as rights and fairness (19.08%). The codes that appeared less often include monitoring programmes (10,69%) and the unequal distribution of environmental harm (9,16%). Nonetheless, the gap between the various codes is not that big hence creating a balance of importance among these codes.

19:31 p 172 in Energy Policy Act 2005

''The term 'tribal energy resource development organization' means an organization of two or more entities, at least one of which is an Indian tribe, that has the written consent of the governing bodies of all Indian tribes participating in the organization to apply for a grant, loan, or other assistance" (Atlas.ti, 2021).

3 Codes:

○ access to resources / ○ local + tribal / ○ political participation

Aims and goals for political participation have already been debated upon in the Energy Policy Act of 2005. Consequently Indian Tribes were given the right of self-determination and to participate within

certain sections of energy development organisations. Interestingly, in the policy document of 2015 and 2021, this topic was also still being discussed.

16:157 p 29 in Coastal Plain Oil and Gas Leasing Program Environmental Impact Statement U.S. Department of the Interior Bure[1021]

"The BLM, as the lead federal agency, consulted with federally recognized tribal governments during preparation of this EIS and identified 16 tribes potentially affected by the leasing program. Consistent with DOI policy on government-to-government consultation with tribes, the BLM first sent a letter of notification and inquiry on March 2, 2018, to the Arctic Village Council, the Iñupiat Community of the Arctic Slope, the Native Village of Kaktovik, the Venetie Village Council, and the Native Village of Venetie Tribal Government. In its letter, the BLM offered these entities the opportunity to participate in formal government-to-government and National Historic Preservation Act Section 106 consultations, to participate as NEPA cooperating agencies, or to simply receive information about the project" (Atlas.ti, 2021).

4 Codes:

○ communities / ○ inclusion + representation + engagement / ○ local + tribal / ○ political participation

20:14 p 3 in Executive Order 13990 of January 20, 2021 Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis 2021

"In carrying out the actions directed in this section, heads of agencies shall seek input from the public and stakeholders, including State local, Tribal, and territorial officials, scientists, labour unions, environmental advocates, and environmental justice organizations" (Atlas.ti, 2021).

4 Codes:

○ inclusion + representation + engagement / ○ local + tribal / ○ political participation / ○ rights + fairness

Both these quotes from 2015 and 2021 mention the importance of political participation and the equal representation of tribal governments in relation to federal and state governments. Regarding recognition and developing this participation further, it becomes evident that the US government agencies debate about it, but eventually changes resulting from the debates is limited. This might demonstrate a frame which implying salience of an issue however, if it continuously keeps being referred to, the frame

becomes questionable. Generally speaking, the topic of inclusion is highlighted, however lacks in clarity to actually provide justice in these environmental and energy issues. Regarding frames being read in different ways, one could steer attention towards misrecognition within the frame of recognition.

24:67 p 150 in PART 300 - NATIONAL OIL AND HAZARDOUS SUBSTANCES POLLUTION CONTINGENCY PLAN 2015

"Indian tribe as defined in OPA section 1001, means any Indian tribe, band, nation, or other organized group or community, but not including any Alaska Native regional or village corporation, which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians and has governmental authority over lands belonging to or controlled by the Tribe" (Atlas.ti, 2021).
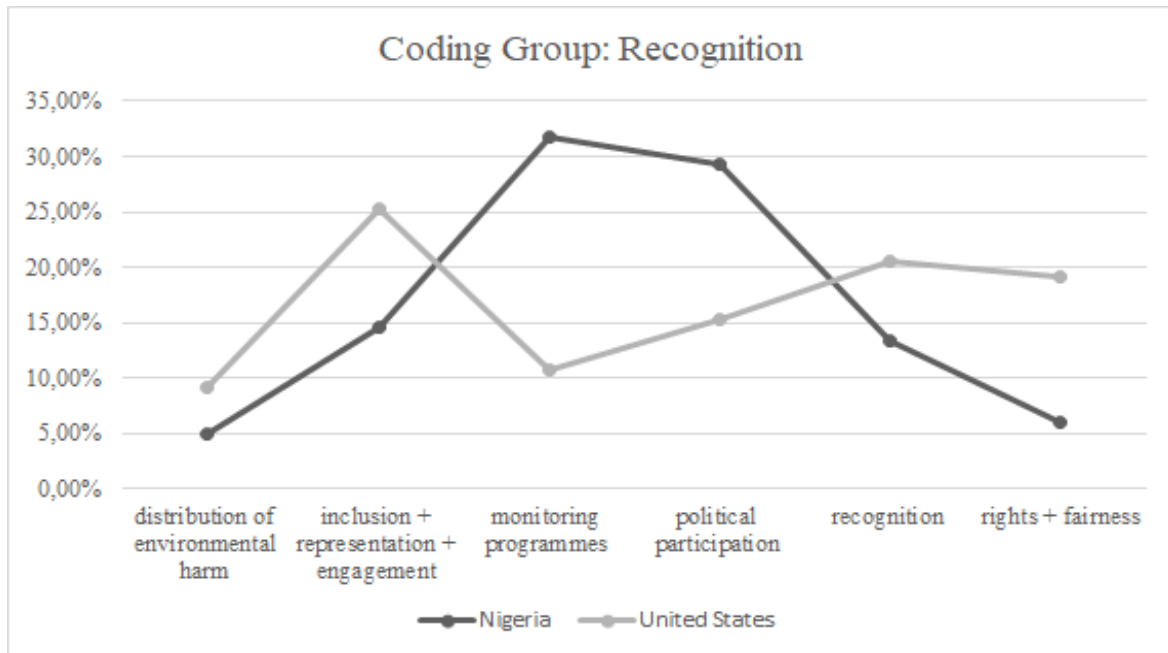
3 Codes:

○ communities / ○ local + tribal / ○ recognition

Alaskan Native corporations are not included in the notion of Indian tribe or community, according to this quotation. Consequently, it also implies that Alaskan Natives are not eligible for special services for their land received from the US. This frame constitutes a sense of misrecognition, when it comes to tribal and native communities in the US and the equal treatment and is therefore crucial in understanding where and when (mis)recognition takes place.

Comparison

This theme is represented differently in both case studies. While Nigeria emphases political participation and monitoring of actions by oil companies, the US focuses on the recognition of the local and tribal communities as well as their inclusion and rights. In both cases however, this theme has not been represented as much as the other themes thereby showing its inferiority. In the table below, it is noticeable that the foci in each case study differ, and it could be argued to be the complete opposite.

Figure 5: Coding Results Recognition

5.6 Conclusion

The results have shown several overlapping patterns and frequencies but most indicators and codes show diverging results in both case studies. This was particularly laid out in the comparison section for each theme. The themes which are more specific, such as capabilities and recognition, the results are also more peculiar and therefore need more thorough explanations with the help of credible sources. By first checking a small sample of policies with the selected codes, I was able to do a summative check and change the code categories slightly in order to have a more stable set of codes throughout the whole analysis and I was hence able to contribute to a formative reliability check before working through the complete set of policies. The achieved results support the overall argument

6 Discussion

6.1 Introduction

This research aimed to find out to what extent the government's impacted environmental justice towards the residents and communities living close to the place of oil and gas explorations and how the theories of capabilities and recognition were able to explain these phenomena. In this chapter, I will reflect on the results both empirically and theoretically. Furthermore, I will expand on the theory of recognition to put more focus on the issues at stake and find solutions for increased awareness and hence environmental justice. How the research questions relate will be outlined in the conclusion.

The oil and gas industry is politically significant for governments. Through economic cooperation of governments and corporations, common aims are emphasised while community capabilities are disregarded, impairing fundamental functionalities. Community groups are under-represented in political participation leading to a lack of common ground in decision-making processes. Lack of enforcement of outdated policies, misunderstanding help, and disregarding future generations are ways to look at environmental justice more broadly. With the future in mind, there needs to be closer attention to context-specific particularities as well as stricter policy guidelines.

6.2 What have we learned from the results?

The policy papers presented findings tracing back to the concepts of justice, particularly looking at environmental, climate and energy justice. As government policies were selected, the scope is at state-level. In the US and Nigeria, "oil has become a very decisive element in defining the politics, rhetoric and diplomacy of states" (UN, 2007,p.2). Although policies numbers are increasing, they are regularly framed excluding the actual problem they are aiming to solve. "For instance, the NESREA and Mining Act exclude the oil and gas industries. The NESREA Act stipulates that the agency has the powers to evolve and review existing guidelines, regulations and standards on the environment except in the oil and gas sector. Similarly, the Mining Act gave a definition of a mineral that completely excludes petroleum. These acts have made the oil and gas industry a 'no go' area and have sent the wrong signal to operators in the sector. Such a lack of sincerity on the part of the government is not helping environmental management"(Adekola, Whanda & Ogwu, 2012,p.675).

Anthropogenic actions regarding EJ frames become apparent in this paper's policies. The main impact on EJ is claimed to be due to governments' decision to allow drilling or to work together with multinational oil companies facilitating gas extraction, mainly for economic gain. This claim, however, disregards the objective of governments to provide a just society and well-being for all. Therefore, the government policies are framed to create meaningful content for some while disregarding others, leading to an injustice.

Frames of environmental justice can thus be argued as an attempt to conceptualise justice in the realm of the selected policies and case studies (McCauley, 2017). In support of the results, Walker and Fraser researched the relationship between frames and environmental justice. Frame creation is based on normative and ethical assumptions of a group (e.g., government) about a frame centre (e.g. marginalised communities both economically, politically as well as environmentally) and a call for attention about a specific situation (oil and gas-based energy extraction) (Walker, 2009). Therefore, it can be argued that policy frames are a collective action frame aiming to reach a prognosis and recommendations and change for the future. The notion of normative and ethical aspects automatically also connect capabilities and recognition.

How does this relate to the coding results?

A set of capabilities for every human being as a matter of justice has been fulfilled to a certain extent, but not fully. Health, air and water quality were emphasised and appeared frequently. In contrast, capabilities of safety and security were not covered to the same extent. Therefore, it can be argued that a pattern appears. The negative "impacts of health and safety of local communities [result in] social unrest and significant security challenges" (International Finance Corporation, 2019). As previously mentioned, the state provides policies and legislations have a certain degree of accountability and responsibility where "the needs of the people are not sustained [...] Democratic governments are in part legitimated by meeting their custodial obligations to their citizens" (Oppenheimer, 2012,p.234).

Furthermore, governments, providing basic commodities of living, often phrased as economic stability and income, are offering so-called "aid" to communities close to extraction and drilling sites for employment purposes. As visible in the results, the economic stability code belonged to community capabilities. However, economic stability in this sense can have paradoxical prospects. On the one hand, as argued by a Republican Party Member in the New York Times (2020),"thousands of Alaskans are employed in our oil industry, and their livelihoods depend on the good-paying jobs created by our state's reserves, [today] we are one step closer to securing a bright future for these Alaskans and their families" (Plumer & Fountain, 2020). Revenue from oil reserves is crucial for the state's economy and its development. On the other hand, however, jobs within this sector do not acknowledge the impacts they have on the liveability of the area for the residents. Both Alaska and the Niger Delta areas have suffered from widespread environmental degradation through oil spills or gas flaring, as visible in the results, thereby destroying key resource-rich livelihoods for the indigenous communities (UN, 2006; Atanda, 2015). And as the aforementioned claim by Westra, this aid by the state is provided without recognising what local residents' appropriate help would be. Furthermore, most of the assets gained by activities in the industry do not go back to local community but end up in the accounts of corporations.

Referring to this, Ipingbemi (2009) argued that when oil pipelines are laid out, often crossing villages, residents' farmland becomes inaccessible, leading to immobilisation of their economic activities. Next to farmlands being the communities' primary source of income, these often have cultural

and spiritual significance (UN, 2007). This consequently leads to "people [being] dislodged from their traditional economic activity without any alternative. [...] The negative externalities of oil production are borne solely by the oil-producing communities without adequate compensation" (Ipingbemi**,** 2009,p.10). Particularly in Nigeria, emigration has become a norm. Environmental refugees in difficult economic situations, "have [...] to take up accommodation in shanties, slums and waterfronts with its attendant risks especially in terms of rights protection [which recently] have been facing demolitions by the government" (UN, 2007,p.10-11).

After looking through patterns and frequencies from the results, it becomes apparent that welfare and well-being is intertwined with justice and fairness. Moreover, injustices experienced by humans are as crucial as by animals. In support of the results, animal species and the protection of biodiversity are vital within the policies. Schlosberg explains a "shift [...] from environmental conditions as an example or manifestation of social injustice to one where justice is applied to the treatment of the environment itself" (Schlosberg, 2013,p.44). This again links to the capabilities laid out in the coding scheme in which human needs and environmental resources are inherently intertwined. In contrast to the protection of animal species and biodiversity however, the relationship of humans with nature has been disregarded. One reason for this is that, due to decades of environmental racism and colonial oppression, the interconnectedness between nature and culture has been dichotomised (Shaw, 2017). Consequently, Schlosberg argues, "when we interrupt, corrupt, or defile the potential functioning of ecological support systems, we do an injustice not only to human beings but also to all of those non-humans that depend on the integrity of the system for their functioning. It is the disruption and increasing vulnerability of the integrity of ecosystems that is at the heart of the injustice of climate change, for example, both in terms of its impact on vulnerable human communities and non-human nature. The treatment – or abuse – of human and non-human individuals and systems is based on the same loss of the ability to function" (Schlosberg, 2013,p.44). This automatically links to the theme of recognition as "there is much more recognition of the way that those natural systems support the functioning of human communities" (ibid.,p.47).

This way, not only climate justice and environmental justice, but also recognition and capability theory adjoint. All factors realise how crucial environmental resources are for indigenous communities in order for them to live in conditions that "provide for individual and community needs and functioning" (Schlosberg, 2013,p.48). Taking this one step further, Star argued that "elementary human rights are implicated through the issue of environmental refugees: "the fundamental principle of justice [states] that every individual is entitled to the protection of a state in a territory where they can earn the necessities of life" (Star, 2004,p.7).

How do the results relate to the methodology?

The use of content analysis brings about a set of points for potential as well as some limitations. Systematic coding with the use of coding schemes generates clarity in a large set of policies. Moreover, counting codes in percentages makes it easier for the reader to understand the results and it helps to compare them, albeit of different policy volumes. The mix between qualitative analysis with quantitative summing of results serves as an innovative feature. Through the use codes, patterns and frequencies, this method can serve as a way to inform policy makers. Due to the cross-national scope, it is thus also policy to adopt this method to different countries, as visible in this paper. Besides, there is potential to use policy content analysis while focussing on a specific timeframe to research why and how policies have changed. Having both open as well as theory-guided phases in the analysis serves as a useful way to identify relevant frames.

Limitations include that claiming and coding requires one to know the content of policies beforehand. The bigger the research, thus the volume of policies is, the more difficult it gets to become familiar with the content. This may result in time-consuming changes within the coding process.

6.3   What does this mean on a broader scale?

In this paper, spatialities and scales of frames are directed at the state and local level. The problem of injustice is experienced by the local communities close to oil and gas extraction fields due to state level policy frames. Referring to this, Fraser argues that "the emphasis is on the call for 'authorities' and 'policy-makers' to recognize under-represented groups [...] Framing research emphasizes, in contrast, the need to explore such processes among those who are 'under-recognized in order to gain insight into the success or not in mobilizing injustices" (McCauley, 2017, p.6). While both state and communities account as critical agents in this paper, its multi-spatial and multi-scalar character brings about relevant insights from capability and recognition theory. In this way, social aspects of justice as well as the environmental and the different scale frames and spatialities are all combined in this paper, aiming to investigate where injustice is generated, how it evolves, and how it "needs to find opportunities for forging common ground with others concerned with patterns and processes of inequality and injustice from local to global levels [with the primary objective to] achieving more progressive global social policy" (Walker, 2009, p.377).

The capability and recognition theory yielded results with a variety of conclusions, specifically for governments and policies at stake. The framing-recognition-capability triangle acquired evident innovative responses. Capabilities are instrumental for environmental justice, and if capabilities cannot be satisfied, nor can justice. Moreover, if capabilities are not fulfilled, it is not possible to achieve recognition from governments and vice versa. The framing theory helped to achieve clarity. Broadly speaking, the methodology of conducting research and the combination of the three theories acquired

innovative features. These include its practical capacity, which can be used operationally for conducting plans for sustainable transitions.

What are effects of disregarding capabilities and recognition?

One aspect of community capabilities was health and a satisfying level of well-being and welfare. Although health was not equally emphasised in both case studies, the health impacts can be considered to be more assertive towards the local communities than concerns of welfare. Tribal communities are exposed to Polychlorinated Biphenyls (PCBs) transferring to Alaska in ocean currents and marine food chains, impacting marine life and water quality. Rising levels of these pollutants, which emerge from toxic waste, among others from offshore drilling activities, pose risks to reproductive health as "breast milk can transfer PCBs from mother to child" (Kovacs, 2019,p.42). Consequently, this poses health threats to Alaskan tribal communities. Kovacs continues to argue that "Alaska Natives should not simply be asked to stop eating their traditional diets because PCBs and other chemicals contaminate them. These are practices grounded in their cultural identity and ancestral tradition" (Kovacs, 2019,p.46). It can therefore be argued that reproduction is a part of community functioning and therefore of basic capabilities which are "central to many environmental justice movements" (Schlosberg, 2013,p.43). In the policies at hand, in both Nigeria and the US, health was one of the indicators that often appeared in combination with the protection of the environment and oil spills and hazardous substances. While we can confirm that there is distributional injustice, the most pressing issue at stake is the lack of awareness and recognition for tribal communities.

Environmental Justice globally

Linked to the results of this paper, there are cases of similarities in other parts of the world and not just within the oil and gas sector. A case study in South Africa shows that environmental injustices are appear in the mining sector. This case uses the theory of political ecology as a framework for the study. In support of the framing theory, it also acknowledges the need to adopt more multi-spatial scales for analysis (Leonard, 2018). There are particular concerns about environmental justice when looking at the post-Apartheid era. The government needs economic income from mining for social welfare reasons, however, the environmental impacts of those mining sites are rarely taken into account (ibid.). Leonard argues that "mining commenced in 1886 and it had the support of the apartheid government, regrettably this has not changed. [...] Politicians are now eager to also exploit prospecting mining resources or rights" (ibid.,p.7). Linked to this, politics converged with race-based communities. "Thus, owing to the high unemployment rate in South Africa, people especially in marginalised areas, have focused on securing basic needs and have not necessarily engaged in broader environmental justice struggles. This has also made it difficult for marginalised local communities to expand environmental justice issues beyond localities to broader macro-economic processes" (ibid.,p.9). The government is therefore using this situation to facilitate mining activities in protected areas, against local opposition.

Environmental justice based on capability theory and framing is similar to the study at hand. In contrast to this paper's study, recognition is not focussed upon here. Instead, Leonard highlights the notion of citizen leadership in the struggle for environmental justice. This thought links to codes of participation and equality and the salience of systemic equity as well.

The lack of recognition becomes particularly clear in local African communities from Chocó at the Atrato River in Colombia. Lack of recognition is associated with the protection of fundamental rights for the local communities regarding bio culture. The study is about local communities' actions to ensure social and cultural recognition and political participation, and collaboration with other stakeholders (Roncucci, 2019,p.51). It shows the development of an environmental justice movement to let their voices be heard and gain political visibility in front of the state (ibid.). Due to their historical significance regarding slavery, there is also uneven recognition of indigenous people and Afro-Colombians. However, "through this action, local communities were demanding to set the Atrato free since it didn't belong to anyone. [...]The study shows that communities were asking for spaces of social participation for the conservation of the environment, areas of awareness against pollution of water sources, strict monitoring of procedures illegal miners, popular consultations in favour of protection of the ecosystem and (limited) impact on the agenda-setting" (ibid.,p.53f). In this case, the recognitional dimension is particularly highlighted, whereas the notion of frames and capabilities get less attention. Just as in this research, the Atrato Case also emphasises the participation and cultural significance of people and their natural surroundings. In this case, the state's role is however less emphasised as different roles of stakeholders such as NGOs are equally evaluated.

The relationship between the environment and human needs is vital in the capabilities approach. The failure of addressing these issues are due to a lack of recognition for the just treatment and functioning of both (Schlosberg, 2013). In both cases, compensation by operations of multinational oil companies offers an inadequate method to steer communities away from their burdens. Compensations matter as a form of recognising what has been done and that it is fair for the polluter to pay, but it does not fully provide sustenance for environmental justice. As compensations are a simple fix, multinational companies tend to lean towards those without affecting their initial operations. This serves as a form of misrecognition of indigenous communities, as they are still marginalised, they still need to bear the burden of environmental hazards, and the importance of environmental resources as a functioning of living has not been recognised. This misrecognition has been investigated within "contemporary resource management and development scenarios [that] often have environmentally unjust consequences because they are predicated on a peculiarly Western way of apprehending the world that is fundamentally in conflict with traditional Indigenous perspectives" which intrinsically leads to unique conceptualizations of nature representing a form of cultural misrecognition (Shaw, 2017,p.507). Consequently, misrecognition generates distributional, procedural, and structural depreciation.

6.4   What should we emphasize more thoroughly in the future?

Although the US is a democracy, the government is not acting democratically to satisfy basic capabilities for all their citizens equally, particularly concerning native communities in Alaska. The US has a high poverty rate but meagre social welfare spending compared to other OECD countries (Oppenheimer, 2012). Furthermore, albeit being a democracy, Nigeria also does not fully take care of the basic capabilities due to high levels of corruption.

Referring to this, dominating corporations in the oil and gas industries "continue with flagrant disregard for legislation and directives. […] The importance of the activities of the oil industry has made enforcement agencies unwilling to perform their duties as expected and even judges very reluctant to grant injunctions even when activities are detrimental to wetlands" (Adekola, Whanda & Ogwu, 2012,p.675). This leads to one of the main issues at stake resulting from the analysis, lack of enforcement, as the "most fundamental cause of inability of the legislation to protect the environment" (Atanda, 2015,p.10). The Nigerian government works closely with and allows free reign of the multinational oil companies resulting in lack of compliance or compensation mechanisms for oil spills or the flaring of gas (Faga & Uchechukwu, 2019; Rhuks, Ako, & Olawuyi, 2017; Oppenheimer, 2012; UNDP, 2014). Moreover, regulations are not enforced strictly due to "conflicting jurisdiction of separate governmental agencies governing petroleum and the environment as well as because of non-transparent governance mechanisms" (Uchegbu, 2014,p.3). For instance, with regards to gas flaring, "although abolished [in policies], the practice is still obtainable [...]" (ibid.,p.1). This is often due to "on one hand, the commodity [being] the major driver of the Nigerian economy and, on the other hand, Nigeria lack[ing] the technical knowhow to exploit the commodity, leaving it with less bargaining power" against the oil companies" (Faga & Uchechukwu, 2019,p.217).

Many of the policies are also outdated and do not provide suitable solutions in a fast-changing environment (Ipingbemi, 2009; Uchegbu, 2014). In this socio-political regard, "governments seek the path of least resistance when siting new hazardous waste or polluting industrial facilities. [...]Poor communities and communities of colour become an easier target because they have fewer resources and are not well represented in the decision making of industry and government" (Mohai, Pellow & Roberts, 2009,p.414). It becomes clear that procedural and structural inequities build the backbone for the lack of enforcement whereby the small communities have to bear the burden of unequal possibilities.

To achieve recognitional and thus environmental justice, national and regional governments need to "attend to the 'situational particularities' of each group, including not only their unique customs and worldviews but also the colonial histories and processes that have shaped their current economic and political realities" (Shaw, 2017,p.510). Above all, native communities need to be able to cooperate with decision-makers and companies "provid[ing] them with some measure of political power over their lands" (ibid.). To increase recognition, take care of context-based capabilities and accelerate

sustainable change, there are various themes needing closer attention. So far, I have made claims about injustices ranging back to normative articulations within policies. I will investigate counter-frames in the form of solutions. I have developed a ten-point recommendation plan for increased environmental justice, more recognition, and sustainable energy development. This is specifically directed at the state level, where policies originate.

Table 3: Policy Recommendations

Standardised regulations with stricter enforcement mechanism	Operational policy guidelines for each country are necessary, including environmental justice concerns and rights of development for indigenous communities (UN, 2007). These regulations need to be legitimised based on context-specific norms and formulated into legislations (UNDP, 2014). This is also particularly relevant timeframes of phasing out hazardous ways of oil and gas spillage.
Public-Private Partnerships and Cooperation	Companies and governments need to cooperate with localities and reach conclusions together regarding, e.g., oil spill compensation. Good cooperation is necessary if policies are to be implemented successfully (Ipingbemi, 2009). For governments, it is crucial to make private sector companies adhere to legislation and support environmental policies, albeit companies being outsourced (Kaphengst & Smith, 2013). Only collective action will serve future generations with a sustainable policy basis.
Active Engagement	Monitor Programmes of explorative activities need to expand, same as active engagement and voicing of issues by political parties and citizens in e.g. social movements. Politicians need to add environmental justice issues to campaigns and make them a global concern.
Strategic Management	There needs to be a synthesis of thoughts and actions between policies, institutions, and normative articulation (Bowen & Wells, 2002). The national policy agenda needs to work on local and national problems simultaneously and give them equal agenda-setting.
Participation and Inclusion	Views of indigenous contractors within the supply chain need to be as represented as national and international contractors to lead to better benefits for both economically, politically, and socially (UNCTAD, 2006). Moreover, representation of perspectives will lead to inclusion rather than alienation regarding interconnectedness with rural nature and culture. Mutual respect and

	reciprocity rather than domination will open up doors reflecting traditional norms and contemporary concerns (Shaw, 2017).
Stricter Sanctions	Oil companies must monitor extraction sites, adhere to national and supra-national regulations. If legislation is ignored, stricter sanctions need to be introduced, making it more challenging to abort the situation (Ipingbemi, 2009). For instance, bringing companies and governments before the court if they do not adhere to climate targets.
CSR for Oil Companies	Companies need to adhere to national legislations and law enforcements but also in their activities, increased corporate social responsibility regarding security, human rights, transparency and social and environmental justice is necessary, specifically when companies are outsourced to rural areas where indigenous populations reside (Kaphengst & Smith, 2013).
R&D and Technology Investments for Energy Development	Increased investments into the design of new technologies for more sustainable ways of producing energy will lead to environmental justice and more jobs for rural communities (Schlosberg, 2013). Expertise needs to include "alternative forms of knowledge and representations of nature" (Shaw, 2017,p.508)
Focus on Renewable Energy	Local energy generation through solar and wind is possible in many areas close to the ocean. A just energy transition will replace environmentally destructive energy production sites and hazardous substances. Instead of unsustainable practices such as oil drilling, companies, and local communities can engage to institutionalise sustainable practices, leading to reconnection and reconstruction of their environment (Schlosberg, 2013).
Increased Accountability and Ownership	Governments and oil companies need to show more sense of ownership in their activities and policy-making processes. Only when adapting to specific contexts will it be possible to achieve equality and equity (Shaw, 2017).

7 Conclusion

This study aimed to answer the research question, *"To what extent do oil and gas exploration policies impact local communities regarding environmental justice and how are they framed by governments?"* In order to do so, the study selected 20 policy documents of the US and Nigeria on the topic of oil and gas exploration and indigenous communities, and a content analysis of these policies was executed in order to explore what impact of environmental justice and its associated concepts of climate justice, energy justice, and environmental refugees, made on these communities through the facilitation of oil and gas exploration. With the help of a coding scheme entailing four themes with around seven codes, the policy documents were coded and analysed.

The overall results showed that awareness and recognition of communities living alongside their natural environment is deficient despite its concern for environmental matters and biodiversity. This is due to the lack of enforcement, sense of ownership, and accountability mechanisms by the government to frame their policies so that oil companies and other stakeholders are free to manoeuvre in their environmentally harming oil and gas extraction practices is visible through the frames. It becomes clear that frames about environmental justice are globalising and thus constantly influx. However, policy-makers fail to acknowledge changes within politics and changing articulations of justice. Consequently, the result is that policies have not been updated for decades, thus giving multinational oil companies reign for activities that are harmful for the communities residing at the site and for the justice of future generations who have to bear the burden of climate change and global warming.

The results and discussion also show that community capabilities can remain on a rather generic level within policy papers when these are recognised in a way that allows for context-based differences. Generally speaking, if societal differences of communities are recognised at the state level, and they make sure that basic capabilities for their particular way of life is recognised, they are treated environmentally just. However, this is not the case, as not all basic community capabilities are fulfilled, and differences are not recognised properly. The policy frames show that safety, health, and access to resources are there but on a superficial basis. Governments and multinationals do not take enough ownership of the activities they are fulfilling and how their actions impact indigenous communities with little to no leverage. The support and encouragement of environmental justice towards local citizens are voiced mildly but in a way that is not fundamentally changing the ways of just treatment and right-worthy acknowledgment towards them and the natural environment around them. "The environmental consequences of the Anthropocene require collective action that takes uncertain futures seriously, not as an endpoint or some utopian ideal, but as a matter of everyday life. Part of this challenge is to develop new understandings of how embodied, every day, and planetary realities are being reimagined in environmentally just and sustainable ways" (Houston, 2013,p.442). Only by changing fundamental guidelines within policy-making activities and working together with public-private partnerships, giving all parties equal say and listening to what is changing in society with regards to substance-gaining

environmental justice concerns will it be possible to change current environmental injustice to environmental justice for indigenous communities in the future generations.

As an addition to existing literature, this research along with its results, the way it was conducted and the recommendations for future transition offers a new way of looking into the policies and what they mean. Issues of environmental injustice concerning indigenous and local communities affected by consequences from activities within the oil and gas industry and the way these are narrated in policies have become apparent with the help of the selected theories. But there are practical steps to achieve more capabilities and recognition while at the same time moving towards a more just society, inclusive policies, transitions towards a sustainable energy future. The comprehensive theoretical framework cover two of the sub questions. The combined discussion section entailing empirical and theoretical reflection, reflecting the analysis results specifically as well as from a broader perspective and outlining recommendations for policymakers to achieve environmental justice becomes well-defined and sums up the research questions and the associated sub questions. Local communities affected by oil practices present the close relationship between recognition, capabilities and justice connecting current environmental matters, cultural practices and energy issues. The conclusion shows that the state's policies and associated actions are lacking awareness, accountability and understanding towards all of its citizens resulting in environmental injustices. Nonetheless, with newly developed strategies, these injustices can be overcome and policies can be more up-to-date, inclusive and legitimate for all.

7.1   Implications for further research

If the scope of research could have been extended, it would have been possible to include views of supranational organisations such as the UN. Moreover, NGOs' views and policies could widen the scope and include more opinions allowing for critical analysis and a more fruitful discussion. As a recommendation for further research, this would also increase the generalisability of this study. By including more stakeholders and possibly a bigger sampling size, a quantitative analysis would work better. Although, I also consider an even more small-scale context-based approach interesting for further research. Particularly following the theories of recognition and capabilities, it would be interesting to conduct field research and interviews with locals and see if this would generate more thorough insights into the live capabilities and interaction with the government. On the other hand, another implication would be to do interviews with those specific policy-makers and stakeholders in the oil and gas sector to hear their opinions on environmental justice linked to their work practices.

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9 Appendices

9.1 Appendix A: Capabilities Alaska, US

Set of 10 Capabilities for the native community in Alaska close to the oil exploration fields
Note: this set of capabilities was created according to the the theory by Martha Nussbaum and Amartya Sen

Created by: Tanja Tüffers on April 22nd 2021

1. equality and respect towards all other peoples
2. "respect for indigenous knowledge, cultures and traditional practices" (UN General Assembly, 2007, p.5)
3. political self-determination and right to self-government
4. economic dependence on revenue from oil
5. access to clean water
6. food security + access to natural resources for nutrition
7. living in, protecting and using the natural environment around them
8. ability to reside and live in their local land and within their community
9. bodily health
10. right to own education and language

(see also (UN General Assembly, 2007)

9.2 Appendix B: Capabilities Niger Delta, Nigeria

Set of 10 Capabilities for the local community in Nigeria close to the oil exploration fields
Note: this set of capabilities was created according to the the theory by Martha Nussbaum and Amartya Sen

Created by: Tanja Tüffers on April 22nd 2021

1. economic dependence on revenue from oil ((Ojo & Tokunbor, 2016)
2. eradication of poverty
3. access to clean water
4. food security + access to natural resources for nutrition, such as "agricultural
5. production, fisheries, livestock grazing, and forestry" (Adekola, Whanda & Ogwu, 2012, p.666)
6. equal engagement in political decision-making
7. bodily health
8. security in their homes
9. living in, protecting and using the natural environment around them
10. cultural rituals

9.3 Appendix C: Coding Scheme

Note: This coding scheme is used for both case studies Alaska, US and Nigeria. This way, it will be more coherent for comparative purposes.

Project: Thesis

Report created by Tanja Tüffers on 29/04/2021

Code Report – Grouped by: Code Groups

Selected codes (27)

Climate & Environment

6 Codes:
○ animal species
○ climate change
○ emissions
○ pollution
○ protection/harm of the environment
○ soil, water, air quality

Community Capabilities

8 Codes:
○ access to resources
○ capabilities of well-being
○ communities
○ economic stability
○ health
○ interdependence of nature + culture
○ local + tribal
○ safety

Energy (Oil + Gas)

7 Codes:
○ compensation
○ energy development/innovation
○ exploration + drilling
○ flaring
○ hazardous substances & toxic waste
○ oil spills and discharge

○ oil and gas based energy systems

Recognition

6 Codes:
○ distribution of environmental harm
○ inclusion + representation + engagement
○ monitoring programmes
○ political participation
○ recognition + awareness
○ rights + fairness

9.4 Appendix D: Analysis; text search examples and synonyms

Example: Community Capabilities Theme - Text Search

Example of selected synonyms for recognition

recognition:
synonyms:
- awareness
- consciousness
- perception
- understanding
- acknowledgement
- valuation
- appreciation
- custom

distribution:
synonyms:
- share

recognising difference
synonym:
- variance
- diversity
- differentiation
- distinguish
- contrast

Rights and fairness
synonym:
- justice
- integrity
- fairness
- equity
- uprightness
- lawful
- righteously
- impartial
- fair
- equitable
- rational
- just

9.5 Appendix E: Summary Analysis

Column1	Climate & Environment Gr=388; GS=6			Community Capabilities Gr=384; GS=8			Energy (Oil + Gas) Gr=308; GS=7			Recognition Gr=174; GS=6			Totals	
	Absolute	Column2 Row-relative	Column3 Column-relative	Absolute	Column4 Row-relative	Column5 Column-relative	Absolute	Column6 Row-relative	Column7 Column-relative	Absolute	Column8 Row-relative	Column9 Column-relative	Absolute	Column10 Row-relative
ENVIRONMENTAL GUIDELINES AND STANDARDS FOR THE PETROLEUM INDUSTRY IN NIGERIA (EGASPIN) Gr=76	45	29,80%	11,60%	59	39,07%	15,37%	33	21,85%	10,71%	14	9,27%	8,05%	151	100,00%
environmental-impact-assessment-eia-decree-no-86-1992 Gr=14	4	17,39%	1,03%	10	43,48%	2,60%	4	17,39%	1,30%	5	21,74%	2,87%	23	100,00%
ESC Plan Gr=25	3	8,57%	0,77%	16	45,71%	4,17%	8	22,86%	2,60%	8	22,86%	4,60%	35	100,00%
Flare Gas (prevention of waste and pollution) Regulation Gr=8	2	12,50%	0,52%	5	31,25%	1,30%	8	50,00%	2,60%	1	6,25%	0,58%	16	100,00%
National Environmental (Energy) Regulation Gr=19	14	45,16%	3,61%	2	6,45%	0,52%	11	35,48%	3,57%	4	12,90%	2,30%	31	100,00%
National Environmental (non-metallic minerals manufacturing industries sector) Regulation Gr=15	7	31,82%	1,80%	4	18,18%	1,04%	7	31,82%	2,27%	4	18,18%	2,30%	22	100,00%
NATIONAL ENVIRONMENTAL STANDARDS AND REGULATIONS ENFORCEMENT AGENCY (ESTABLISHMENT) ACT, 2007 Gr=22	18	42,86%	4,64%	9	21,43%	2,34%	10	23,81%	3,25%	5	11,91%	2,87%	42	100,00%
National Gas Policy 2017 Gr=27	5	10,64%	1,29%	17	36,17%	4,43%	17	36,17%	5,52%	8	17,02%	4,60%	47	100,00%
National Oil Spill Detection and Response Agency (Establishment) Act Gr=14	6	16,67%	1,55%	11	30,56%	2,87%	13	36,11%	4,22%	6	16,67%	3,45%	36	100,00%
National Petroleum Policy Gr=23	9	18,37%	2,32%	17	34,69%	4,43%	14	28,57%	4,54%	9	18,37%	5,17%	49	100,00%
ngfcp-pim-rev1 Gr=9	5	29,41%	1,29%	2	11,77%	0,52%	8	47,06%	2,60%	2	11,77%	1,15%	17	100,00%
Nigeria_Environmental_Protection_Agency_Act _1988 Gr=18	12	41,38%	3,09%	6	20,69%	1,56%	6	20,69%	1,95%	5	17,24%	2,87%	29	100,00%
2007 americn indian and alaska native polic of the us census bureau Gr=10	0	0,00%	0,00%	9	47,37%	2,34%	0	0,00%	0,00%	10	52,63%	5,75%	19	100,00%
Coastal Plain Oil and Gas Leasing Program Environmental Impact Statement U.S. Department of the Interior Bure[1021] Gr=179	86	32,21%	22,17%	86	32,21%	22,40%	61	22,85%	19,81%	34	12,73%	19,54%	267	100,00%
COUNCIL ON ENVIRONMENTAL QUALITY 40 CFR 2020 Gr=45	25	38,46%	6,44%	23	35,39%	5,99%	0	0,00%	0,00%	17	26,15%	9,77%	65	100,00%
DEPARTMENT OF THE INTERIOR Bureau of Ocean Energy Management, Regulation and Enforcement 30 CFR 2011 Gr=11	8	40,00%	2,06%	7	35,00%	1,82%	4	20,00%	1,30%	1	5,00%	0,58%	20	100,00%
energy policy act 2005 Gr=41	24	40,00%	6,19%	14	23,33%	3,65%	14	23,33%	4,54%	8	13,33%	4,60%	60	100,00%
Executive Order 13990 of January 20, 2021 Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis 2021 Gr=13	11	42,31%	2,83%	5	19,23%	1,30%	7	26,92%	2,27%	3	11,54%	1,72%	26	100,00%
Executive Order 14008 of January 27, 2021 Tackling the Climate Crisis at Home and Abroad 2021 Gr=27	21	35,00%	5,41%	18	30,00%	4,69%	11	18,33%	3,57%	10	16,67%	5,75%	60	100,00%
Federal Oil & Gas Royalty Management Act of 1982 Gr=13	0	0,00%	0,00%	11	52,38%	2,87%	4	19,05%	1,30%	6	28,57%	3,45%	21	100,00%
oil pollution act 1990 Gr=37	28	40,58%	7,22%	10	14,49%	2,60%	27	39,13%	8,77%	4	5,80%	2,30%	69	100,00%
PART 300 - NATIONAL OIL AND HAZARDOUS SUBSTANCES POLLUTION CONTINGENCY PLAN 2015 Gr=77	55	36,91%	14,17%	43	28,86%	11,20%	41	27,52%	13,31%	10	6,71%	5,75%	149	100,00%
Totals	388	30,94%	100,00%	384	30,62%	100,00%	308	24,56%	100,00%	174	13,88%	100,00%	1254	100,00%