International Institute of Social Studies

Grafing

The Impact of Oil-bunkering 'kpo-fire' in Nigeria: A Gender Perspective

A Research Paper presented by:

LINDA EGBUBINE

(NIGERIA)

in partial fulfillment of the requirements for obtaining the degree of MASTER OF ARTS IN DEVELOPMENT STUDIES

Major:

SJP

Specialization: Environment and Sustainable Development

Members of the Examining Committee:

Wendy Harcourt

Murat Arsel

The Hague, The Netherlands December 2023

Disclaimer:

This document represents part of the author's study programme while at the International Institute of Social Studies. The views stated therein are those of the author and not necessarily those of the Institute.

Inquiries:

International Institute of Social Studies P.O. Box 29776 2502 LT The Hague The Netherlands

t: +31 70 426 0460 e: info@iss.nl w: www.iss.nl fb: http://www.facebook.com/iss.nl twitter: @issnl

Location:

Kortenaerkade 12 2518 AX The Hague The Netherlands

Contents

List of Tables	v			
List of Figures	v			
List of Maps	v			
List of Acronyms	vi			
Acknowledgments	vii			
Abstract	viii			
CHAPTER 1: INTRODUCTION	1			
1.1 What is the Research About?	1			
1.2. Justification Of Research Problem	4			
1.3 Organization Of Paper	8			
Chapter 2 BACKGROUND: LITERATURE REVIEW ON ILI	LEGAL			
BUNKERING/KPO-FIRE	10			
2.0 Introduction	10			
2.1 Discovery Of Oil In Nigeria: Bloom Or Doom?	10			
2.2 The Link between kpo-fire (Illegal) and Oil-bunkering (legal)	11			
2.3 kpo-fire and Nigeria's Economy	13			
2.4 kpo-fire and the Environment	14			
2.5 Breadwinner/Industrial Masculinities	16			
2.6 The Case of Bodo Community	18			
Chapter 3 METHODOLOGY/METHODS FOR ACQUIRING DATA	22			
3.0 Introduction	22			
3.1. Feminist Methodology	22			
3.2. MY POSITION AS A RESEARCHER	24			
3.3. Who are the Participants?	25			
3.4. Ethical Consideration and Limitations				

Chapter 4 KPO-FIRE IN BODO COMMUNITY				
4.0 Introduction				
4.1 The Everyday Life in Bodo Community Before kpo-fire				
4.1.1 The Emergence of kpo-fire	29			
4.1.2 Ecological Transformation of Bodo Community: Ecological War!	35			
4.2 The Women's Emotions	39			
4.3 kpo-fire and Household Labour Allocation				
4.4 How do the women see their life changing because of the kpo-fire?				
4.5 A Possible Way Forward? An Alternative?				
Chapter 5 Reflection and Recommendations	50			
Reference list	52			

List of Tables

Table 1: Source: Interview Data	25
---------------------------------	----

List of Figures

Figure 1: A kpo-fire man at work
Figure 2: Gas flares by international companies in Nigeria15
Figure 3: Setting kpo-fire products ablaze16
Figure 4: kpo-fire locations in Bodo West, Nigeria
Figure 5: Perewinkles
Figure 6: Cassava, an agricultural produce
Figure 7: 'Garri' product of the processed cassava
Figure 8: A container filled with polluted water
Figure Soot on the palm
Figure 10: Bodo river polluted by crude oil
Figure 11: Baripai by the Bodo river 40

List of Maps

Map 1- Map showing the Bodo community in Ogoni land

List of Acronyms

ISS	Institute of Social Studies		
ERAFoEN	Environmental Right Action Friends of the Earth Nigeria		
NGO	Non-Governmental Organization		
FPE	Feminist Political Ecology		
BBC	British Broadcasting Corporation		
UNEP	United Nations Environment Programme		

Acknowledgments

I acknowledge the giver of life and the reason for my existence; Thank you Yaweh. Words alone cannot express how grateful I am to my wonderful parents whose kind and reassuring words and actions kept pushing me through. Mr. Ernest Egbubine and Mrs Veronica Egbubine, thank you for instilling the love and quest for quality education and intellectual knowledge from an early age. To my ever supportive siblings, Prosper and Sandra who contributed to this journey I couldn't ask for better siblings to navigate this journey of life with. To my cousin, Ayomide Samuel, Mrs Peace Ayo, The Mathews, Clementina, Emaediong, and my supportive and compassionate partner S.vanAyo, thank you for the time and effort to make all this come through.

To my supervisor, Professor Wendy Harcourt who has challenged me in scholarly ways, to see things from a different perspective. I am grateful, you are the supervisor I hoped for and more. My second reader, Professor Murat Arsel thank you for believing in my capacity to carry out this research. I am also thankful to Dr. Julien-francios Gerber for your invaluable contribution that came at the perfect time during the course of this work. It is an honour to have encountered you all.

I am also thankful to my discussants Andrew, Sayema and Joycelyn for their constructive feedbacks during my seminar presentation.

Finally, Thank you to ISS for igniting my passion for environment and sustainable practices and creating a platform to learn and unlearn while making quality and lasting friendships. To the participants of this study, especially the women in Bodo community, A special thank you for sharing your experience and knowledge thereby making this research possible.

Abstract

The Niger Delta region of Nigeria suffers from environmental degradation due to fossil fuel extractions such as crude oil, leading to environmental and social injustices. This research paper explores the impact of this ecological degradation on the Bodo community in Ogoni land, Rivers state, Nigeria, looking at how kpo-fire (a local name for illegal refinery or artisanal refinery) shapes the behavior of the people living in the community. It specifically examines the gendered dynamics of these impacts with a focus on the women who are related to the men who engage in the kpo-fire. The RP examines the way men and women understand the impact of the po-fire, such as ecological degradation and economic livelihoods, to the 'invisible,' which includes women's knowledge, embodied experiences, and emotions concerning kpo-fire. Using story-telling, conversations, and in-depth unstructured interviews, the research paper serves as a vehicle to bring the voice of the marginalized women to the centre of the story of kpo-fire. Using a first-person narrative, pictures, and live videos, the research paper aims to capture the experiences of women, how kpo-fire emerged, the community concerns, and possible economic alternatives.

Relevance to Development Studies

The extraction of fossil fuels has become vital to growth, hegemonic development, and economic advancement worldwide despite its impact on the climate and the environment. By incorporating the voices of those marginalized by the discovery of fossil fuels such as crude oil in their region and the intensive extractive activities causing further underdevelopment in the area, this research contributes to discussions and writings on how extractive activities are experienced locally. It proposes a 'bottom-up' approach to the narrative of fossil fuel extraction. The relevance of this research also lies in its focus on women in the schemes of extraction going on in a particular region, an 'invisible' narrative in the journey of extractivism.

Keywords

Women, gender, care, kpo-fire, oil-bunkering, emotions, Bodo community, Ogoni, Livelihood, fishing, farming, unpaid care work, refining, oil companies, pollution, degradation, risk, everyday.

CHAPTER 1: INTRODUCTION

1.1 What is the Research About?

My research interest emerges from my own personal experience living and growing up in Port Harcourt, River state, a Niger-delta region in present-day Nigeria. Since I was a child, I observed how the people of the local community engage in Artisanal refinery or kpo-fire¹. kpo-fire is a slang used by the local communities. It received its name from the explosive noise produced when oil is used as fuel for refining. It is a straightforward fractional distillation method that utilizes resources from the neighborhood. These materials include welded-together metal pipes and drums used to boil crude oil. The resulting emissions accumulate in tanks after being cooled and condensed, and the end-product contains Kerosene, diesel, and fuel (PMS), which are used for transport, electricity, and heating (UNEP, 2011). The crude oil is refined to produce 2% kerosene, 2% fuel, 41% diesel, and 55% debris. (SDN, 2013). Large amounts of waste dumped carelessly on land and into the closest aquatic body after the items of interest are gathered cause environmental damage. The next refinement stage also uses a portion of the residue as fuel. (Ibietela, 2018).

Despite the illegality of kpo-fire, it has become a norm in the local community as a source of livelihood. The people in the community would prefer to patronize these locally refined products rather than going to the fueling station. As one local put it, "If I have a diesel plant in my house and I want to use diesel, and I see diesel at one place for \$2, and at another location for \$10, I think if you are in my shoes, you will go for \$2 because you want to save money". (Mike, 17th August, 2023). Hence, due to the cheap nature of these illegally refined products, the locals feel it is only rational to patronize them. It becomes a business of supply and demand. It is commonplace to see young men with gallons tied behind their backs heading towards the creeks to refine the crude oil locally. On their return, they would sell them to shops and anyone interested. Frequently, the women at dawn, after purchasing these locally refined oils, would push their wheelbarrows around, trying to sell this refined kerosene in smaller bits. Buy your Kerosene!' they would yell at the top of their voice to get customers. At home, one does not always need an alarm to wake up, and their cries are our constant way of knowing

¹ Through this research, I will be using "artisanal refinery", "illegal refinery" and "kpo-fire" interchangeably.

that the dawn has come. The journey to these creeks was always uncertain, as the same number of young men did not always return as those who had left. Explosions can occur at these creeks, with accidents and many lives lost.

I remember one day when we ran to the river when we heard about the death of some oil bunkers and saw the dead bodies who had gone to the creek two days before but didn't make it back alive. The bodies were discovered floating on the river and sent on a canoe back home. There was wailing and crying while the other kpo-fire guys who hadn't embarked on the journey were relieved they did not go. One would think such experiences would send fear through the spines of illegal oil bunkers. But no, the following day, a different set of bunkers set out to do *kpo-fire* business. While they set out, one woman whose son was among those who had died at the creek came to the riverbank to identify the body before the police officers came to transport the bodies to the mortuary. On identifying her son, she shed a tear, did some prayers, and left the riverbank. She seemed resigned and almost as if she was anticipating this outcome due to the nature of the activity her son was involved in.

These memories are my entry point into the stories and experiences of women related to the men who engage in kpo-fire. Despite the government's efforts to end artisanal refineries, this has proven futile; it is like filling a basket with water. In the *Punch* newspaper's March 2022 edition, Nyesom Wike, the then-governor of Rivers State, spoke out against artisanal crude oil refining and illegal bunkering. He claimed that Nigeria's economy would be weak and vulnerable if it continued unabated. The backbone of the country's economy, he said, was the oil and gas industry, and it was Nigerians' responsibility to guarantee that the economy prospers. It is the citizens' collective obligation to look for ways to keep the nation's economy going. Oil accounts for 80% of the nation's income; thus, if we cannot curtail or prohibit illicit oil bunkering, serious problems would result in our country's economy.²

So, despite the accidents and official opposition, why do the locals continue this practice? In my research, I bring to light the stories and perspectives of the communities, especially the women directly involved with these kpo-fire men, by being mothers,

² <u>https://punchng.com/oil-bunkering-security-agencies-involvement-frustrates-govt-efforts-wike/</u>

wives, sisters, daughters, and girlfriends to give their perspectives and explain why kpofire continues.

My research provides a window into the 'world' of these locals from a gender dimension. The many videos and pictures of the practice only show the men who are going through 'hell on earth' due to the risks of the job, which is seen as only for men. One participant stated: "Women can't do it; it is a difficult job." (Tonia, 4th August 2023). Another participant said, "It is the men who engage more in it; women cannot withstand it; it is a men's circle. They cannot allow a woman in their midst to cook or refine with them." (Favor, 20th July 2023).

This expression aligns with feminist writers who have observed: "Whenever women do a task, it is considered easy, and where men do it, it is considered difficult" (Mencher, 1988, p.104 in Butler, 1994, p.33). No doubt, kpo-fire is risky. "The number one risk is the explosion, which is the highest of them all; sometimes, we risk submerging in a pool of crude oil. We also risk getting injured by our storage equipment when carrying it to the sites through bush paths." (Mike, 17th August 2023). In addition, "For some person that doesn't know how to swim like me, when there is fire outbreak on the boat, they might drown, so people die every day." (Jay, 1st August 2023). Men in Niger Delta regions are the ones who suffer these fatalities due to their direct contact with the refining as they provide for the members of the families as the breadwinner of the household and perform their masculinities (Butler, 1994).

I am interested in the gender dynamics; what do the women feel, think, and do as their men risk their lives? What happens to the women when their male relatives are away? Can a better understanding of women's experiences illuminate gendered reality on the ground? What are their thoughts and perceptions towards kpo-fire? What are their emotions and concerns? How are they impacted by being relatives of these kpofire men? Has it changed the household labour allocation and focus on Agriculture? How has the community been transformed in the wake of the kpo-fire?



Figure 1: An illegal refinery worker, John Sowawi, pumps water into the distilling equipment used to refine the stolen crude oil. - Source: <u>http://www.aljazeera.com/gallery/2013/6/28/oil-theft-in-nigeria</u>

1.2. Justification Of Research Problem

According to Arsel et al., "The relationship between natural development has emerged as one of the contentious issues in development studies" (Arsel et al., 2016, p.1). Contextualizing this, one of Nigeria's ongoing issues is the illicit oil bunkering in the Niger Delta (Anyio, 2015). Given the speed at which illegal oil bunkering is spreading throughout Nigeria and causing associated issues, it is necessary to regard this issue as a serious threat to national security. (Ayodele et al., 2020). In the move against activities on the ecosystem that gives rise to climate change, researching illegal oil bunkering by incorporating the stories of the locals who are directly involved with extractivism by having fossil fuels in their regions helps to bring the viewpoint of marginalized groups in the fight against climate change, social injustice, and environmental injustice to the limelight. No one can tell the story better than those directly impacted by these environmental issues. Stories told by this marginalized community would help us remember the lived realities of their experience of social and environmental injustice (Di Chiro, 2015). This research helps us understand these locals' viewpoints on ecological degradation and injustice due to the extraction of fossil fuels—a situation of "environmental racism."(Martinez-Alier et al., 2014, p. 21), as extractivism intersects with patriarchy and oppression (Owen et al., 2023, p.71). Furthermore, exploring the research objectives and questions through a gender³ perspective helps to understand the way men and women experience the environment through their different work activities and responsibilities (Elmhirst and Ressurection, 2008). It encourages us to "look at the social and emotional aspects rather than frame everything from an economic perspective" (Harcourt, 2020, p.227).

It gives us a different and unique lens to "understand how women and men, as embodied and emotional beings, have complex and shifting relationship to the natural world that are embedded in place and shaped by intersections of gender, race, class, caste, culture, age is central to the search for environmental and social justice" (Resurrección, 2017, p.1). Gender is crucial in determining environmental change processes, sustainable livelihoods, and development possibilities. There are contributions in the realm of environmental Justice that show how feminist theory may be used to engage with environmental issues and study them in valuable ways. (Elmhirst, 2015).

I take this up in my RP in several ways. First, I focus on the lived experiences of the locals who have been marginalized due to the presence of fossil fuels such as crude oil in their region. Secondly, I amplify the voices of women who share blood/marital ties with the male oil bunkers through the realities of their everyday lives and bring women's situated and embodied experience to the center, "interpreting and re-interpreting their needs, their environment concerns, and issues pertaining to the security and well-being of their families, households, and community." (Rocheleau et al., 2013, p.289). Thirdly, I use this research to see how natural resources such as crude oil transform a community over time. Finally, my study contributes to the scholarly works of literature on gender dynamics, emotional ecologies, political ecology, and natural resources/extractivism.

³ While I am aware of the various categories of gender, in this paper I only refer to men and women

Research Questions

My main research question is: How are the women in the lives of the male oil bunkers in the Bodo community impacted? With three sub-questions:

- How has the Bodo community evolved ecologically after the kpo-fire?
- How has kpo-fire changed the household dynamics regarding household labour allocation and agriculture?
- How do the women see their life changing because of the kpo-fire?

Research Objectives

The research aims to bring to the highlight the experiences of the women in the lives of the men who engage in kpo-fire, to analyse the transformation of the Bodo community in the wake of the kpo-fire and how this transformation shapes the experiences of the women relatives of men involved in kpo-fire.⁴

Theoretical Framework

The theoretical framework that guides my research is feminist political ecology (FPE). A key component of FPE is the study of environmental crises and their effects on various genders and the communities and ecosystems in which they live (Harcourt and Nelson, 2015). The study integrates ideas from feminist political ecology (FPE) and offers a valuable framework that analyses women's experience to circumvent the problems associated with upholding a rigid division between theory and practice; it provides a method that draws theory from real-world experience. It connects an ecological viewpoint to examine political and economic power and local policies and activities. (Elmhirst, 2015; Harcourt and Nelson, 2015; Rocheleau et al., 1996), emotional, political ecology (Sultana, 2015), ethics and practices of care in doing feminist research, seeing care as an essential need of humans that we (humans and the society) cannot flourish without (Sultana, 2007; Gomez et al., 2023), care in feminist political ecology is also described as how "communities organize their community and their livelihood" (Harcourt and Bauhard, 2018, p.3), emotions in environmental issues (Gonzalez-Hidalgo

⁴ In this research oil-bunkers is used to describe the men who engage in the kpo-fire direct.

and Christos Zografos, 2020) and, gendered division of labour (Elmhirst, 2018), gendered environmental knowledge (Sultana, 2018).

All these are based on the understanding that FPE is attentive "to everyday needs, embodied interactions and labours as well as emotional and effective relations with our environments and natures where we live" (Harcourt and Nelson, 2015, p.13). Thus, utilizing feminist political ecology as a theoretical framework enables me to acknowledge emotions and feelings as part of the research project to analyse resource struggle through a gender lens using the bottom-up approach (Rocheleau et al., 1996).

I have brought together FPE with political ecologists' writings on oil extraction and the 'oil curse' (Pellegrini and Arsel, 2022) and those looking at relative deprivation around resource control (Pettigrew, 2015; Walker and Smith, 2002). The framework of FPE provides an essential perspective in the research by highlighting how some people are excluded by the hegemonies of neoliberal environmental governance, which continues to perpetuate power structures and marginalization processes. (Harris, 2015; Elmhrist 2015; Harcourt and Nelson, 2015; Resurreccion, 2017; Sultana, 2021;Harcourt et al., 2023; Harcourt, 2020; Rocheleau, 1996; Rocheleau, 2013). In addition, the writings bring to my research how environmental practice can result from the decision-making process in the social, economic, and political spheres

Feminist Political Ecology enables us to see how gender subjectivities are constantly negotiated and articulated by the many social, political, and ecological settings (Mollet and Faria, 2013). Furthermore, FPE helps us focus on how gender roles are shaped by extractive processes and how people respond to the extraction of fossil fuels, which harms the body, ecologies, and the living world. (Ojeda et al., 2022). Using political ecology, I disclose how structural ideologies such as gender, race, and nation underpin power relations that promote societal inequalities. (Mollet, 2017), and how it recognizes the possibility of 'paradoxical spaces' occupying a place on the margin and center simultaneously (Ibid). Utilizing these theories, I explore in this research work ways kpo-fire has impacted the women in the lives of the male oil-bunkers in the Bodo community.

1.3 Organization of Paper

The research paper is divided into five chapters. The first chapter sets out the overall research problem and positions my interest and concern in the issue. It also encompasses the research questions leading to the research objectives and the theoretical framework guiding my research. The second chapter critically discusses the overview of illegal oil bunkering (kpo-fire) or artisanal refinery and how different academic scholars have differentiated it from oil bunkering, a finding I discovered during my readings of various articles related to kpo-fire divided into sub-sections on Frontier masculinities, economic impact, and environmental impacts of kpo-fire in Nigeria. I take the discussion further to the local context of the Bodo community, indicating where I intend to contribute to this stream of knowledge by looking at the social and emotional impact from their everyday struggle.

The third chapter gives a detailed description of the methodology used for acquiring data, how the participants were selected, and the criteria for the selection process. It also included my position as a researcher and the ethical considerations and limitations I encountered during the research process. In chapter four, I look further into women's experiences, perspectives, and emotions concerning kpo-fire and how they feel about the men engaging in kpo-fire; I analyse the different experiences and feelings, bearing in mind that experiences and emotions are subjective. It also included the alternative way forward to the dilemma that came about with reference to FPE writings and resource curse literature. The concluding chapter reflects on my journey through research writing, how I constantly reflected with the participants, aware of my positionality, a summary of the findings, and a recommendation for a way forward.

Chapter 2 BACKGROUND: LITERATURE REVIEW ON ILLEGAL BUNKERING/KPO-FIRE

2.0 Introduction

In this chapter, I review works of literature on illegal bunkering. I give an overview of how different scholars differentiated kpo-fire from Oil-bunkering. I discuss how traces of hegemonic/breadwinner masculinities are linked to extraction and how it is inherent in Nigerian masculinities. I look at how various authors have written on the impact of kpo-fire on the environment and Nigeria's economy. Utilizing FPE, I analyse how environmental and economic crises impact diverse genders and the communities they inhabit (Harcourt and Nelson, 2015); I then focused on the local milieu of the Bodo community in Ogoni land, where I looked at the social and emotional impact of kpo-fire in the community as what needs to be questioned, a missing link in the review of works of literature made on kpo-fire.

2.1 Discovery of Oil in Nigeria: Bloom or Doom?

Oil is the backbone of the Nigerian economy (Dagogo, 2022, p.50). Crude oil has served as the backbone of the Nigerian economy and the locals who have resorted to making a living out of it. According to Steyn, "The search for oil in Nigeria officially started in 1903 when two companies, Nigeria Properties (Limited) and Nigeria and West African Development Syndicate (Limited), commenced exploration for bitumen, coal, and oil." (Steyn, 2009, p.252). Nigeria, the largest oil producer in Africa, is one of many countries in the global South that has continued to endure resource loss which can be termed as "social-environmental liabilities" (Pellegrini and Arsel, 2022, p.4), environmental degradation due to continuous fossil fuel extraction, especially in communities where these fossil fuels are extracted. One reason, as argued by Arsel, is that extraction is so essential to growth that it takes precedence over all other considerations (Arsel, 2016).

The oil in Nigeria would have been a blessing if managed well, but due to its operational issues, it has become a curse because the resources are not getting to the people, which is in line with previous empirical data; oil-rich countries suffer from a resource curse. (Ali et al., 2019). Although this is often the case with some countries, for instance, In contrast to other oil exporters like Nigeria and Angola, which are grouped around

the bottom, Norway, an oil exporter, has leveraged the advantages of North Sea petroleum to gain the top spot on the United Nations Development Program's list of best economic performance. (Karl, 2007). Thus, the presence of crude oil does not always relate to a curse, but in the case of Nigeria, "oil has brought doom and bloom. Bloom for the oil companies, while it is doom and gloom for the communities." (Godwin Uyi Ojo, Executive ERAFoEN 30th August 2023). During an interview with Arsel, Watts opines that, in reality, the politics surrounding the acquisition and distribution of oil have been entirely destructive; they have only led to the failure and devastation of a secular kind of national growth. (Watts, 2009, p.1193). In addition, the government is not enforcing laws, "there is corruption, and as a result of this corruption, massive oilbunkering is going on a larger scale. Each time, the government promises to improve things; when asked where the budget is, they say it is in the pipeline, so the locals decide to go to the pipeline to check what's in there. So there is a link, as Uyi Ojo stated in an interview with me, "the failure of the government and its policies gave rise to bunkering and artisanal refinery" (kpo-fire). (Godwin Uyi Ojo, Executive ERAFoEN 30th August 2023)

2.2 The Link between kpo-fire (Illegal) and Oil-bunkering (legal)

Significant works have been written on oil bunkering in Nigeria. Several authors make a distinction between oil-bunkering and kpo-fire. Garuba (2010) reports that "Oil bunkering in Nigeria took firm roots with discrete cooperation of oil companies workers who operated at oil wellheads or allowed access to them" (Garuba, 2010, p.11). During this research paper, I learned through various academic literature and an interview with a participant that there is a difference between oil bunkering and kpo-fire (illegal oil bunkering or artisanal refinery). According to the Human Rights Watch of 2003, the term Bunkering is used to describe the process of filling up a ship with Oil. (Human Rights Watch, 2003). Shedding more light on this, Ozogu et al. write, "To dispel the myths that some Nigerians have, it is important to distinguish between legitimate bunkering and illegal bunkering, sometimes known as oil theft. Bunkering is when an authorized worker offers services on lubricants, water, or fuel on demand to marine services. Illegal bunkering is when petroleum product is being siphoned illegally from a pipeline or a wellhead and loaded in a ship or boat to sell at a low price." (Ozogu et al, 2023, p.8)

When asked to briefly describe oil-bunkering or kpo-fire, one of the participants responded:

'I think we need to differentiate between two terms here. Oil bunkering is the legal term associated with the services that happen in the oil industry. So, oil bunkering is legal. It is simply the term used to move oil from a well, a reservoir, a storage, or a vessel ready for exportation. But the other aspect of it, which is the kpo-fire that is going on around us, is the refining of crude products, but this time around, illegally. You can see local efforts to get the crude refined in their way. Since they do not have the license, they resort to stealing it. And sometimes, they get the product out of the pipeline and refine it. Locally, I would call it kpo-fire. If I am to expantiate further a little bit on kpo-fire and why it is given that name, it is just because of the explosion that usually happens in the refining period, and that is why it is called kpo-fire." (Mike 17th August 2023).

Mike's view is shared by Boris, who ascertained that oil bunkering is needed for marine ships inside the maritime sector; it becomes illegal without the necessary statutory licenses or valid documentation or in violation of the Nigerian maritime industry. (Boris, 2016). The link between kpo-fire and Oil-bunkering seems clear, the former has its roots in the latter.

However, during the Environmental Assessment of Ogoniland carried out by the United Nations Environment Programme, it was reported that "Bunkering is an oil industry term for supplying oil to a ship for its use. In Ogoniland (and the wider Niger Delta), this term refers to the illegal tapping of oil industry infrastructure to procure oil illegally." (UNEP, 2011, p.101).⁵ Often, when videos and pictures of operators of kpo-fires are being displayed, what is visible to the eyes are photos of the local men doing the refining, Boris (2016) argues that kpo-fire or Oil theft is a sophisticated organization that operates in the Nigerian Niger Delta. Many people are involved in it, including employees of the oil companies, military officers, politicians, local community members, international oil traders, militants, shippers, bankers, refiners, and affluent Nigerians and for-eigners. (Boris, 2016, p.2)

⁵ Based on the United Nations Environmental Programme report, I coined the topic for this research. Hence oil Bunkering in this study means kpo-fire, the illegal refining of crude oil, as the study is being carried out in the Bodo community, a Niger Delta region

2.3 kpo-fire and Nigeria's Economy

As stated, oil-led development has 'over-determined' Nigeria's economic system (Agbonifo, 2009). According to the Policy brief of 2010, the Nigerian state, which owns 55% of the joint venture with Shell Petroleum Development Company (SPDC), Total-FinaElf, and Agip, suffers an incalculable loss as a result of the enormous profit generated by oil-bunkering. (Boris, 2015, p.13). Thus, even though Nigeria has a larger share of oil exploration companies, kpo-fire practices have led to the loss of profit, which has affected Nigeria's economy.

Crude Oil extraction has attracted more attention and interest in Nigeria during the past few decades. On how kpo-fire or artisanal refinery affects Nigeria's economy, Ogele and Egobueze write, "Nigerian economic survival is tied to crude oil that contributes 80 percent of her foreign exchange earnings. Hence, whatever affects crude oil production definitely shakes Nigeria's socioeconomic development." (Ogele and Egobueze, 2020, p.23) One would think that with the abundance of oil in Nigeria, especially the Niger Delta region, the country would be economically stable, but the contrary is the case. Given that Nigeria's economy is mainly dependent on oil, drops in the value of the commodity on the international market or acts of economic sabotage like arson or bunkering might be disastrous. (Ozogu et al, 2023, p.11; Boris, 2013, p.564)

Research demonstrates that despite the enormous income from oil, the Niger Delta populations have remained severely socioeconomically undeveloped and impoverished as a result of structural instability in the oil production exchange relationship between the government, multinational corporations, and the people. Despite the enormous financial benefits of oil export, the region has seen catastrophic land degradation, social disarray, rising levels of poverty and suffering, military occupation, and violent crime. (Anyio, 2015, p.56). According to Garuba, "Based on earlier recounted knowledge of the global political economy of oil and the fact that the stolen crude enjoys spot-market without capital cost, there is no gainsaying that illegal oil bunkering is conveniently the most profitable private business in present-day Nigeria" (Garuba, 2010, p.13). Garuba's view about illegal oil bunkering being the most profitable private business in present-day Nigeria.

Although Onuh et al. posit that "the volume of crude oil stolen and refined illegally remains unknown." (Onuh et al., 2021, p.477), various researchers have presented their

findings on the loss Nigeria's economy incurs due to Illegal bunkering. For instance, in his conclusions on the impact of oil bunkering in Nigeria, Dagogo (2022) finds that Nigeria has lost over One point twenty-nine trillion nairas⁶ to oil bunkering, including degradation of the local environment. (Dagogo, 2022, p.52). Recent findings also indicate that illicit bunkering of crude oil causes Nigeria to lose revenues of USD 2.184 trillion annually. (Ozogu et al., 2023). Thus, illegal oil bunkering might weaken Nigeria's economy in the long run due to its over-reliance on crude oil. In addition to its impact on Nigeria's economy, the environment has its share of the adverse effects of kpo-fire.

2.4 kpo-fire and the Environment

kpo-fire impacts the ecosystem due to spillage and the procedures for refining the crude oil locally. The ecosystem pays the price as long as the "fossil fuel sector keeps milking the planet while they can" (Pule et al., 2021, p.49). On the environmental impact of kpofire, Onuh et al. write, "The environmental consequences arising from illegal artisanal refining are considered very high both on the humans and the ecosystem" (Onuh et al., 2021, p.478). It is sure that with the nature of the kpo-fire enterprise and how it is being carried out, it has an adverse effect on the environment. The climate is "overburdened with the aftermath of the excesses of humans in their struggle for survival." (Ewubare et al., 2021, p.82). Due to the polluted air that is a result of the local refining of oil, black soot is released into the air. As such, the locals are now coping with a multitude of environmental problems, such as poor health conditions, polluted drinking water sources, unusable grounds for agriculture, and Stagnant rivers (Ozogu et al., 2023, p.6; Boris, 2015, p.568). Through various research, various scholars around the world have ranked the quality of air in Port Harcourt and multiple parts of the Niger Delta area of Nigeria as the top most polluted regions in the world. (Ewubare et al, 2021, p.82). This pollution can be said to be a result of the black dust or soot, "a powder-like form of amorphous carbon produced during the incomplete combustion of organic matter...containing polycyclic aromatic hydrocarbons (PAHs)" (Ibid, p.82), which has been tested to be detrimental to the health of those living in the region. However, the polluted

⁶ As of 10/10/23 according to the official rate, this is equal to twenty-six billion one hundred sixty-five million nine hundred eighty-one thousand two hundred twenty-six euros. (26.165.981.226,00) <u>https://ngn.currencyrate.today/convert/</u>

air in these regions cannot be linked to kpo-fire alone but to other extractive activities in the area.

For instance, in a study carried out by Obuah and Keke (2022), they state that "The World Bank using remote sensing technical data said that the gas flared annually in Nigeria is approximately 8 billion cubic meters, making Nigeria the world's number seven notwithstanding the venting of gas into the air without the burning of natural gas from crude oil extraction." (Obuah and Keke, 2022, p.2)



Figure 2: A picture of Gas flares by International oil companies in Nigeria. Source: <u>https://guardian.ng/opin-ion/gas-flaring-means-cash-burning/</u>



Figure 3: A picture of setting kpo-fire products on fire in River State, Nigeria. Source: <u>https://www.bbc.com/pidgin/tori-60083814</u>

Hence, these 'oil areas' environmental degradation can result from extractive activities, not just by the locals who engage in kpo-fire, but multinational oil industries through their gas flares and oil spills.

2.5 Breadwinner/Industrial Masculinities

As in many traditional patriarchal communities in the Global South, it is the obligation or norm for men to go out and provide for the family. As one participant said, it is like the Lord's prayer, which we ask to 'Give us our daily bread,' 'It is the man's duty to go out and get the daily bread.⁷ Kivel, a US violence prevention educator, activist, and author, in his "act like a man" box⁸, in which he provided examples of how men and boys are indoctrinated to follow specific sets of pre-established malestream standards, stated that "boys or men are expected to make money and carry the responsibilities for their friends and family" (Hultman and Pule, 2018, p. 38). These gender norms and attitudes are ingrained early on through socialization (Uchendu, 2007). Through such ideas, you

⁷ My translation

⁸ A picture of this box can be found in Hultman and Pule, 2018, p. 38

see how hegemonic masculinities operate. Masculinities are also played out in the male worker stereotype in the "extractive industries such as coal, gas, and oil, Hydropower development, and the nuclear industry. (Mohideen et al, 2022, p.38). The gender norm of the male being the breadwinner and the masculinism of resource extraction needs to change if a sustainable ecosystem is to be achieved. This can be seen in a policy brief for diplomats, national leaders, and the U.N. by Martin Hultman *the leader of the Center Studies of Climate Change Denial (CEFORCED) and author of Ecological masculinities* states the following:

"If we are to ... [create] a sustainable future – we need to recognize the historical patterns that have led us to this point. ... to leave anthropocentric extractive logic behind, laws and norms need to be changed ... our global climate emergency needs [to shift] towards glocal care for our planet. Two suggestions to that end are... First... laws that protect the planet... arguing that nature in and of itself should be part of political decision-making. Second is the need to change the gender norms that shape men into industrial/breadwinners masculinities. This way, framing maleness is today present mainly in the ... cohort of climate change deniers and is failing both men themselves and the broader society they live in ...A shift is needed toward masculinities with greater care for men themselves, as well as for women, [genderqueers], youth, societies, and the earth." (Hultman, 2020, paras 2,6,7,8 quoted in Pule et al., 2021, p.19).

The term "industrial/breadwinner" is part of "patriarchal, hegemonic, and normative masculinities" largely embraced by men but can also include some women and nonbinary individuals. (Hultman and Pule, 2018, p.40) Hultman and Pule categorise industrial/breadwinner masculinities as a group of men who have long been (and still are) involved in large-scale extractive processes and services that depend on environmentally fossil fuels and are energy-intensive. These processes have been created and sustained through the colonization process. This term is used to clarify the many malestream masculinities that guys from all socioeconomic backgrounds exhibit can embrace and do. (Hultman and Pule, 2018, p.42). Hultman gives us an insight into the intrinsic connection between hegemonic/breadwinner masculinity and extraction.

R.W. Connell's concept of hegemonic masculinity helps explain the Nigerian ideal of man-the-provider (Smith, 2017, p.9). As Uchendu states, "One indication of maleness in Nigerian societies involved providing for dependents from within and outside one's extended family...from danger at great risk to one's life" (Uchendu, 2007, p.283). This is seen in how the kpo-fire is being carried out, as the men, in a bid to provide for their needs and those of those depending on them, put their lives at risk in refining these crude oils locally. Men try to attain and sustain "the image of the responsible breadwinner...fulfilling financial obligations to their families." (Cornwall, 2003, p.237). In a Nigerian setting, where masculinity is based on provision, "withdrawing from the provider role has risks" (Cornwall, 2003, p.242), as a man forfeits his ability to exert power over a woman by not providing for her (Ibid). Thus, to sustain their masculinity, they make an effort to provide for the women, which includes taking up risky jobs such as kpo-fire as breadwinners and men. To link the environmental and economic perspective within a local setting (Rocheleau et al., 2013), I now move from the larger picture to the local level and the case of the grassroots Bodo community in Gokana Local government in River State, Nigeria.

2.6 The Case of Bodo Community

Bodo, derived from Boodor, meaning "because of the sea," is translated as "on the sea." (Tanen, 2005, p.1in Fentiman and Zabbey, 2015, p.616) Bodo is located in Ogoniland, east of the Niger Delta in Nigeria, near the southernmost point of the kingdom of Gokana. Its eastern, western, and southern seaward boundaries are Andoni, Bolo, and the Atlantic Ocean. (Fentiman and Zabbey, 2015, p.616) Research states, "There are five major oil fields, 110 oil wells, five flow stations, and a network of interconnecting pipelines across the length and breadth of Ogoni land. Natural gas considered wastes are continually flared 24 hours a day and seven days a week for many years in all flow stations" (Ibezue, 2013, p.275). This shows us the availability of crude oil in this region.

The Ogoniland is an ethnic group in the Niger Delta region that covers an area of 1000 km2 (386 square miles), has a population of approximately 832,000, and has a flow station capacity of 185,000 barrels per day (UNEP, 2011). The Ogoniland stretches across four local government areas: Eleme, Gokana, Khana, and Tai. The majority of the communities are home to multiple oilfields run by international oil firms, including Shell Petroleum Development Company (Nigeria) Ltd. (SPDC), a joint venture between the Nigerian National

Petroleum Company (NNPC), Elf, Agip, and Shell International. These oil firms' operations have led to contamination of the environment and oil spills.

Most people in the region live in abysmal poverty even though the enormous amount of money the oil in the area provides for the government and the burgeoning young population who confront the significant effects of expanding unemployment (Onuh et al., 2021, p.469), which is contrary to the expectations of many. As one would reason that the presence of these multinational oil firms would be seen as a means to "escape poverty and more generally improve economic conditions." (Arsel et al., 2019, p.204). Instead, "as a result of the marginalization, marginalization because resources due to them are not being released, and when the money is released, it is not used for development due to venality and prejudice (Agbonifo, 2009).

Due to oil extraction activities, Ogoniland is one of Nigeria's worst environmental contamination disasters, which has destroyed the local economy, threatened public health, and raised security dangers (Onuh et al., 2021, p.480). It can also be seen as a case of environmental racism which is when a group of people, ethnic group, or class is subjected to injustices such as exploitation of resources or pollution (Martinez-Alier et al., 2014). "This also occurs when the use of different standards in European countries in the event of a spill differs from the standard used in Nigeria" (Godwin Uyi Ojo, Executive ERAFoE, 30th August 2023). One prominent example of this oil spill, amongst other cases that have occurred in the Niger Delta region is the Bodo oil spill in 2008 (Fentiman and Zabbey, 2015; Pegg and Zabbey, 2013; UNEP, 2011).

Pellegrini and Arsel argue that the exploitation of fossil fuels is linked to repercussions of the resource curse at the local level (Pellegrini and Arsel, 2022). In these cases, "there is a prevailing underdevelopment leading to abject poverty," (Godwin Uyi Ojo, Executive ERAFoEN 30th August 2023), defined by the World Bank as "material deprivation, low levels of education and health, vulnerability and exposure to risk and voicelessness and powerlessness." (World Bank, 2001, in Pegg and Zabbey, 2013, p.398)



Map 1- Showing the Bodo community in Gokana local government in Ogoniland, Port Harcourt, Rivers State, Nigeria. Source: Google Map.

The Bomu oil field in Ogoniland was discovered two years in 1958 and it greatly aided the first oil transportation from Nigeria to other countries. Over time, the oil field expanded to fifty-seven oil wells connected to 5 flow stations (oil fields) that are now present in Ogoni. One of the flow stations, Bodo West Field, is situated amid Bodo Creek's mangroves (Fentiman and Zabbey, 2015, p.616). The trans-Niger Pipeline (TNP) transports between 120,000 and 150,000 barrels per day of crude oil from the Niger Delta Hinterlands to the Bonny oil which traverses the Bodo Creek. There are "incidents of the oil spill in the Ogoni area compounded by uncapped wellheads and flow stations, leaks from pipelines, spills associated with illegal tapping of wells, transport of stolen oil and artisanal oil refining." (Fentiman and Zabbey, 2015, p.616). An investigation carried out by UNEP in the Bodo Community assessed the environmental impact of the illegal refinery. According to the UNEP report 2011, "There are hundreds of locations in the Ogoniland where people undertake illegal refinery of crude oil every day, as shown as thick black smoke that emanates from the refinery sites." (UNEP, 2011, p.161)



Figure 4: kpo-fire locations in Bodo West indicated by arrows. Source: UNEP, 2011.

The impact of kpo-fire on Nigeria's economy and the ecosystem is intricately connected. It is mainly a male occupation following the traditional breadwinner/industrial masculinities in extractive industries. The question I am asking is, when the men are involved in kpo-fire, what happens with the women?⁹ To answer that question, I need to "think from women's lives" (Harding, 1991). This is where I make my contribution, positioning myself in a stream of knowledge by focusing on the social and emotional impact on women's lives and their embodied interaction with the environment and nature where they live (Harcourt and Nelson, 2015).

⁹ Although it could be that women engage in the refining process, I focus on the women involved in the lives of the kpo-fire men.

Chapter 3 METHODOLOGY/METHODS FOR ACQUIRING DATA

3.0 Introduction

This chapter explains the methodology used for my research, the methods used to acquire the data, the sample selection, and the criteria I used to engage participants in the study. I also give a description of the participants as well as the ethical considerations and limitations associated with the study.

3.1. Feminist Methodology

For my research, I have adopted the feminist methodology of first-person narrative and storytelling (Harcourt and Ximena, 2022, p.87). Storytelling is a way to do careful research. (Gomez et al., 2023). It is centered on an awareness of gender dynamics, building knowledge based on women's experiences, as a form of "gender-sensitive reflexive practice" (Harding, 1987, p.31 Quoted in Sathyamala, 2022, p.180). Feminist methodology prioritizes women's experiences and includes their perspectives and subjectivities on how they live in their environments. (Gollaz Moran, 2022, p.204). Following Haraway's situated knowledge, I move away from the "doctrine of objectivity" (Haraway, 1988, p.579), learning from grounded theory based on my listening to women's experiences. Having lived in a community where kpo-fire was seen as a means of livelihood among the locals, I am also positioned as someone who can understand local knowledge from an embodied experience, even if it is partial and relational (Haraway, 1988).

Therefore, to explore the research questions and objectives set out at the beginning of this research, from my partial experience, I decided to engage with women who are in the lives of the male oil bunkers to understand their unique experiences and how they have been impacted. Feminist epistemology informs my method of knowledge production by paying attention to the perspectives of women's experiences, providing the space to give women the voice their situation, paying attention to their gendered experience and how they differ from the men involved in kpo-fire. (Harding, 1991, p.106; Harcourt, 2016)

Methods

I carried out in-depth, unstructured interviews, observing the participants in terms of body language and tone of voice as they told their stories. I conducted online conversations on Zoom from July 2023 to August 2023. I also returned to them during the findings and analysis in October 2023 to share my findings and to have further discussions. Each interview was recorded with the consent of the participants. Afterward, I translated and transcribed the interview. The interviews were done in *Nigeria pidgin.*¹⁰ A research assistant provided her cell phone for the participants to use and gave them the consent forms to sign. The interviews were carried out as "conversations" (O'Leary, 2017, p.107).

For the participants, I used a 'criterion-based selection' (Roulston, 2010, p.81). The women who participated in the research had a relationship (daughter, wife, sister, mother, grandmother) with a kpo-fire man. A list of open-ended questions was used as a guide throughout the interviews so the participants could freely express their experiences, and the dialogues flowed spontaneously. The aim was to give them a platform to answer the questions in their own words, using the "participant's own words to generate questions that elicit a further description of the topic" (Roulston, 2010, p.13).

The conversations or discussions were in *Nigerian pidgin*. This mode of communication enabled participants to share their stories. To eliminate the power imbalances in the interaction between the participants and me, I applied "empathy" and "careful listening" (Harding, 2007; Roulston, 2010). I did not claim to 'know' or 'see' from the positions of these women (Haraway, 1988). Instead, I made a cognizant effort to capture their stories and "worked with the participants in respectful and ethical ways that allow the women's voices to be heard" (Roulston, 2010, p.23). I conducted the research in cooperation with the research participants (Gomez et al., 2023), talking with them as I did my research writing, findings, and analysis.

¹⁰ Nigerian Pigin is a language spoken by Nigerians, it differs from the British English. It is a common language spoken majority of Nigerians irrespective of class, gender, age or educational background.

3.2. My Position as a Researcher

To explain the uniqueness of my study findings, I need to draw attention to the specifics of my own experiences (Ampong et al., 2020). To conduct ethical research, I paid attention to my positionality, reflexivity, and the power relations present throughout the research process. (Sultana, 2007) I am a Nigerian who has lived most of her life in the Niger Delta region, first in Delta State, Nigeria, my state of origin, before moving to Port Harcourt, River State, Nigeria, where I lived most of my years growing up. According to the Nigerian standards, I am from a middle-class family. I have never been malnourished due to a lack of food or poverty. Coming from a small nuclear family, there was enough to go around. So in the Nigerian context, I am fortunate. I have a Bachelor's degree from a prestigious university in Nigeria, from which I graduated, and started earning; I was never unemployed like many Nigerian youths. I am currently doing my Masters degree in Europe. I do not know what it is like to have a male relative who engages in kpo-fire as my father is a federal employee, and my elder brother is currently earning his graduate degree in England. However, I have experienced the impact of kpofire work where I live and on my community. I witnessed how desperate these kpo-fire men can be whenever they are hungry and in dire need of money, begging anyone interested to purchase their illegally refined products in exchange for monetary value to enable them to care for their needs and their families.

These illegally refined products harm the ecosystem and negatively impact all community members, whatever their social class, by breathing polluted air. The dilemma is whether to purchase these kpo-fire products when approached or let the kpo-fire man and his family die of hunger. I have often been moved by the social and environmental injustices experienced by poor women and men at the local level. During the research, I positioned myself as someone who shares their concerns and struggles and is willing to learn with and from them. One major concern we shared was living in the environs irrespective of our class is the breathing in soot due to the polluted air.

Although I did not come from the same class or education level as the women, we were able to communicate as people who live in the same place and can share empathy (Sultana, 2007). As a Nigerian who has felt the impacts of kpo-fire, I could understand their stories. As I positioned myself to learn with and from them, I was mindful not to sentimentalise their various experiences or to unfairly appropriate their knowledge.

3.3. Who are the Participants?

Before doing the research, I had contact with some participants. The research participants consisted of twelve (12) people. Eleven (11) people from the Bodo community and I also interviewed Godwin Uyi Ojo¹¹, the executive director and co-founder of Environmental Right Action Friends of the Earth Nigeria (ERAFOEN)¹², whom I contacted after speaking to Julien-Francios Gerber.¹³ The members of the Bodo community who participated were three men and eight women. See the table below. Two men were kpo-fire workers; one was not involved in the work but had lived in the community all his life and has a brother-in-law who engages in the work. The women were in relationships with kpo-fire men. The women were of different ages. Speaking to the older women gave me an insight into the historical perspectives of the study area.

PSEUDONYMS	GENDER	AGE	RELATIONSHIP WITH
			KPO-FIREMEN
Dunubari	Male	50	Brother-in-law.
Mike	Male	49	Engages in kpo-firework
Jay	Male	25	Engages in kpo-fire work.
Baripai	Female	57	Mother
Tonia	Female	24	Girlfriend
Esther	Female	25	Sister
Victory	Female	18	Daughter
Favor	Female	45	Wife
Confidence	Female	21	Girlfriend
Vee	Female	71	Grandmother
Merciful	Female	22	Sister

Table 1: Source: Interview Data

¹¹ Dr. Godwin Uyi Ojo co-authored between activism and science: grassroots concepts for sustainability coined by Environmental Justice organization.

¹² ERAFOEN is a pioneering NGO in environmental activism in Nigeria which stands for the protection of the environment, and democratization of development. They hold corporations into account for environmental degradation.

¹³ Julien-Francios Gerber is an Associate Professor of Environment and Development in ISS, ERASMUS.

3.4. Ethical Consideration and Limitations

According to Sultana, "It is imperative that ethical concerns permeate the entire research process, from conceptualisation to dissemination" (Sultana, 2007, p. 375). Even when most participants consented to use their real names, I used pseudonyms for all participants who participated in the study for ethical reasons and due to the illegality associated with kpo-fire to avoid harming the participants, especially with the current situation of kpo-fire/illegal refinery in Nigeria. I did not do the fieldwork in Nigeria; I felt I had "established sufficient rapport with participants to generate quality data, that is, rich, detailed descriptions of the authentic selves of the participants" (Roulston, 2010, p.88). However, one limitation I encountered was IT network issues. The transmission of the network in the community was sometimes low. Most times, my research assistant and I would often test the network before conducting any interview, and whenever the network was off, we would reschedule for another time.

Chapter 4 KPO-FIRE IN BODO COMMUNITY

4.0 Introduction

In this chapter, I analyse my conversations with the participants. I aim to build a series of stories that explain the complex situation of kpo-fire in the Bodo community rather than seeking to develop one narrative (Gomez et al., 2023). I begin by giving a historical perspective to show how the community was before the kpo-fire to capture the people's stories behind the emergence of kpo-fire. How did kpo-fire change the livelihoods of the community? How has kpo-fire transformed their environment and household labour allocation? I then focus on the women's experiences, looking at their emotions/feelings about the current state of the community's environmental degradation and their men's involvement in kpo-fire. I also delve further to discuss how they expressed life changes due to the kpo-fire and their thoughts on the alternative way forward.

4.1 The Everyday Life in Bodo Community Before kpo-fire

Before kpo-fire, the natives¹⁴ of the Bodo community were primarily engaged in fishing and farming: "Before kpo-fire, people in the community engaged in farming; things were very okay, from the crops we planted to the food we ate. We also go to the mangrove forest to pick periwinkle and fetch firewood; we also got fish, oysters, and the rest from the rivers." (Dunubari, the 50-year-old man who was formerly a fisherman and has a brother-in-law who engages in kpo-fire, 15th July 2023).

"I used to follow my father to the farm. He would often come back with big fish whenever he goes fishing." (Victory, the 18-year-old daughter whose father was a farmer before venturing into kpo-fire, 27th July 2023)

"I used to go to the farm to plant cassava and corn; I also go to the rivers to get periwinkles and fish, which I sell in exchange for money," (Baripai, a 57-year-old widow and mother, 30th July 2023)

¹⁴ I used 'natives' and 'locals' interchangeably to refer to the participants living in the community.

The observation of the participants is in line with Fentiman and Zabbey's research. They state that before the oil spill, the inhabitants of Bodo engaged in fishing and shell-fish gathering activities while also relying on mangrove wood as a source of firewood (Fentiman and Zabbey, 2015). They also observe that "In Bodo, there is a division of labour by gender. Traditionally, men were responsible for the bulk of the food supply through fishing, and women were responsible for domestic chores and other activities close to the home, such as collecting shellfish like periwinkles, mangrove oysters, shrimps, and bloody cockles. Women also relied on the ubiquitous mangrove wood found throughout the creeks to use for firewood." (Fentiman and Zabbey, 2015, p.617).



Figure 5: Picture of the periwinkles in their shell. Source: Author (09/2023)

I conclude from discussion with the community that they were mainly into agriculture, with farming and fishing being their primary focus; they depended on the fertile land for their livelihood.

4.1.1 The Emergence of kpo-fire

"A father with no farm to uproot cassava for garri¹⁵ and no other means of providing for the family cannot stop a child from getting garri or uprooting cassava elsewhere. It is not possible." (Dunubari, 15th July 2023).



Figure 6: Picture the cassava, a popular agricultural produce in the Bodo community. Source: Author (08/2023)

¹⁵ Garri as it is locally called, is a type of flour made from the roots of cassava plants.



Figure 7: Picture of Garri, which is the product of processed cassava. Source: Author (08/2023)

During the conversations with the research participants, the origins of kpo-fire were discussed. During an interview with a 50-year-old male resident born in the Bodo community, a trader, he said, "kpo-fire started from this community; it was named after the sound kpo! This resulted from hitting the drum used to refine the crude oil, which often results in fire emission". (Dunubari, 15th July 2023).

The exact period when the kpo-fire business started was not precise, as each participant gave a different time frame when kpo-fire emerged: Dunubari said, "kpo-fire started in 2000, let's say 1998. Within the years 1997, 1998, 1999 until this day." (15th July 2023).

Another participant, Mr. Mike, a 49-year-old male resident of the Bodo community who has been in the kpo-fire business for seven years, when asked when kpo-fire started, said, "This is 2023, so I would say ten years ago, 2013." (17th August 2023).

Esther, a 25-year-old female student and a stylist who lives in the community and has a brother who engages in kpo-fire, said: "That should be when I was 16 years old (nine years ago), around 2014." (13th August 2023). Thus, it seems kpo-fire started in the last two decades, but I could not extract an exact date on the genesis of kpo-fire. However, the discovery of the oil fields can be traced to the discovery of crude oil in Ogoni in 1958, leading to establishing a flow station in Bodo Creek. (Fentiman and Zabbey, 2015).

What is clear is that the kpo-fire started as a response to their needs for livelihood. Following the *relative deprivation theory* (Pettigrew, 2015; Walker and Smith, 2002), they all felt 'deprived.' As one participant stated,

"I want to let you know that the oil companies that have come to do oil explorations in this community forced the grounds not to produce and polluted the sea because of the activities that harm the fish. And so everybody decided to ask them for compensation. The government and these oil companies were unwilling to compensate, so the people started gradually taking what belonged to them by refining; even though it was illegal, it also sustained their livelihood. Because we cannot have things on our ground, it is being taken away, and nothing is being given as compensation. It is heartbreaking. And so, in that situation, the males have to start looking for alternative ways to recover what is lost. So, if the sea or rivers cannot produce fish due to the activities the oil company or IOC have caused in the community, we must start living by trying our best to take them back. We cannot die of hunger." (Mike, 17th August 2023)

Sharing this view, Dunubari adds, "The main reason people started doing kpo-fire is the lack of Jobs; nobody seems to pay attention to the community and the rural areas. The government is not taking care of us. So people are putting their heads in where they can survive. (15th July 2023)

"Last week, we had another oil spill that condemned and even wanted to break down people's houses; these oil spills affect the farm. The youths went there to secure the place because they did not want the oil company at fault to come and close down the place without compensating them. Because the oil spill is the multinational oil company's fault, they sleep there daily to secure the place." (Esther, 17th August 2023).

According to Tyler and Lind, the recognition and interpretation of these experiences "lays a groundwork for the development theories of social justice, theories that argue that people use principles of justice to identify the feelings of entitlement that shape people's reactions to their outcomes." (Tyler and Lind, 2002, p.44) That is to say, "when people compare their outcome to those of others or their outcomes at other points in time, they need some set of principles to tell them what they deserve ("equal outcomes; "proportional" outcomes; etc). The principles that people use often involve their sense of moral correctness or justice. People use their sense of what to be when judging what is" (Ibid, p.44). The sense of neglect and deprivation becomes evident when they observe the state's disregard for the source of oil income while making capital investments in

non-oil-producing regions (Agbonifo, 2009). The Bodo community who engage in kpofire are part of a disproportionately disadvantaged group in a highly unequal social environment (Gaventa, 1982).

Feminist political ecology also helps us understand that "struggles over the environment are not merely over resources and economic values but are embedded within power hierarchies and cultural-specific meanings" (Radcliffe, 2015, p.42). FPE "analyses the powerful underlying structures which operate to the benefits of certain classes and groups, both locally and across international boundaries, how site-specific ecological and livelihood systems are linked into national and global environmental, economic, and political systems which shape, enable, and limit the opportunities and constraints occurring at the local level." (Rocheleau et al., 2013, p. 296). It also emphasize access to resource control and how these resources are used and managed. From the participants' stories, underlying power structures exist between the state and the locals in the community. This patriarchal system benefits certain classes of people while marginalizing others and limiting their livelihood opportunities, further leading to "Local communities feeling disempowered by outsiders who extract what they need to the detriment of local residents." (Rocheleau et al., 2013, p.289). There is an existing power relation to extract more from nature, seen as a "patriarchy in the domination of the environment" (Ojeda et al., 2022, p.151)

Resource control and access are also linked to gender. (Elmhrist, 2015; Rocheleau et al., 2013). "Gendered subjectivities emerge from the convergence of political and economic structures and embodied everyday practices in a specific ecological context." (Elmhrist, 2015, p.63). Gender subjectivities are seen in the everyday practices in which they navigate their ways in the degraded environment as men and women (Harcourt, 2016). Men have more access to the resources. As Mike stated,

"The males have to start looking for an alternative to recover what is lost". (Mike, 17th August 2023).

"It is a male business because you need to see them in operation. Like I said, it is a do-or-die affair. It is like being in the mud. They are soaked up to their waist. It is a rough terrain, and it is a hard life." (Executive ERAFOEN, 30th August, 2023)

Gender has, therefore, become a crucial factor in determining how ecological change processes and the pursuit of sustainable lifestyles are shaped (Elmhirst and Ressurrecion, 2015), how their interactions with nature constitute their gender as men and women (Harcourt, 2016)

Analysing gender as a social category helps us see how the women and men in the Bodo community, through their experiences, are shaped by their responsibilities as men and women; this is seen in the ways the men are going out to 'recover what is lost' through the kpo-fire enterprise.

Hunger, poverty, inequality, and resource exploitation by international oil companies and the government could be categorised as the catalyst of kpo-fire in the community, which is also in line with the findings of Ibezue that Communities may resort to oil bunkering as a result of feeling exploited by the oil industry. Their environment has been contaminated by oil operations and spills that have gone unaddressed, thus leading them to seek retribution from the industry for the harm caused. Writing on oil spills and compensations, Fentiman argues that many oil firms refuse to compensate communities after the spills because they think the incidents result from sabotage, which challenges many communities (Fentiman, 1996). Some communities turn to oil bunkering to get back at the industry for not giving them what they believe they are entitled to and for the deprivations they have suffered (Ibezue, 2013, p. 276). Thus, the feeling of deprivation or entitlement leads to a crucial aspect of political ecology: resource control.

Who owns and controls the resources?

Due to crude oil extraction in the Bodo community, there is a connection between the state and the local community. All natural resources three feet below the ground are the state's property, and the state has the ultimate right to decide when and how extraction happens: "The ultimate landlord is the state" (Loftus, 2020, p.143). The state serves "as both developer and protector of environmental resources within capitalist modernity." (Loftus, 2020, p.141). There is a contradiction "between the imperatives of capital accumulation to keep the state and economy afloat by providing taxation revenue and employment and democratic legitimation to respond to public environmental concerns to legitimate and maintain political power." (Eckersley, 2021, p.249). Following these observations in Nigeria, the oil resources belong to the government in power. Therefore, the oil bunkers that operate the artisanal refinery or engage in kpo-fire are seen by the state as stealing. Still, the Bodo community does not consider it as 'stealing.'

"It belongs to us; it is in our backyard; how can we be stealing our property?" (Jay, 1st August 2023)

The Bodo community sees it as a prevailing injustice when the oil is carted away to develop other places, both locally and internationally. At the same time, their home and community are underdeveloped and subjected to environmental degradation. So, while comparing their outcomes with those of others. Godwin states, "The issue of the artisanal refinery is classified as illegal, but the people see themselves as exercising their right to resource control" (Godwin Uyi Ojo, 30th August 2023).

Moreover, individuals in the community 'feel deprived, not getting what they deserve.' (Tyler and Lind, 2002). Even though the state frequently controls subsurface minerals, local communities can nonetheless use the fact that their territories sit on top of these resources to assert specific claims against the state (Pellegrini and Arsel, 2022), making resource ownership the central question. It became an issue of "who gets what, when and how, and who gets left out and how" (Gaventa, 1982, p.9) and how connected these are. The people of the Bodo community, like every community in Ogoniland, have come to see the Nigerian state and the oil companies as tenants, and like transactions between tenants and landlord, they are entitled to the revenue that comes with Extraction (Agbonifo, 2009).

Based on the participants' stories, we could see that kpo-fire is the community's response to the state for feeling deprived of the resources they believe belong to them, which is also due to the existing power structure between the state and the natives of the community to access and manage of the natural resources. The relationship between the government and the people in Bodo can be seen as a patriarchal system of domination in which the excess exploitation of nature has led to the disempowerment of the locals in the community (Rocheleau et al., 2013).

This form of domination and exclusion does not pertain to just a class of people in the community but also to women. In the decision-making process, for instance, Esther says that the kinsmen and the chiefs are directly involved with the negotiation, as women are not allowed due to the community's cultural norms, which position men as heads of the family and the community. Esther's story is also shared by a report carried out by Amnesty International in the Bodo community, which states that "almost everyone involved in oil spill investigations is male. In general, the oil companies and Nigerian oil regulators only deal with chiefs and other elite members of the spill-affected communities, reinforcing gender stereotypes and economic disadvantage in the Niger Delta" (Amnesty International 2013)¹⁶. The exclusion of women's knowledge, experiences, and emotions indicates gender bias in management and governance practices (Harcourt, 2020). Thus, not only is there a power struggle or class struggle, but there also exists gender power relations in governance and the decision-making process, which has been reinforced through social and cultural norms and has led to further deprivation and gender inequality. This gendered power relation do not empower the women but makes them more vulnerable.

4.1.2 Ecological Transformation of Bodo Community: Ecological War!

The ecological state of the Bodo community can be likened to what the late Ken-Saro Wiwa referred to as "an ecological war" (Wiwa-Saro, 1992). A war between the extraction of fossil fuels and the sustainable livelihoods of the people of the Bodo community. Stating the importance of agriculture (farming and fishing) to the Ogoni people, Ken-Saro Wiwa writes, "If you take away the resources of Ogoni people, you take away their land, you pollute their air, you pollute their streams, you make it impossible for them to farm or fish, which is their main source of livelihood" (Agbonifo, 2009, p.79)

Reflecting on her embodied experience, Baripai says,

"Before the kpo-fire, we used to plant cassava or corn, but now, the oil has polluted everywhere. When we plant cassava or corn, it feels like a fire has burnt down the whole cassava or corn because of the oil. The air, due to the kpo-fire, has also affected the rainwater. Due to the polluted air, if you place a bucket outside, the water that fills the bucket comes out dark and not as clean as before. You can't use it to bath or drink it, and you know rain water is healthier than borehole water. I can't afford a borehole, so I place my containers outside in the corridor whenever it rains to fetch and put inside my house, and because of this, my body is full of *kro-kro¹⁷*. I am coughing; my children also cough because they inhale the polluted air caused by kpo-fire." (Baripai, 30th July 2023).

¹⁶ https://www.amnesty.nl/content/uploads/2016/11/1311 rap shell .pdf?x68065

¹⁷ Kro kro is a local name for skin rashes caused by Fungi infections.

The experience of Baripai confirms what Fentiman found: the village people were impacted by oil and exposed to skin ailments such as rashes, acne, and boils, among others (Fentiman, 1996).



Figure 8: Picture of a container filled with polluted rainwater. Source: Author (07/2023)

Esther and Mike believed that the Bodo community's environmental degradation resulted from the area's kpo-fire and multinational oil companies. Esther says,

"The oil spill has damaged a lot of land. Should I say it's from kpo-fire or what an oil company is doing in our community? Our air is polluted. When you spread clothes outside, they get covered by soot (black dust). There was a particular seafood I used to eat when I was 16 years old, but when you go to the river, it is no longer there. As illegal bunkering and the oil spill have killed them all." (Esther, 17th August 2023).

"When the oil companies take the oil, our environment is degraded. Our aquatic lives are dying; sometimes, pipeline leaks affect the land and rivers. Soot is a result of human activities. We have IOCs in our community, and they flare gas every day. And you and I know what gas flaring can cause." (Mike, 17th August 2023)

In this situation, the appropriation of profits from the Bodo community in Ogoni land and the devastation of the ecosystem can be considered as injustice, a form of "eco-nomic exploitation, perceived as injustice and form of dehumanization" (Agbonifo, 2009, p.86).



Figure 9: Picture of Black soot on a palm. Source: CNN in <u>https://guardian.ng/features/again-soot-spike-in-rivers-raises-fresh-health-concerns/</u>

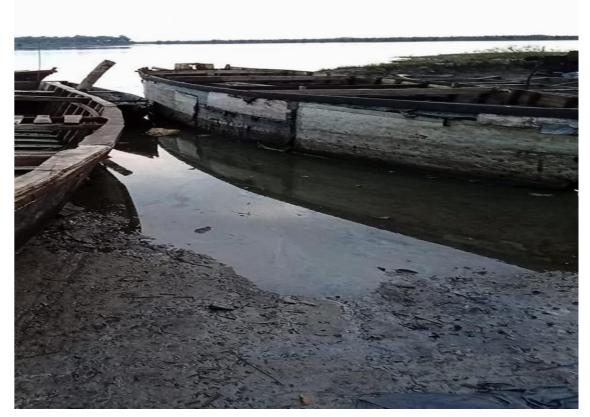


Figure 10: Current picture of the Bodo River, polluted by Crude oil. Source: Author (07/2023)

During an interview with Mercy, a 22-year-old female living with her parents, she showed me a live video explaining the Bodo community's environmental degradation. "Let me show you our river": <u>https://vimeo.com/866949657?share=copy.</u>¹⁸

From the picture and the video in this chapter on the current state of the Bodo River, we can see the oil spills, which could be a result of the kpo-fire going on in the community and the spills from the IOCs in the region, which is a frequent occurrence in the Niger Delta region resulting in environmental degradation and is gradually eradicating their means of livelihood. Thus, people can no longer focus on fishing as their primary source of income as they have done before. Therefore, there has been a shift from Agriculture (farming and fishing), their primary source of Livelihood.

According to Harris, these livelihoods "mean more than simply meeting economic needs and generating income but are also about everyday interactions and emotions" (Harris, 2015, p.158 in Harcourt, 2016, p.1009). Having their livelihood affected due to the 'ecological war,' their cassava or corn is unhealthy to eat because of the oil spill, or having to rewash their clothes due to being affected by the soot, "facing severe constraint on their livelihood." (Rocheleau et al, 2013, p.16)

The community has seen the sustainable way of acquiring their means of livelihood, which is farming and fishing, being "eradicated by the intensification of oil sector activities" (Arsel et al., 2019). With the environment being degraded and their means of livelihood eradicated, prompting the men to venture into kpo-fire, how are the women related to men working on kpo-fire specifically impacted by kpo-fire, and how do they feel having to live in a degraded environment? When I use the word 'impact,' I use it discreetly. I do not present a situation of women being 'victims' of the condition or groups of vulnerable individuals (Resurrección, 2017), the "stereotype of men being dominant and women being victimized" (Harcourt, 2016, p.1), That is, what men do and what women suffer. Instead, using FPE, I pay attention to women's embodied experiences, knowledge, and emotions, enabling us to understand their reality more effectively.

¹⁸ Interview with Mercy. (30th July, 2023). Dear Readers, Kindly click on the link to get a live view of the ecological degradation in Bodo Community.

4.2 The Women's Emotions

While speaking about women in this research, I recognize that "women's experiences are multiple" (Harcourt, Icaza, and Vargas, 2016, p.151), due to various situations, locations, and experiences (Rocheleau, 2008). I also understand that women's situated experiences in the lives of the kpo-fire men are not the same and cannot be generalized for all the women in the Bodo community in Ogoni land and in Nigeria as a whole. Issues over resources include more than rights of ownership and obligations; they involve embodied emotions, sentiments, and lived experiences. (Sultana, 2015). Moreover, emotions are crucial in political ecology narratives as they "add details to the analysis of practices of over-exploitation of resources." (Gonzalez-Hidalgo and Zografos, 2020, p.239).

While narrating their experiences of being involved in the lives of the Male kpo-fire as mothers, wives, daughters, sisters, girlfriends, and partners, the women expressed emotions of fear, sadness, uncertainty, anxiety, and anger with regard to the environmental degradation and having their men out there doing the kpo-fire business. Uncertainty about the return of the kpo-fire men, fear of being encountered by sea pirates, fear of being arrested by the army officials, or even death. Sadness about the community's ecological transformation, which has affected their livelihood. Angry by having their male relative engage in kpo-fire despite the risk involved due to the availability of no other reliable means of livelihood. Some participants shared how they have gotten used to the fear by turning to religion through prayer.

Baripai, the 57-year-old widow/mother mentioned earlier, was a food vendor in the city who migrated back to her hometown after the death of her husband and decided to live close to the waterside because, just like most people from Ogoni, she saw a "sense of good life with harmonious existence with nature" (Arsel and Angel, 2010, p.210), the river is a source of life to her as she can go there to bath and to enable her to get periwinkles and fish as a primary source of income, expressed various kinds of emotions from uncertainty, sadness, and fear. Sadness that her once clean river is now polluted, and tension, anxiety, and fear whenever her son goes for kpo-fire. She said,

"Whenever my son is away for two weeks, I can't sleep. My house is close to the waterside, and with every sound of the boat, I run toward the Waterside to see if he is back. But he is not inside. He does not have a phone to call me to tell me whether he is back, so I keep walking to the waterside at the sound of any incoming boats. I don't have strength. I keep praying for him because accidents occur in the creeks. They get

fire injuries from fire explosions, and their boats get burned down by the army officials. They also get arrested and taken to prison. When I eventually see him, I always give thanks to God." (Baripai, 30th July).



Figure 11: Picture of Baripai by the waterside. Source: Author (07/2023)

While looking collected and calm, the picture of Baripai by the waterside shows us how resilient women can cope and adapt to the ecological issues they encounter.

Esther, the 25-year-old stylist, and student who lived with her brother, who engages in kpo-fire, admitted that her brother stays away for one or two weeks, depending on the oil pressure¹⁹. Whenever he is away, she feels disturbed, tired, and weak. It is until he gets back that her mind will be settled. She prays for him to survive because she knows that going and returning is not an easy task.

Victory, an 18-year-old daughter who is learning to be a tailor but is supported by her father, who was once a farmer and fisherman but has ventured into kpo-fire since

¹⁹ The pressure makes it possible for them to fetch the oil. The pressure always comes in the night and that is why most of their refining is done at night.

their lands and rivers have been polluted, said, "When my father is away for two weeks, I feel angry. This is because the job is risky. The gas can burst out, and the environment might catch fire." (Victory, 27th July 2023).

To better understand her experience, I conducted a second interview session to understand her emotional response. She said, "I am angry because if my father had a better job, he would not have to risk his life to fend for us. He might get arrested, you know." (Follow-up interview, Victory, 29th October).

Mercy, a 22-year-old woman who lives with her parents and is also learning how to be a hair stylist says whenever her elder brother leaves for kpo-fire, she does not feel relaxed because the work is a risky job; it involves life and death. "For instance, they might go as four persons, but come back as three persons, or when they come back as four, one might be injured. I do not feel okay; I am scared." (Mercy, 30th July 2023).

Loneliness and sadness were also expressed on the part of Confidence, a 21-year-old woman whose boyfriend engages in kpo-fire, "Whenever my boyfriend is away, I feel so lonely we do not get to spend time together. I also feel sad because the job is risky (August 6th, 2023).

Tonia, a 24-year-old salon owner who isn't married to the kpo-fire man but who has a baby with him, and Favor, a 45-year-old woman, a trader who has four children and lives with her husband, who engages in kpo-fire, shared almost similar experiences when expressing their emotions and feelings. Tonia stated, "I was initially scared when he initially started. But with time, I started getting used to it. The only thing I do now is to pray for safety. I pray for a safe journey that he comes back. You know it is a journey made on the river. And most times, they encounter sea pirates." (Tonia, 4th August 2023)

"I am not scared. I keep praying that he should bring something for us." (Favor, 20th July 2023)

Vee, a 71-year-old woman born in the community and never left, lived her life growing up in the community and goes to farms occasionally even though, according to her, it is not yielding as much as it used to before the oil spill and the emergence of kpo-fire. Reflecting on her embodied experience as a woman who has lived all her life in Bodo, she says,

"I feel sad whenever I look at the river and my farmland because back then, the farmland was rich in agricultural produce, but now, crude oil has polluted the land, and it is because our rivers are polluted that is why we are hungry, and if not for kpo-fire we won't be able to feed. But whenever my son goes for the work, I keep praying to God to grant him safe returns because the work is heavy; it is dangerous." (Vee, 71-year-old grandmother, 22nd July 2023).

From the narration of these participants about their embodied experiences, we can see how over-exploitation in the Bodo community impacts their emotions in profound ways.

Vee's experience shows us how the process is all connected. From her story, we can see how the ecological degradation, which has also impacted their emotions, amongst other factors, has led the community into kpo-fire despite the risk involved.

4.3 kpo-fire and Household Labour Allocation

With the men being the 'breadwinner' by engaging in kpo-fire, what does this mean for the women at the household level? A critical aspect of FPE is the analysis of gendered relations within the household and beyond (Elmhirst, 2011; Rocheleau, 2008), looking at how family hierarchies operate in the gender division of labour and how the ecological transformation of a place shapes existing household division of labour (Elmhirst, 2018). The participants shared how the kpo-fire has transformed the household labour allocation concerning care and increasing unpaid work.

"Before my son started going for kpo-fire, he assisted with the house chores and accompanied me to the farm to help me with farm work. But now, I am the only one doing the chores. His younger sister, who would have helped, is currently ill. She has been ill for a long time and lies on the mat. And I do not have money to take her to the hospital." (Baripai, 30th July 2023).

Esther also relates how she cared for and nurtured her brother back to a healthy state when an explosion occurred at the kpo-fire site, leaving his brother injured and leaving an everlasting scar on him. Favor, whose husband engages in kpo-fire, also talked about how things have transformed in her home. She says,

"When my husband was around, he helped with the chores like washing and cooking; he also helped me to trade my goods in the market. But now, when he is away for two weeks to one month, I am the only one doing the things we used to do together; I get tired." (Favor, 20th July 2023).

I asked Mr. Mike about the household labour allocation in his home. He said,

"It depends on the day or time that I am around if I am around, which is unlikely because there is always a call for duty. No household chores, nothing to assist. The workload remains with the woman who is in the house. To take care of the children, prepare the children for school, take care of the house, and do all the house chores." (Mike, 17th August 2023).

Men are away from home for weeks depending on the quantity of kpo-fire products that are to be refined, and taken to the market, "the situation of the road if it is tightened with security agencies, the checkpoints, we might have to stay back for more weeks." (Mike, 17th August 2023)

From their stories, it is clear that caring for the children has been relegated to women. The relegation of the care work to women "reinforces gender stereotypes and gendered hierarchies" (Wichterich, 2015, p.69), gender stereotypes of women in the community as caregivers.

With the men away from home, there is more work for the women to do at home, and as they take care of the children and provide food for the men on their return from the creeks, as well as doing the household chores, all part of the vital role in social reproduction. (Fraser, 2017; Folbre, 2013). Human welfare depends on paid or unpaid care (Razavi, 2007). Care is invaluable in that it is "embedded in our everyday language" (Tronto, 2020, p.102).

Thus, while making the women's social reproductive work visible, we can see the increase in their care for men, their worries and work for their family, and their own personal survival impacted by kpo-fire. The allocation of household chores is gendered, and this is seen in the ways the men and women are performing masculinities and femininities as gendered subjects through their everyday practices. (Elmhrist, 2015).

An example of this is the case of Mike, his wife does all the domestic chores/unpaid care work while still going out to do her regular job. This unpaid care labour is not compensated (Razavi, 2007; Harcourt and Bauhardt, 2018).

All these are crucial in keeping the community going. In addition to finishing duties, providing care entails developing emotional bonds, demonstrating empathy, and appreciating the intrinsic worth of the individuals it offers. This can be seen in the case of Baripai, who takes care of her sick daughter alone while her son is out in the creeks engaging in the kpo-fire business, and when Esther had to provide care for her brother, who had gotten an injury as a result of the explosion during the refining of kpo-fire products in the creeks by cooking, doing his laundry, taking him to the bathroom to bath while he heals from the wound. We see the invisible act of care in their narratives, how they try to survive and hold the family and community together. (Gomez et al., 2023).

4.4 How do the women see their life changing because of the kpo-fire?

The women shared how their lives are changing with regards to their means of sustainable livelihood. Paradoxically, during the discussions with the women, women did not state outright that they wanted their men to engage in other kinds of jobs apart from kpo-fire, even given the risks, the **emotional instability**, and **the greater unpaid care work** for them. While some participants admitted that they wanted their men to stop the business, they simultaneously said that the kpo-fire had improved their lives financially. Most say that men need to engage in it as it generates the best income. Favor recounted how difficult things were financially for the family before her husband started the kpo-fire business. Sharing her experience, she said,

"If the alternative job can serve us, I will tell him to stop. But if the new job can't satisfy us, I will tell him to continue the kpo-fire so that we can feed well. When he was solely into farming, my business was not doing well because there was no money to invest. I used to buy things on credit or loans from people to repay later. But now, with the kpo-fire, I don't buy things on credit again or beg. So things are now better." (Favor, 20th July 2023).

Favor's view was shared by Confidence, a 21-year-old lady with a boyfriend who engages in kpo-fire. For her, if the other job pays more than the kpo-fire, he can stop. But if it doesn't, she would advise him to continue in the line of business.

Baripai expressed how she would honestly want her son to stop the kpo-fire business; she also said,

"The money from the kpo-fire is helpful. It sustains our needs. When he returns from the creeks, he will buy fish, garri, bathing, and washing soap. He does not hide his line of work from me." (Baripai, 30th July 2023)

This has helped her feed and take care of her sick daughter, who lies on the mat. Baripai is often unable to go to the farm due to the polluted land or go fishing due to the polluted river. And during those times when her son has not yet returned from the creeks, she said,

"I normally go to the river, stand at the river to beg those who have returned for fish, and go into the rivers to search for periwinkle, even though it is not as much as before." (Baripai, 30th July 2023)

Tonia now views kpo-firework as a regular where her boyfriend has to go to work and come back, she shares,

"the only thing is the risky nature of the job, so a safety prayer is what I indulge in because the money helped us when I just got pregnant, he had to cater for his son and me, so even though it is a dirty and risky job, at least it paid" (Tonia, 4th August 2023).

Victory, the 18-year-old daughter, recounted how she and her family went to bed hungry when farming was no longer lucrative due to ecological degradation, but this has not been the case since her father started engaging in the kpo-fire business. Now, her father could pay for her skill acquisition, where she could learn tailoring or sewing, and they wouldn't go to bed hungry again. This also gives us an answer to the question as to why marginalized communities engage in risky ventures such as kpo-fire. It has become a means and quest for survival, a 'financial change', and an employment source.

Source of employment

The participants shared a similar view on the source of employment that kpo-fire has provided for the youths in the community due to the unemployment rate in the country. Esther shared about how her brother, a student, can earn and sustain himself through this line of business and how he has been able to see himself through school. "My brother would come back with 300,000²⁰ or 200,000 naira depending on how many days they could refine the oil. In this country, no job can give you that in a week." (Esther, 17th August).

Mr. Mike, explaining some of the various segments of the business that make up the value chain and lead to employment, said,

"kpo-fire is a value chain; when there is an increase in production, there is an increase in Labor, giving people things to do. For instance, one person supplies the nylon, another buys from him and resells, and the one with a car or who knows how to drive transports the locally refined oil from one place to another, he has added to the value chain. With the flow of income, they can cater to the needs of their family." (Mike, 17th August 2023)

When Jay is not joining them with the refining, he will buy from the people who cook in the camp and bring it offshore to sell to the people. And this has helped him pay his dues.

"Now I have more foodstuffs, and I can pay my son's school fees early. This was not the case when I was a barber, and it was hard to meet my needs. (Jay, 1st August 2023)

It is clear from their stories that they've come to accept kpo-fire as a regular means of earning money despite its risk.

The paradoxical views of the participants about the risks of their doing kpo-fire yet also accepting it as the best regular employment can be seen as "a consolation ... in the face of steady and extensive deterioration of their natural and social environments" (Arsel et al., 2019, p.221). They have come to see this kpo-fire business as a way to 'console' themselves, feed, and survive due to the current state of their environment and the country's economy.

²⁰ This amounts to 360.61euros according to the official rate compared to the Nigerian Minimum wage of 30,000naira which amounts to 36.13euro. Source: <u>https://ngn.currencyrate.today/convert/</u>

4.5 A Possible Way Forward? An Alternative?

After the first round of interviews, I went back to some of the participants to share my findings and ask them what is or could be the possible way forward to environmental degradation and another route from kpo-fire.

Tonia, the 24-year-old woman who has a son for an oil bunker, said,

"See Linda, the way the country is going, the only way forward can be at least providing jobs for the youths; imagine when I got pregnant, and there were no means to take care of my baby and me, what would my boyfriend have done? Most of these guys are faced with this situation. The government doesn't care; they play a major role in making things better." (Tonia, 29th October 2023)

Baripai wished the river in the community and the farmland could return to its clean state, unpolluted with crude oil, and then she would be delighted. For the way forward, she said if the government can come to her aid by giving her son a job and a source of clean water, and as a mother, she speaks for her son and other young men who engage in the kpo-fire business.

Esther opined that what is needed is government intervention. She says,

"Government should come and seal up those places so we will not have oil spills, and also compensate the people. You know, when the oil spills, it comes out with force, flows to anywhere, different direction from the rivers to the farmland, even to the buildings." (October 31st, 2023).

These women's knowledge of the possible and alternative way forward can be seen as the feminist perspective of the care economy, which entails the provision of basic needs, public services such as employment and source of clean water, as well as environmental protection and natural regeneration by paying attention to the oil-spills and contaminated ecosystem (Wichterich, 2015).

Although Esther suggested that a possible way forward is to seal up the places where they experience oil spills, as the oils from these oil spills, when scooped, can also be refined locally to make kpo-fire products and to compensate those affected, she laughed when I asked her if compensation would stop the kpo-fire. Laughing, she said,

"It won't stop. People would still go about it because they need money. The economy is tough. For example, getting refined kerosene and fuel from the fuelling station is not easy. Why? Because we do not have a refinery in our country that is functioning well. These kpo-fire boys are why we have cheaper kerosene and fuel. It is cheap, and people can afford it. But the government can give them things to make them legal."(Esther, 31st October 2023)

The 'things to make them legal' from Esther's story could be called license. And these licenses could make these artisanal refineries operate as modular refineries. The question is how to do this. What will reduce their poverty and exclusion from development? Would it be more support for women? Less extraction of fossil fuels? Make kpo-fire legal?

In answering this dilemma, we must move towards an alternative form of thinking and developing through a different lens (Escobar and Harcourt, 2018; Harcourt and Nelson, 2015), an alternative way of human-environment relationship moving away from the "mindless, growth-oriented, technology-based development" (Rocheleau et al., 2013, p.305), which is rooted in natural-resource based development, towards care for the more than human world (Gomez et al, 2023). We need to change how we as humans go about our daily interactions with the planet, its populace, and its natural resources (Sultana, 2015; Elmhirst, 2015).

Granting kpo-fire men licenses to function as modular refineries does not provide a comprehensive solution. Licenses are expensive, and many kpo-fire men are not economically buoyant; charging a high price for a modular refining license might lead to deviant conduct among community members. The issue at hand does not pertain to the legality or illegality of the extractivist activities; rather, it concerns the inability of extractivism to alleviate poverty and exclusion from development within the community, its contribution to environmental degradation, and its reinforcement of the detrimental consequences associated with breadwinner masculinities—men frequently endanger their lives to support their families and seldom succeed in lifting them out of poverty. The women in these men's lives are in dilemma to choose survival over mental and emotional stability, sustainable environment, and safety.

It is essential to implement a "transnational perspective on environment and development" (Elmhirst, 2015, p.65), not just in indigenous communities in the global south but also in the global North. In addition to global collective care for the environment, another way this can be achieved is by leaving these fossil fuels untapped, encouraging developing countries rich in fossil fuels, such as Nigeria, to leave their resources unextracted and assisting them with loans whose refunds would be depending on future wealth (Pellegrini and Arsel, 2022). These would enable us to "move away from the violence of extractivist Eurocentric technoscience" (Gomez et al., 2023, p.161), which views nature as an inert resource to be exploited and commodified relentlessly. We need to re-evaluate how nature is understood (Elmhirst, 2015); human-nature relationships should be based on reciprocity, restoration, and community economies rather than globalized extractivists of value and one centered on global solidarity movements.

Chapter 5 Reflection and Recommendations

This research journey has been a means of learning, re-learning, and unlearning. Conversations with the participants helped me view the kpo-fire issue from various perspectives. I reflect on my ethical commitments as a researcher to my participants, who, at one point or another during this research, saw me as one who understands their struggles, as a student of ISS, I am someone passionate about environmental and sustainable practices and development.

I have explored a gender perspective on the impact of oil bunkering in the Bodo community, how kpo-fire shaped the community, and how the women in the lives of the men are impacted, not just because they are related to the men, but also their emotions about having to live in the degraded environment and having to see their male relatives engage in the risky kpo-fire business. Using FPE, I showed how looking at 'emotions in environmental issues' is a crucial perspective to political ecology and how the social classification of gender has shaped natives of the community to take up different tasks in relation to their environment.

The kpo-fire that occurred in the Bodo community is due to the pollution of their rivers and farmlands and the inability to rely on agriculture as their primary source of livelihood, as they could no longer yield healthy or profitable harvests to sustain them. Since fossil fuels, such as crude oil, "has led the ruling elites to a path that marginalizes the minorities, that is ultimately self-destruct" (Agbonifo, 2009, p.79), kpo-fire became a means of survival and a way to get back at the state for the neglect and deprivation they felt. The impact on the women in the community includes emotional worries and more unpaid care work, as they hold the family together while the men are in the creeks trying to refine the oil locally.

However, despite the emotional stress and unpaid care work, the women admitted that the revenue from the kpo-fire sustained their needs and was financially beneficial. The paradoxical view that emerged was that finance was a form of consolation. At the beginning of the research, I had wondered at the reaction of the woman who came to the river bank on the news of the death of her son, who had gone to the creeks the previous night to refine oil locally but didn't make it back alive. She only shed a tear and said a prayer. During this research, I also understood that these people are aware of the risks involved but must survive by any means possible. In conclusion, let us go back to Dunubari when he said,

"A father with no farm to uproot cassava for garri and no other means of providing for the family cannot stop a child from getting garri or uprooting cassava elsewhere. It is not possible."²¹

These words and the experiences of the participants show us the dilemma faced by communities who engage in kpo-fire. How can the state tell them not to refine their oil locally when they have degraded the environment through intensive extractive activities and provided them with no alternative? If the state wants to close down illegal kpo-fire, the state should provide an alternative means of livelihood for all in the community, men and women. An alternative away from extractivism that colonises, plunders, and amasses wealth but then fails to provide or restore what has been damaged or lost.

How do we convince these people who have been wired to survive by extracting their fossil fuels to move towards an alternative? As researchers, It is therefore essential to start from the everyday level, a community, and action-based research, one that is collaborative and collective with community projects to engage with their emotions and daily struggle, a bottom-up approach to development issues. We need to re-examine, re-evaluate, and rethink gender dynamics about resource access and management and incorporate feminist thinking and practices that look at local livelihood from a logic of survival and care that sustains lives and livelihood.

²¹ A parable by Dunubari

Reference list

- Adu-Ampong, E.A. and Adams, E.A., 2020. "But you are also Ghanaian, you should know": negotiating the insider–outsider research positionality in the fieldwork encounter. *Qualitative Inquiry*, 26(6), pp.583-592.
- Ali, S., Murshed, S.M. and Papyrakis, E., 2020. Happiness and the resource curse. *Journal of Happiness Studies*, 21, pp.437-464.
- Anyio, S.F., 2015. Illegal oil bunkering and oil theft in Nigeria: impact on the national economy and the way forward. *ILIMI Journal of Arts And Social Sciences*, 1(2), pp.53-65
- Arsel, M. and Angel, N.A., 2012. "Stating" Nature's Role in Ecuadorian Development: Civil Society and the Yasuní-ITT Initiative. *Journal of Developing Societies*, 28(2), pp.203-227.
- Arsel, M., Hogenboom, B. and Pellegrini, L., 2016. The extractive imperative in Latin America. The Extractive Industries and Society, 3, 880-887.
- Arsel, M., Pellegrini, L. and Mena, C., 2019. Maria's paradox: oil extraction and the misery of missing development alternatives in the Ecuadorian Amazon
- Boris, O.H., 2015. Upsurge of oil theft and illegal bunkering in the Niger Delta region of Nigeria: is there a way out?.
- Chagnon, C.W., Durante, F., Gills, B.K., Hagolani-Albov, S.E., Hokkanen, S., Kangasluoma, S.M.J., Konttinen, H., Kröger, M., LaFleur, W., Ollinaho, O. and Vuola, M.P.S. (2022). From extractivism to global extractivism: the evolution of an organizing concept. *The Journal of Peasant Studies*, 49(4), pp.760–792. doi:https://doi.org/10.1080/03066150.2022.2069015.
- Cornwall, A., 2003. To Be a Man is More than a Day's Work: Shifting Ideals of Masculinity in Ado-Odo, SW Nigeria'. *Men and Masculinities in Modern Africa. Westport, CT: Heinemann*, pp.484-502.
- Di Chiro, G., 2015. A new spelling of sustainability: engaging feminist-environmental justice theory and practice. *Practising feminist political ecologies: moving beyond the green economy. Londres, Zed Books*, pp.211-237.

- Eckersley, R., 2021. Greening states and societies: from transitions to great transformations. *Environmental Politics*, 30(1-2), pp.245-265.
- Elmhirst, R., 2015. Feminist political ecology. The Routledge handbook of gender and development, pp.519-530.
- Elmhirst, R., 2018. Feminist political ecologies–Situated perspectives, emerging engagements. *Ecologías políticas feministas: perspectivas situadas y abordajes emergentes. Ecologia Politica, 54.*
- Elmhirst, R., (2023). Extractivism. In *Global Political Ecology Course at International Institute of* Social Studies.
- Escobar, A., 1998. Whose knowledge, whose nature? Biodiversity, conservation, and the political ecology of social movements. *Journal of political ecology*, *5*(1), pp.53-82.
- Escobar, A. and Harcourt, W., 2018. Post-development Possibilities: A Conversation. Development, 61, pp.6-8.
- Ewubare, D.B., Agbugba, I.K. and Kpeden, C., Awareness and Impact of Black Soot on Selected Food Vendors in Port Harcourt, Rivers State, Nigeria.
- Farah, D., 2022. Oil Bunkering and Insecurity in Rivers State. Texas Journal of Multidisciplinary Studies, 11, pp.50-57.
- Fentiman, A., 1998. The anthropology of oil: the impact of the oil industry on a fishing community in the Niger Delta. In *Environmental Victims* (pp. 87-99). Routledge.
- Fentiman, A. and Zabbey, N., 2015. Environmental degradation and cultural erosion in Ogoniland: a case study of the oil spills in Bodo. *The Extractive Industries and Society*, 2(4), pp.615-624.
- Garuba, D.S., 2010. Trans-border economic crimes, illegal oil bunkering and economic reforms in Nigeria. *Policy brief series*, *15*, pp.1-23.
- Gaventa, J., 1982. Power and powerlessness: Quiescence and rebellion in an Appalachian valley. University of Illinois Press.

- Gollaz Morán, A., 2022. Embodied Urban Cartographies: Women's Daily Trajectories on Public Transportation in Guadalajara, Mexico. In *Feminist Methodologies: Experiments, Collabourations and Reflections* (pp. 189-209). Cham: Springer International Publishing.
- Gómez, M., Voss, A.K. and Farrelly, E., 2023. Meanings and Practices of Care in Feminist Political Ecology: An Intergenerational Conversation with Khayaat Fakier and Wendy Harcourt. In *Contours of Feminist Political Ecology* (pp. 155-176). Cham: Springer International Publishing.
- Gonda, N., 2021. Re-negotiating rural masculinities as vulnerability: Cattle ranchers in climate change affected rural Nicaragua. Men, Masculinities, and Earth: Contending with the (m) Anthropocene, pp.289-307.
- González-Hidalgo, M. and Zografos, C., 2020. Emotions, power, and environmental conflict: Expanding the 'emotional turn'in political ecology. *Progress in Human Geography*, 44(2), pp.235-255.
- Haraway, D., 1988. Situated knowledges: The science question in feminism and the privilege of partial perspective. *Feminist studies*, 14(3), pp.575-599.
- Harcourt, W., 2016. Gender dilemmas in international development studies. *The European Journal of Development Research*, 28, pp.167-174.
- Harcourt, W., 2017. Gender and sustainable livelihoods: linking gendered experiences of environment, community and self. *Agriculture and Human Values*, *34*(4), pp.1007-1019.
- Harcourt, W., 2020. Reflections from a feminist political ecology perspective. *Engendering the Energy Transition*, pp.275-278.
- Harcourt, W., Agostino, A., Elmhirst, R., Gómez, M. and Kotsila, P., 2023. Contours of Feminist Political Ecology (p. 315). Springer Nature.
- Harcourt, W. and Argüello Calle, X., 2022. Embodying Cyberspace: Making the Personal Political in Digital Places. In *Feminist Methodologies: Experiments, Collabourations and Reflections* (pp. 83-112). Cham: Springer International Publishing.

- Harcourt, W. and Bauhardt, C., 2018. Introduction: Conversations on care in feminist political economy and ecology. In *Feminist political ecology and the economics of care* (pp. 1-15). Routledge.
- Harcourt, W. and Nelson, I.L. eds., 2015. Practising feminist political ecologies: moving beyond the'green economy'. Bloomsbury Publishing.
- Harcourt, W., Icaza, R. and Vargas, V., 2016. Exploring embodiment and intersectionality in transnational feminist activist research. In *Exploring Civic Innovation for Social and Economic Transformation* (pp. 148-167). Routledge.
- Harcourt, W., Van den Berg, K., Dupuis, C. and Gaybor, J., 2022. Feminist methodologies: Experiments, collabourations and reflections (p. 296). Springer Nature.
- Harding, S., 1991. Whose science? Whose knowledge?: Thinking from women's lives. Cornell University Press.
- Harris, L., 2015. Hegemonic waters and rethinking natures otherwise. *Practicing feminist political* ecologies: moving beyond the green economy, ed. W. Harcourt, and IL Nelson, pp.157-181.
- Hultman, M. and Pulé, P.M., 2018. *Ecological masculinities: Theoretical foundations and practical guidance*. Routledge.
- Human Rights Watch (2003). The Warri Crisis: Fueling Violence. Lagos: Human Rights Watch. Retrieved from http://www.hrw.org/sites/default/files/reports/nigeria1103.pdf.
- Karl, T.L., 2007. Oil-led development: social, political, and economic consequences. *Encyclopedia of energy*, 4(8), pp.661-672.
- Loftus, A., 2020. Political ecology II: Whither the state?. *Progress in Human Geography*, 44(1), pp.139-149.
- Martinez-Alier, J., Anguelovski, I., Bond, P., Del Bene, D., Demaria, F., Gerber, J.F., Greyl, L., Haas, W., Healy, H., Marín-Burgos, V. and Ojo, G., 2014. Between activism and science: grassroots concepts for sustainability coined by Environmental Justice Organizations. *Journal of Political Ecology*, 21(1), pp.19-60.

- Mohideen, R., Aberg, A. and Mareels, I., 2022. White Paper-DIITA-Gender Equality and Social Inclusion (GESI) Workstream White Paper-Gender and Technology: The Case of the Energy Sector. DIITA-Gender Equality and Social Inclusion (GESI) Workstream White Paper-Gender and Technology: The Case of the Energy Sector, pp.1-40.
- Mollett, S. and Faria, C., 2013. Messing with gender in feminist political ecology. *Geoforum*, 45, pp.116-125.
- Odalonu, B., 2016. Oil theft and insecurity in post amnesty era in the Niger Delta Region of Nigeria: Implications on national security. *E3 J. Environ. Res. Manag*, 7, pp.1-12.
- Ogele, E.P. and Egobueze, A., 2020. The artisanal refining and socioeconomic development in Rivers State, Nigeria, 2007-2017. *International Journal of Research and Innovation in Social Science*, 4(4), pp.16-25.
- Ojeda, D., Nirmal, P., Rocheleau, D. and Emel, J., 2022. Feminist Ecologies. *Annual Review* of Environment and Resources, 47, pp.149-171.
- Osborne, P., Segal, L. and Butler, J., 1994. Gender as Performance-an Interview with Butler, Judith. *Radical Philosophy*, (67), pp.32-39.
- Owen, A., Maimunah, S., Ekowati, D., Elmhirst, R. and Hoover, E.M., 2023. Extracting Us: Co-curating Creative Responses to Extractivism Through a Feminist Political Ecology Praxis: The Extracting Us Curatorial Collective. In *Contours of Feminist Political Ecology* (pp. 51-73). Cham: Springer International Publishing.
- Ozogu, N.A., Olabimtan, O.H., Chukwurah, N.C., Ukpong, M.K. and Daniel, D.S., 2023. Effects and Causes of Illegal Crude Oil Bunkering in Nigeria: Case Study Niger Delta. *American Journal of IR 4.0 and Beyond*, 2(1), pp.6-14.
- Pegg, S. and Zabbey, N., 2013. Oil and water: the Bodo spills and the destruction of traditional livelihood structures in the Niger Delta. *Community Development Journal*, 48(3), pp.391-405.
- Pellegrini, L. and Arsel, M., 2018. Oil and Conflict in the Ecuadorian Amazon. European Review of Latin American and Caribbean Studies/Revista Europea de Estudios Latinoamericanos y del Caribe, (106), pp.209-218.

- Pellegrini, L. and Arsel, M., 2022. The supply side of climate policies: Keeping unburnable fossil fuels in the ground. *Global Environmental Politics*, *22*(4), pp.1-14.
- Pettigrew, T.F., 2015. Samuel Stouffer and relative deprivation. Social Psychology Quarterly, 78(1), pp.7-24.
- Pule Paul M and Hultman, M. (eds) (2021) Men, masculinities, and earth : contending with the (m)anthropocene. Basingstoke: Palgrave Macmillan (Palgrave studies in the history of science and technology). doi: 10.1007/978-3-030-54486-7.
- Radcliffe, S.A., 2015. Gender and postcolonialism. The Routledge Handbook of Gender and Development, pp.35-46.
- Razavi, S., 2007. The return to social policy and the persistent neglect of unpaid care. *Development and Change*, *38*(3), pp.377-400.
- Resurrección, B.P., 2017. From 'women, environment, and development'to feminist political ecology. *Routledge handbook of gender and environment*, pp.71-85.
- Rocheleau, D.E., 2008. Political ecology in the key of policy: From chains of explanation to webs of relation. *Geoforum*, *39*(2), pp.716-727.
- Rocheleau, D., Thomas-Slayter, B. and Wangari, E., 1996. Gender and environment. *Feminist political ecology: Global issues and local experiences*, pp.4-5.
- Rocheleau, D., Thomas-Slayter, B. and Wangari, E. eds., 2013. Feminist political ecology: Global issues and local experience. Routledge.
- Roulston, K., 2010. Reflective interviewing: A guide to theory and practice. *Reflective Interview-ing*, pp.1-216.
- Saro-Wiwa, K., 1992. Genocide in Nigeria: the Ogoni tragedy. London: Saros International
- Sathyamala, C., 2022. Immersion, Diversion, Subversion: Living a Feminist Methodology. In Feminist Methodologies: Experiments, Collaborations and Reflections (pp. 163-188). Cham: Springer International Publishin
- Smith, D.J., 2017. To be a man is not a one-day job: Masculinity, money, and intimacy in Nigeria. University of Chicago Press.

- Steyn, P., 2009. Oil exploration in colonial Nigeria, c. 1903–58. The Journal of Imperial and Commonwealth History, 37(2), pp.249-274.
- Sultana, F., 2007. Reflexivity, positionality and participatory ethics: Negotiating fieldwork dilemmas in international research. *ACME: An international journal for critical geogra-phies*, 6(3), pp.374-385.
- Sultana, F., 2015. 45. Emotional political ecology. *The international handbook of political ecology*, p.633.
- Sultana, F., 2021. Political ecology 1: From margins to center. Progress in Human Geography, 45(1), pp.156-165.
- Tronto, J., 2020. Moral boundaries: A political argument for an ethic of care. Routledge.
- Tyler, T.R. and Lind, E.A., 2002. Understanding the nature of fraternalistic deprivation. *Relative deprivation: Specification, development, and integration*, pp.44-68.
- Uchendu, E., 2007. Masculinity and Nigerian youths. Nordic Journal of African Studies, 16(2).
- United Nations Environment Programme, 2011. Environmental assessment of Ogoniland.
- Walker, I. and Smith, H.J. eds., 2002. Relative deprivation: Specification, development, and integration. Cambridge University Press.
- Watts, M., 2009. Reflections: Michael Watts Interviewed by Murat Arsel. Development and Change, 40(6), pp.1191-214.
- Wichterich, C., 2015. Contesting green growth, connecting care, commons and enough. *Practising feminist political ecologies: Moving beyond the "green economy*, pp.67-100.
- Zina, O., 2021. The essential guide to doing your research project. Sage.