

UNIVERSITY OF CAPE COAST

FISH MAMMIES IN ARTISANAL FISHERIES IN COASTAL GHANA:
EXPERIENCES, CHALLENGES AND PROSPECTS FOR OCEAN
GOVERNANCE

KENNETH AMANKWAAH BOATENG

2024

UNIVERSITY OF CAPE COAST

FISH MAMMIES IN ARTISANAL FISHERIES IN COASTAL GHANA:
EXPERIENCES, CHALLENGES AND PROSPECTS FOR OCEAN
GOVERNANCE

BY

KENNETH AMANKWAAH BOATENG

This thesis is submitted to the Department of Sociology and Anthropology of
the Faculty of Social Sciences, College of Humanities and Legal Studies,
University of Cape Coast, in partial fulfillment of the requirements for the
award of Master of Philosophy Degree in Sociology

OCTOBER, 2024

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature: Date:

Name: Kenneth Amankwaah Boateng

Supervisor's Declaration

I hereby declare that the preparation and presentation of the thesis was supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Supervisor's Signature: Date:

Name: Professor Georgina Yaa Oduro

ABSTRACT

The roles of women as fish mammies in Ghana's artisanal fisheries, a sector traditionally dominated by men, are markedly underexplored. Fish mammies often face marginalization in fishery policies and their experiences remain largely undocumented. Existing research fails to adequately explore how fish mammies, navigate and challenge gender roles in this male-dominated sector. This study aims to fill this gap by investigating the experiences, challenges, and prospects of fish mammies in Elmina and Chorkor, utilizing an ethnographic case study approach within a qualitative framework. Data were collected through purposive, snowball, and convenience sampling methods. In-depth interviews and informal conversations were conducted with male canoe owners, fishermen, and fish processors for the study. The study is underpinned by Gender Performativity, African Feminism, and Ecofeminist theories. The findings reveal distinct gender roles and social practices where fish mammies in Elmina adopt masculine values and behaviours influenced by matrilineal kinship norms, while those in Chorkor embrace more traditionally feminine roles. The application of Judith Butler's theory of gender performativity highlights the fluid and context-specific nature of gender roles among fish mammies. Despite the pervasive masculine dominance in artisanal fisheries, fish mammies demonstrate significant agency and advocate for sustainable fishing practices. The study underscores the need for greater visibility and inclusion of fish mammies in policy-making and management decisions; including forming an association to enhance their participation in decision-making processes and integrating gender-sensitive approaches in ocean governance.

ACKNOWLEDGEMENTS

There are too many people to thank individually for their many acts of thoughtfulness, and gestures of generosity over the course of this thesis. Beginning with the person who has been a constant presence from the first conversation about the ideas behind this thesis, through to the very end of the process: Professor Georgina Yaa Oduro. Her guidance and wisdom over the period of the thesis writing have been extremely important to me. She shared and contributed relevant insights and knowledge in the research and have inspired me with her hard work and diligence. What is much thrilling is, in spite of her busy official schedule, she was more than ready and welcoming whenever I needed her. And all the while, her unwavering passion has been a constant force for this research project. For this, I am indebted to her.

I wholeheartedly thank One Ocean Hub for funding my MPhil thesis. For assistance, and insights - a special thanks to Dr. Edgar Takyi Akonor and Professor John Windie Ansah. Both have influenced my studies in many ways than they will ever know. I want to express my heartfelt gratitude to my parents for helping me to see the bigger picture. They have been there for me unconditionally to acknowledge my efforts and encourage me through the demanding times. I am deeply indebted to the participants at Elmina and Chorkor, especially Auntie Mansa and Mrs. Lamptey for their willingness to open up their private spaces for me and helping me to gain access to other fish mammies. My further gratitude goes to all my MPhil classmates. It had been lovely living together for two years. The cohesiveness was unparalleled. We really had wonderful experience and great memories.

DEDICATION

To my loving twin brother, Kingsley Amankwaah Boateng.



TABLE OF CONTENTS

	Page
DECLARATION	ii
ABSTRACT	iii
ACKNOWLEDGEMENTS	iv
DEDICATION	v
TABLE OF CONTENTS	vi
LIST OF TABLES	x
LIST OF FIGURES	xi
CHAPTER ONE: INTRODUCTION	
Background to the Study	2
Statement of the Problem	6
Objectives of the Study	8
Research Questions	9
Scope of the Study	9
Significance of the Study	10
Contributions to policy formulation	11
Definition of Concepts	11
Organization of the Study	12
CHAPTER TWO: LITERATURE REVIEW	
Introduction	14
Theoretical Review	14
Gender Performativity (Judith Butler, 1990)	15
African Feminism	19
Ecofeminism	22

Overview of Ghana's Fishery Sector	23
Structure of the Fishery	24
Artisanal fisheries	24
Evolution of the Artisanal Fishery Sector	25
Artisanal Fishery in the past	25
Understanding the Concept of Fish Mammy	27
Gender norms and customs along coastal settlements of Ghana	30
Kinship and Gender Marine Property Ownership	32
Empirical Review	34
Contributions of fish mammies in artisanal fisheries	34
Categories of women who are fish mammies	38
Gender and Traditional Co-management	40
Women and Masculine Dominated Institutions	46
Summary of Chapter	52
CHAPTER THREE: RESEARCH METHODOLOGY	
Introduction	53
Research Paradigm	53
Research Design	54
Description of the Study Areas	56
Elmina	57
Chorkor	59
Sources of Data	61
Research Population	62
Sampling Procedure	62
Data Collection Methods and Instruments	64

Data Collection Procedures	68
Data Processing and Analysis	75
Limitation of Study	78
Ethical Consideration	78
Trustworthiness of the Study	79
CHAPTER FOUR: RESULTS AND DISCUSSIONS	
Introduction	81
Socio-Demographic Characteristics of Participants	82
Which category of women are fish mummies?	85
Family Backgrounds and Career Path of Fish Mummies	86
Family-based fishing enterprise	86
What are the experiences of fish mummies in artisanal fisheries?	90
Appropriate gender roles perceived by fish mummies in Elmina and Chorkor artisanal fishery	94
Social practices that reinforce appropriate gendered performances within the artisanal fishery	100
Fish mammy identity, gender roles, and performances within the artisanal fishery	105
Construction of Identity: Edwumadzewura and Yaa Ny3	106
Contributions of fish mummies in the artisanal fishery	109
As a canoe owner, I feel responsible as a mother	110
Poverty Reduction	115
How does the nature of artisanal fisheries pose a challenge to fish mummies?	117
Stigmatized Identity	118

What are the prospects of fish mammals' to ocean governance in artisanal fisheries?	123
Chemical fishing regulation	125
Co-Management Potential	128
Chapter Conclusion	129
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS	
Introduction	130
Summary of the Main Findings	130
Conclusions	133
Contributions of the Study	135
Recommendations	139
Suggestion for Further Research	141
REFERENCES	142
APPEDNICES	160
APPENDIX I: Interview Guide	160
APPENDIX II: Socio-Demographic Characteristics of Informal Conversant	164

LIST OF TABLES

Table		Page
1	Summary of the sample for the survey	75
2	Socio-Demographic Characteristics of Fish Mammies	84



LIST OF FIGURES

Figure		Page
1	A map showing Elmina	59
2	A map showing Chorkor	61
3	Auntie Mansa's Journey to being a Fish Mammy	86
4	Naa Oboshie's Journey as a Fish Mammy	88



CHAPTER ONE

INTRODUCTION

Women are regarded as an important workforce in coastal communities owing to their key role in sustaining and enhancing the growth of fishing industries (Gopal, Hakpe, Kusakabe, Rajartnam & William, 2020). However, the specific role of women as canoe owners or fish mammies in fishing communities is not well documented. While there is literature acknowledging women's involvement in various fisheries-related activities such as gleaning, processing, marketing, and other pre-harvest roles, these contributions are often marginalized. According to Britwum (2009), social norms and values that define the respective roles of men and women in coastal communities have led to the marginalization of women's roles, resulting in fisheries management programs overlooking their varied contributions. This marginalization extends to the crucial role of fish mammies, who have been instrumental in developing artisanal fisheries in coastal Ghana.

According to Overa (1993), fish mammies are a female occupational group who own major fishery equipment such as canoes, and fishing nets and engage in entrepreneurial activities such as pre-financing fishing trips. There exists literature on the various roles and contributions of fish mammies in artisanal fisheries in coastal communities in Ghana and Nigeria (Ameyaw, Breckwoldt, Reuter & Aheto, 2020; Olaoye & Ojeyibi, 2019). Moreover, notable studies have found that Kinship and women social position in their community serve to influence the opportunity to become owners of canoe and other fishing equipment (see Britwum, 2009, Overa, 2003, 1992). However, studies rarely attempt to explore the activities of fish mammies; whose nature

of work and the environment in which they undertake their role present unique concerns. Thus, it is important to examine the experiences of fish mammies, their specific challenges as well as their prospects for ocean governance. This thesis, therefore, hopes to fill that gap by exploring the phenomenon of fish mammies in terms of which category of women are fish mammies, their experiences, associated challenges, and prospects. The prospects of fish mammies in artisanal fisheries are also explored, drawing from Elmina and Chorkor respectively.

Background to the Study

Ghana's artisanal fishery activities play an important role along the coastal settlements by providing jobs to both men and women, income, and a source of fish protein. Women, relative to men make essential contributions to sustaining and enhancing the development of the fishing industry (Gopal, Hakpe, Kusakabe, Rajartnam & William, 2020). Their roles differ significantly; but in countries where economic and social forces are transforming fisheries, women's roles in the sector have undergone rapid changes (Ninson, 1991). They are represented in all domains in artisanal fisheries as paid or unpaid workers. It is found that men often work in the harvesting sector whereas women are engaged in post-harvesting activities such as trading and fish processing (Weeratunge, Snyder & Sze, 2010). This division of labor is made possible by customary beliefs, norms, and regulatory structures of fishing communities (Ansah, Oduro, Wilson, 2022; Adjei & Sika-Bright, 2019; Britwum, 2009; Ninson, 1991); even though they vary in fishing communities across the coastal settlement of Ghana.

Despite that, women are regarded as an important workforce in fishing communities worldwide. Their activities in artisanal fisheries typically involve fish trading and processing, and other pre-harvest activities such as financing of fishing trips, provision of meals for fishermen among others. Through this, their contribution to Ghana's artisanal fishery is estimated at (40%) (Food and Agricultural Organization, 2008); expected to be higher if their pre-harvest activities were considered (Ogden, 2017). Others prepare food for fishing trips and mend nets as unpaid pre and post-harvesting tasks (Weeratunge et al., 2010). These activities have also been acknowledged for securing a direct link between fish, food security, and sustainability, and the provision of opportunities to influence the behavior of fishermen (Matsue, Daw & Garrett, 2014; Zhao et al., 2012; Britwum, 2009; Overa, 1998). Evidence from other countries (Nigeria, Benin, Congo, Mali, Tanzania, Nigeria, Solomon Island, Papua New Guinea, Cambodia) shows that women just like men use fishing gear such as canoes/boats and nets for fishing and in addition rent out their canoes to men (Olaoye & Ojeyibi, 2019; Weeratunge & Snyder, 2009). Weeratunge and Snyder (2009) and Ogden (2017) have cautioned that women's dominance in the sector has made possible the need to challenge the notion that fisheries are a male-dominated sphere even though fisheries enumerators consistently deny this

From the period before technological modernization in Ghana's artisanal fisheries to the present, the business of marine property ownership such as canoes, outboard motors, and fishing nets is adjudged to be a male entrepreneurial activity (Walker, 2002; Overa, 2003; Ninson, 1991). However, attention has been drawn to a somewhat new phenomenon – the occurrence

within coastal Ghana of what has been termed “fish mammies” or Woman Fish Merchant as they known in Nigerians. The term refers to the ownership of canoes and other fishing equipment by women in coastal Ghana with the view of enhancing their access to fish (Walker, 2002). The term also indicates fish-related activities of fish traders in coastal Ghana such as the provision of finances and other inputs for fishing trips. Except for Walker (2002), Overa (1998, 2003), and Ninson (1991) who examined the pathways through which fish traders and women in coastal Ghana became owners of marine properties such as canoes and fishing nets. Indeed, little remains known about fish mammies, taking into account the women who are engaged in this practice; their experiences, challenges, and prospects for ocean governance in the artisanal fisheries, and how their activities are fundamental to fisheries management and marine policies. This study seeks to fill this gap by using a qualitative research approach to explore and analyze the experiences, challenges, and prospects inherent in the activities of fish mammies in coastal Ghana from the lens of kinship relations.

Studies on fish mammies in Ghana were taken with the view to explore and understand the pathways through which women become owners of marine properties, and how gender and kinship relations and socio-cultural practices in those places are crucial in the opportunities and constraints for these female entrepreneurs. A study by Overa (2003) and Britwum (2009) found that kinship norms and production relations between fish traders and male cooperatives who are mainly fishermen in Moree and Elmina (coastal communities in the Central Region of Ghana) play a significant role in creating opportunities for their pathway to becoming marine property owners.

This opportunity is further bolstered by the loyalty and trustworthiness that subsist in the relationship. These relationships (convivial) of reciprocity are thought to be useful for fish mammies' security and help mitigate risk (Overa, 1993).

Complementing this, Overa's (1993) study of entrepreneurs, particularly canoe and net owners, among Ghana's fish traders revealed that the economic and social strategies adopted by women in fishing communities constitute a pathway through which they succeed in converting capital from their fish trading into the male domain of canoe ownership; even though, it is considered risky due to the limited possibility to seek for male cooperation. As such, the lack of access to a secure network and the ascribed path make it difficult for them to take the risks demanded to be an entrepreneur in the fisheries (Overa, 1993). Historical analysis by Walker (2002) amongst Fanti canoe owners revealed that the British colonial notion of open sea access was vital in the ability of Fanti fish traders in Kormantse to purchase and control canoes and other fishing equipment. As a result, many fish traders became convinced by the belief that investing their market capital into marine property ownership will increase their regular access to fish. According to Walker (2002), this created the contemporary condition where on daily basis, fish traders provided fishermen with fuel and maintenance costs for fishing trips.

As a key occupational group (i.e. fish mammies) in the artisanal fishing industry, the locus of much debate about the role of women in fishing has always centered on making them visible for policy consideration. Although, the research on the pathways fish traders and women in coastal communities go through to become fish mammies in the fishing sectors is

valuable, studying the experiences and challenges that hamper fish mammals' activities cannot be undermined considering the masculinized nature of their work and the environment. By default, this may undervalue their contributions and Gopal, Hakpe, Kusakabe, Rajartnam and William (2020) note that these challenges marginalize and render their activities invisible (Gopal, Hakpe, Kusakabe, Rajartnam & William, 2020); including certain management scenarios that contribute to ocean governance and facilitate sustainable fisheries. This view of men seen as the traditionally appropriate individuals to own canoes has conferred on them privileges and power within the artisanal fisheries to oversee decision-making about sustainable fishery (Gissi et al., 2018); at the expense of the fish mammy whose hierarchical position in the fisheries guarantees collaborations (Adjei, 2021). Jo (2010) believes that the knowledge and experiences of women as an occupational group in the marine fishery is enriching thus, a great loss to ocean governance as it continues to remain underutilized. Calhoun, Conway, and Russell (2016) have intimated the need for ocean governance policies to recognize women as active participants in ocean-related decisions since their experience as ocean managers is likely to enrich and yield holistic results. In line with this call, it will be expedient to explore fish mammals' ocean governance prospect considering their hierarchical position in the fisheries. Therefore, exploring the experiences, challenges, and prospects for ocean governance in the Artisanal fishery in Elmina and Chorkor has become necessary.

Statement of the Problem

The roles of women as fish mammals in Ghana's artisanal fisheries, especially within a patriarchal and masculinized domain, have been

underexplored. Despite performing roles traditionally associated with men, their contributions remain largely invisible and undervalued. Prior research has primarily focused on women's roles in gleaning, processing, and marketing within artisanal fisheries in Africa and the Asia-Pacific regions, highlighting their contributions to the sub-sector's development (Ameyaw, Breckwoldt, Reuter & Aheto, 2020; Gopal, Hakpe, Kusakabe, Rajartnam & William, 2020; Harper, Grubb, Stiles & Sumaila, 2017). However, these studies have not sufficiently addressed how women, as fish mammies, navigate and challenge traditional gender roles within this male-dominated sector.

The majority of existing research has centered on the challenges faced by fish traders in artisanal fisheries, along with policy recommendations (Ameyaw et al., 2020; Olaoye et al., 2019). In sub-Saharan Africa, for instance, the High-Level Panel of Experts on Food Security and Nutrition [HLPE (2014)] found that the relocation of processing facilities away from landing sites has significantly increased transportation distances and costs for fish traders and processors. Additionally, Harper et al. (2017) noted that the limited access of fish processors to global markets has constrained their finances.

Ameyaw et al. (2020) also analyzed the roles of women in fisheries in Ghana's western region, identifying challenges such as health constraints, low profit margins, limited access to loans, and inadequate preservation facilities, all of which impede the activities of fish mammies and their wives. Yet, unlike other occupational groups (e.g., fish processors, fishmongers, fish traders), fish mammies remain less visible, often unknown, and sometimes unheard of, as their work is conducted out of public view and primarily involves unpaid

pre-harvest activities (Ogden, 2017). This underscores the need for an in-depth study to bring visibility to their experiences, challenges, and prospects within artisanal fisheries in coastal Ghana.

Although some literature touches on the socio-cultural pathways and contributions of fish mammies (Ninsin, 1991; Overa, n.d.; Walker, 2002; Olaoye & Ojeyibi, 2019; Ameyaw et al., 2020), it fails to adequately address how these women perform roles traditionally associated with men within a patriarchal and masculinized domain. Gopal et al. (2020) have called for immediate research to provide deeper insights into the activities of fish mammies, which would inform future policies on marine and coastal management (Zhao, Tyzack, Anderson & Onoakpovike, 2012; Torell, Bilecki, Owusu, Crawford, Beran & Kent, 2019). In response, this study seeks to address this gap in the literature by exploring the phenomenon of fish mammies in Ghana's artisanal fisheries. Through a sociological lens, this research will examine how the artisanal fishery sector in coastal Ghana constructs, challenges, and reinforces the gender roles of fish mammies, while also exploring their individual experiences and the prospects they offer for ocean governance.

Objectives of the Study

This study aims to explore the phenomenon of fish mammies in artisanal fisheries in coastal Ghana. Specifically, the study sought to:

1. Identify the category of women who are fish mammies in Elmina and Chorkor
2. Examine the experiences of fish mammies in Ghana's artisanal fisheries

3. Interrogate the contributions of fish mammies to the development of artisanal fisheries
4. Examine the challenges faced by fish mammies in artisanal fisheries; and
5. Identify the prospects of fish mammies for ocean governance in artisanal fisheries.

Research Questions

Underpinning the research aim, there were several research questions:

1. Which category of women are fish mammies?
2. What are the experiences of fish mammies in artisanal fisheries?
3. How do the activities of fish mammies contribute to the development of the artisanal fisheries?
4. How does the nature of artisanal fisheries pose a challenge to fish mammies?
5. What are the prospects of fish mammies' for ocean governance in artisanal fisheries?

Scope of the Study

This study examines fish mammies in the artisanal fisheries of Elmina and Chorkor, selected for their distinctive gender ideologies and the robust nature of their fishing practices. Elmina recognized for its extensive landing site and significant participation of women in fishing-related activities, provides insight into gender roles influenced by matrilineal kinship norms. In contrast, Chorkor, with its patrilineal ideals, offers a perspective on how these gender ideologies shape the roles and experiences of fish mammies in artisanal fisheries. By exploring these varied contexts, the study aims to uncover how

gender roles for fish mammies are constructed and performed within different socio-cultural settings in artisanal fisheries.

Significance of the Study

As stated earlier, the largest body of work has looked at marketing strategies that enable fish traders to effectively mobilize capital for canoe, net, and outboard motor ownership (Ameyaw et al., 2020; Olaoye et al., 2019; Overa, 1993). Also, marriage to fishermen, the entire kinship arrangement of coastal societies, and the colonial notion of the sea that permitted marine property ownership have been considered. Surprisingly, their focus suggests that there is more to explore. Therefore, this study seeks to provide insight into how fish mammies' marginalization and invisibility pose challenges to their activities in artisanal fisheries in coastal Ghana. Given that fish mammies operate within a strongly patriarchal environment, their activities are likely subject to conditions that undermine their roles and contributions. Research focusing exclusively on the marginalization of fish mammies will reveal the underlying challenges they face, which may require targeted policy interventions. By highlighting these issues, the study aims to identify specific areas where policy changes could address the systemic barriers affecting fish mammies and improve their operational conditions.

The study hopes to contribute to the discourse on gender and fisheries management as well as an understanding of the experiences, challenges, and prospects of fish mammies in artisanal fisheries in coastal Ghana to yield highly overlooked insights that will be useful to the literature on marine policy and ocean governance respectively.

Contributions to policy formulation

It is acknowledged that the role women play in contemporary fishing industries continues to be unrecognized (Gopal et al., 2020; Zhao et al., 2013). At the other end of the continuum, researchers advocate for research to provide insights into the role of women in the fishing industry to effectively guide future policies on marine and coastal management. Here, the findings will make available useful information for policymakers such as those in Fisheries and Gender because successful policy direction will also depend on the challenges that underlie fish mammies' marginalization and invisibility in coastal Ghana. Fish mammies' activities will also inform policy dialogue on ocean management and marine policy to adopt a more integrated approach for advancing a broader set of objectives and effective ocean management practices.

Definition of Concepts

- i. **Fish Mammy:** a woman who operates on a large scale in the fishing economy and whose fishing-related activities include the ownership of marine properties such as a canoe, fishing net, and outboard motor (Overa, 2003). However, in this study, the concept refers to women canoe owners. They are seen as the female equivalent of the male capitalist fisherman (Britwum, 2009; Ninsin, 1991).
- ii. **Fish Wives:** female spouses of fishermen who sell and keep the finances of fishermen as their main task (Ninsin, 1991).
- iii. **Ocean Governance:** it denote concerted coordination of efforts by state and non-state actors towards the protection of the ocean and

marine environment (Pyc, 2016). In this study, non-state actors are fish mammals.

iv. **Artisanal Fishery:** denotes traditional fishing involving the use of relatively small fishing vessels to make short fishing trips mainly for local consumption

v. **Experiences:** it is the interaction between an organism and environment such that a state of satisfaction is achieved (Acampado, 2019).

vi. **Challenges:** inherent socio-cultural conditions in the respective artisanal fisheries in coastal Ghana that hinder or constrain the entrepreneurial activities of fish mammals.

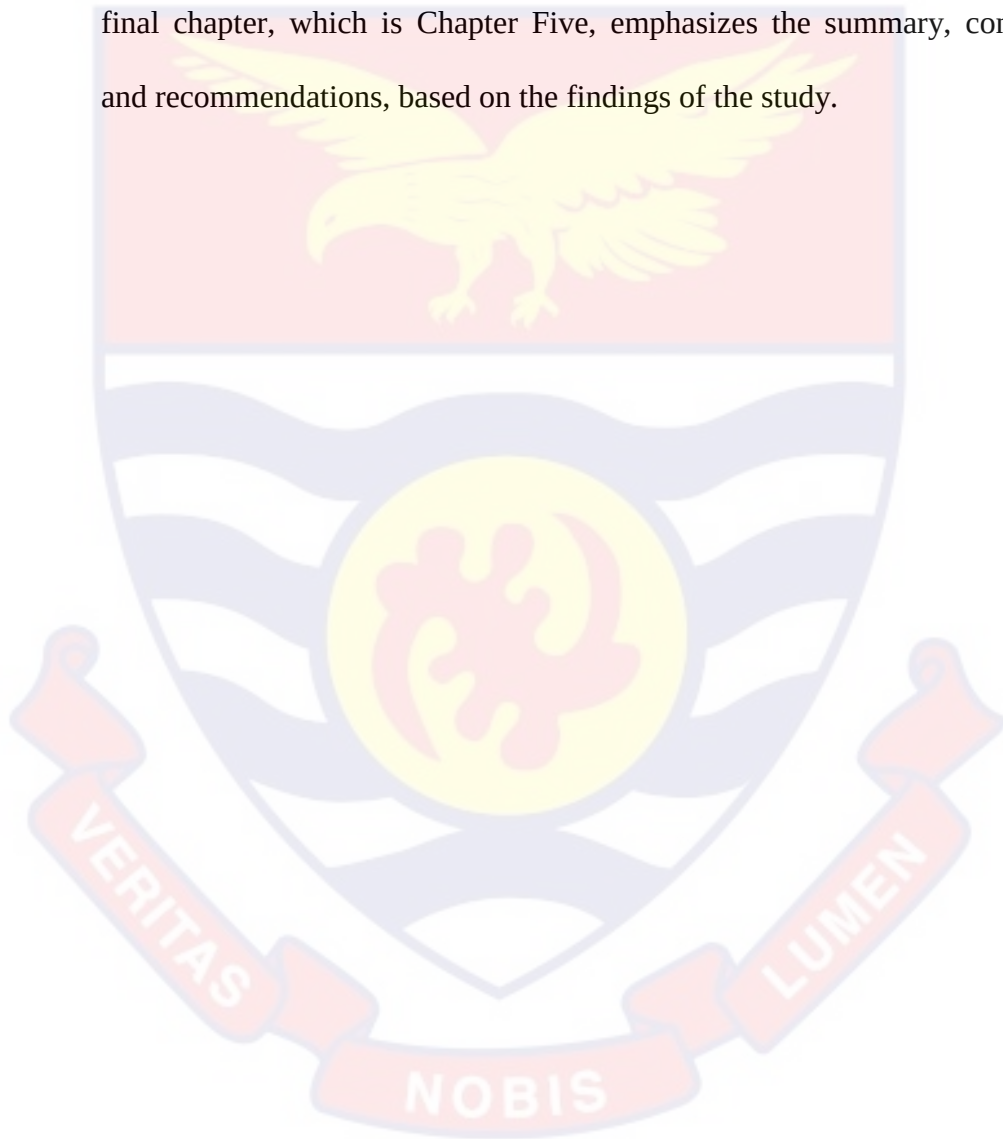
vii. **Prospects:** constitute the possibility of potential growth and improvement in conditions favorable for enhancing the activities of fish mammals.

viii. **Kinship:** customs and ideas about inheritance through one's generation (Overa, 2003); mainly matrilineal and patrilineal setting premise for respective fish mammy in the artisanal fishery.

Organization of the Study

This study is structured into five chapters. The first chapter focuses on the overview of the research in terms of the background to the study, the problem statement, the research objectives, the research questions, the scope of the study, and the significance of the study. Chapter Two presents reviewed literature on theoretical approaches employed in the study, these are Gender Performativity, Africa Feminism and Ecofeminism. The chapter also reviewed concepts and empirical studies related to fish mammals and artisanal fisheries.

Chapter Three provides an in-depth explanation of the methodology for the research. It defines the research design, the study area, the study population, sampling technique/procedures, instrumentation, data collection methods, method of data analysis, and ethical considerations. Chapter four provides the outcomes or rather the findings and discusses the analysis thoroughly. The final chapter, which is Chapter Five, emphasizes the summary, conclusion, and recommendations, based on the findings of the study.



CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter on a study on the phenomenon of fish mammies in artisanal fisheries in coastal Ghana reviews relevant related literature on concepts and theories; and provides empirical evidence on the subject. The concepts of artisanal fisheries and fish mammies are extensively examined from gender and socio-cultural perspectives. It also examined how kinship systems and gender ideologies in fishing communities potentially serve as basis for marine property ownership. More so, relevant theories are reviewed to help explain the activities of fish mammies particularly on issues related to what fish mammies believed are appropriate gender roles of a marine property owner, the social practices and discourses that determine appropriate gendered performance, and lastly the relationship between gender role, performances and individual fish mammy identity.

Theoretical Review

Thomas Jefferson noted that “the moment a person forms a theory, their imagination sees in every object only the traits which favour the theory” (quoted in Matthews 1984, pi). That is to say, theories help us explain or describe facts that we already know. One of the core tasks of social research is concerned with developing theoretical orientations to bring to light the social world as it is experienced on a daily basis (Sparks et al., 1996). Here, the study explored a number of theoretical perspectives for their relevance in making plausible the experiences of fish mammies, the challenges they face in the artisanal fisheries, and how they derive opportunities in their activities to

reshape their interests. In this sense, the study advances Butler's theory of gender performativity to consider how the firmly entrenched masculinised ideals in Ghana's artisanal fisheries shape the activities of fish mummies. Her insights on gender identity more generally are relevant to understanding how fish mummies' original gender identities are regulated to suit the dominant discourse that is masculine by definition, and how performing that script is personally traumatizing. More so, in the quest to contextualise these challenges, the African feminist perspective was applied to make plausible the patriarchal system of Africa that underpins the nature of oppression and marginalisation by African women in the fisheries sector. I would also discuss how Ecofeminism theory provides a novel approach to understanding fish mummies' ecological stewardship and how they shape their sustainable fishing practices and ocean governance efforts.

Gender Performativity (Judith Butler, 1990)

The Gender Performativity theory was originally introduced by Judith Butler in her book, *Gender Trouble: Feminism and the Subversion of Identity* (1990); in which she argued that gender is a socially constructed category that is enacted during gendered 'performances' (Lester, 2008). Butler challenges the notion that gender norms create gender roles, asserting instead that gender identities emerge through the repeated performance of specific gender roles. According to Ritzer and Stepnisky (2018) gender exists only within the performance itself, and its repetition informs our understanding of gender; by allowing for the creation of livable gender identities, and clarifying gender norms through these repetitive performances (Shang, 2012). However, Butler recognizes that societal conventions impose constraints on the content of

gender performances. While individual agency plays a role in choosing a gender role, it is influenced by the ability to navigate social norms (Lester, 2008).

Mendez (2012) emphasizes that individuals are conditioned and limited by cultural norms, shaping their intentions and potentially leading to unforeseen outcomes. Here, Butler (2004) draws on the influence of Michel Foucault's concept of the regulatory power of discourse, which not only acts upon individuals but also shapes and forms them. The performance of gender is influenced by norms and practices that are available and legitimized within a culture (Butler, 2004). In this context, Lester (2008) highlights that certain gender identities are aligned with power, and their performance is considered appropriate within specific contexts. Regulatory power functions as a normative force, labeling any gender identity that deviates from its direction as problematic and inappropriate. Regulative discourse exerts significant control over individual gender performances, dictating what is deemed acceptable within a particular cultural context (Ritzer & Stepnisky, 2018). The content of gender performances is shaped by social norms, thereby constraining individual agency (Lester, 2008).

Consistent with Gender Performativity, Butler theorized that gender identities are constructed through repeated performances of specific gender roles. While individuals have agency in choosing their gender identity, societal norms and regulatory power exert influence, shaping and constraining their performances. Understanding gender performativity helps illuminate the dynamics of power and norms in the construction of gender identities within different cultural contexts in coastal Ghana.

Closely linked with the theory of gender performativity is the concept of identity. Identity refers to the conscious and unconscious ways in which we give meaning to our relationship with the world, enabling us to continuously shape and reshape ourselves through repetitive performances (Butler, 2006; Lester, 2008). While individuals possess multiple identities, the choice to enact each identity depends on contextual conditions, particularly the dominant discourse that ultimately compels certain performances (Nelson, 1999). In the practice of gender performativity, we not only observe how governing norms are invoked, but we also comprehend one of the mechanisms through which reality is reproduced and transformed (Butler, 2004, p. 218). Fish mummies do not simply become like men (as shown by the data later), but they go through a subtle process in which their traditional gender identities are juxtaposed with the masculinized requirements inherent in artisanal fisheries in coastal Ghana. More likely, their roles, experiences, and expectations are embedded in patriarchal conventions or norms and masculinized demands within the context of artisanal fisheries. Their roles, experiences, and expectations are deeply rooted in patriarchal conventions and norms, which are further magnified within the realm of artisanal fisheries.

Consequently, as women fisher folks in coastal communities navigate their way into this male-dominated sphere, their transition becomes a gendered process that necessitates the manifestation of gender roles in new and unanticipated ways. In essence, the traditional gender roles of being a marine property owner in artisanal fisheries are redefined, albeit in a manner that does not entirely favor women's position within the industry. Fish mummies find themselves subordinated by the prevailing patriarchal discourse, yet they are

afforded the opportunity to perform similar roles as men. However, this complexity is compounded by the fact that the existing standards used to evaluate their performance are inherently masculine, as the conventions within the Ghanaian fishing industry are rooted in masculinized ideals based on patriarchal norms (Adjei & Sika-Bright, 2020; Britwum, 2009). I argue that the masculinized ideals prevalent in Ghana's artisanal fisheries have profound implications for the experiences of fish mammies in terms of how they fulfill their productive roles. Artisanal fisheries serve as one of the spaces in which women have sought to challenge gender equality by attempting to redefine the range of behaviors and attitudes within a traditionally male-dominated setting. This raises thought-provoking issues in the study of fish mammies, in that the extent to which fish mammies can successfully redefine traditional gender roles and gain greater control over their lives within one of the most gendered domain within Ghana's artisanal fisheries in coastal Ghana remains a subject of debate among feminists (see Britwum, 2009; Weeratunge, Snyder, & Sze, 2010). Some feminists argue that providing spaces for women will increase female participation in artisanal fishing. However, others criticize women's involvement in fisheries, as they believe that it is unlikely for women to benefit from a patriarchal organizational structure rooted in the glorification of masculine values.

Gender performativity has not been without praise and criticism. Despite that the theory allows us to see how the norms in Ghana's artisanal fisheries operate to shape fish mammies, undertaking a close and critical reading of Butler's performativity theory allowed a view that endorses the subject's performativity as an exaltation of dominant discourse usually

masculine in nature. In other words, the theory of performativity insists that gender identities acquired through series of repetitive acts are compelled by dominant discourse in Ghana's artisanal fishing industry (Nelson, 1999; emphasis added). Thus, fish mammies do not exist outside masculine discourse in the artisanal fishing industry; which constructs them into performing certain roles as marine property owners. So, fish mammies continually perform identities that are prescribed by the hegemonic patriarchal discourse inherent in artisanal fishery. However, the locus of Butler's performativity paradigm fails to represent in its agenda the all-inclusive concerns on the African continent that underlie the 'third world' women or the nature of marginalisation and oppression of African women. In other words, the Eurocentric undertone of Butler's perspective does not recognise the common struggle of African women for empowerment and liberation.

African Feminism

During the past decades, feminism has become a common currency both inside and outside the academic setting for addressing the political, social, and economic conditions influencing women's marginalization and oppression. As a theory, it seeks for the empowerment of women by reexamining the conditions aforementioned. However, African feminism as a variant of mainstream feminist theory was first introduced by Filomina Chioma Steady in her book, *African Feminism: A Worldwide Perspective* (1987) to delineate the experiences, worldviews, and perceptions of Indigenous African women about underlying conditions in Africa that oppresses them. African feminism draws some of its theoretical base from mainstream feminists' enterprises, although African feminism for the most part

has given remarkably more attention to the peculiar conditions that underlie African women oppression and marginalization. In fact, this was necessary, since it was known that African culture is replete with practices that hegemonize patriarchal interest and women oppression (McFadden, 1997). Lewis (2002) concurs that the need to address the particularities of gender relations, practices, and identities in confronting women in Africa was often misunderstood by Western feminism, which influenced the reason for this shift. That is, the uniqueness of the sociocultural identity typified by motherhood and the reverence for other culturally specific roles provided a steppingstone for the emergence of the African feminism paradigm. This shift also mirrored the ideological refusal of African women to pepper their discourse with the general Eurocentric representation of women's struggles, rather preferring to perpetuate the idea that their challenges are unique and rooted in the sociocultural practices. A radical feminist Patricia McFadden reasserted that as African women, "we mirror the different faces of the same patriarchal culture and often we see ourselves as the custodians, in fact the main gatekeepers of African patriarchy, through culture. We derive our identity from it" (McFadden, 1997)

In spite of cultural patriarchies instilling dread, African feminism at its core have lend itself to the strategic deployment of indigenous practices to resist multiple oppression and marginalization (Kuumba, 2006); recognizing African women efforts to barter their oppressions to promote their emancipation. That said, African feminism sees women as agents of change and stresses the need for women to organize themselves for resistance. In this vein, Kuumba (2006) revealed that African women make use of social

practices to wage resistance against their oppression. Steady (1997) contends that African women of varied cultural systems often resort to their own institutionalised modes of female resistance to counter various forms of domination. This is true for other African women who often use their role as cultural conduits to embark their resistance. Although for many women, the strategic intent to resist oppression is always unthreatening, and hence makes their exercise of power hard to recognise. Kabeer (1999) attributed this to the influence of their emotions by certain subjectivities. Despite that, African women continue to develop a range of possibilities in which they also exert power.

The emphasis on African feminism is essential in the analysis of the challenges and contributions of fish mammies in the artisanal fishery of coastal Ghana. Central to this is examining how indigenous cultural practices in the artisanal fishery sector tend to marginalize and oppress fish mammies' performing their respective productive roles. In this regard, fish mammies' entrepreneurial initiatives could be seen as an expression of their agency deployed to push through their interests despite the possible resistance they may face (i.e. the patriarchal convention regarding the conduct of a marine property owner in the artisanal fishing industry). Overa (2003) observed that the insistence on gender-correct behaviour within the industry forces women canoe owners to always find new ways to perform their gender; where in most cases they are required to be mannish. Despite the subtle nature of women's resistance, Kawarazuka, Locke, and Seeley (2019) reflect that women's exertion of their agency through their socially prescribed practices leads to changes in gender relations, often in their favour. According to Beck (2017),

African women are able to utilise the contradictions of patriarchy to enable the creation of opportunities for their empowerment. To some extent, fish mummies' creative cultural resistance will be dependent on how they are able to overcome complexities with innovative initiatives to manipulate their interests.

Ecofeminism

Ecofeminism is a variant of feminist theory and activism that emphasizes women's connection with nature or ecology. Emerging in the 1970s as a feminist model, it argues that women's liberation is intertwined with the liberation of nature. The movement began with French author Françoise d'Eaubonne, who asserted that the destruction of the planet is due to the profit motive inherent in male power, or patriarchy. As a sociological theory, ecofeminism prioritizes ecological sustainability over destruction and advocates for care over human-centered greed that leads to the overexploitation of nature (Birkeland, 2012). At its core, ecofeminism identifies women as 'natural environmentalists' due to their reliance on trees, land, water, and other resources to fulfill their reproductive and domestic roles, such as cultivating food, hauling water, and finding medicine. Women's role as carers and saviors of the environment is emphasized, particularly in the context of their victimization by environmental devastation, which can impede their domestic duties.

Shiva and Mies (1993) critique technological modernization and capitalistic patriarchy for the destruction of nature and the marginalization of women, holding men accountable for overexploiting the environment for profit. Their strand of ecofeminism 'essentializes' the spiritual connection

between third-world women and ‘mother nature,’ highlighting the nurturing relationship these women have with the environment, especially for those whose livelihoods depend on it.

In the context of fish mammies, this perspective highlights their unique ecological relationship with the marine environment and how it shapes their approach to sustainable fishery practices. Fish mammies’ role as ‘natural environmentalists’ is evident in their reliance on the marine ecosystem to carry out daily tasks such as fishing for food and supporting their livelihoods. Their intimate connection with the sea fosters a sense of responsibility and stewardship toward the marine ecosystem, leading to sustainable fishery practices that prioritize the preservation of fish stocks and maintain a balance between fishing and ecological well-being.

Ecofeminism emphasizes how fish mammies’ caregiving and nurturing attributes extend to their relationship with the environment, translating into practices that align with ecological principles. Shiva and Mies's critique of profit-driven exploitation resonates with the advocacy for sustainable fishery practices, where fish mammies are seen as crucial in safeguarding the health and productivity of the marine ecosystem. The spiritual connection these women share with the sea underscores their profound respect for marine life and their commitment to ecological sustainability.

Overview of Ghana’s Fishery Sector

This section looks at the structure of Ghana’s fisheries sector. It considers the artisanal fishery sector’s evolution and set the scene for discussing its current status by detailing the issues affecting the people who

live and work in the sector and where the country is going in terms of its management.

Structure of the Fishery

Ghana's fisheries sector consists of two main components: capture fisheries which contribute (91%) of the total fish production and culture fisheries which accounts for the remaining (9%) of the country's total fish production (Ministry of Fisheries and Aquaculture Development [MOFAD], 2015). The capture fisheries include marine (sea and lagoons) and inland (lakes, rivers, and reservoirs). The Inland fisheries are mainly small-scale, while the marine fisheries are a combination of mostly small-scale and large-scale industrial fleets with exploitation spanning four coastal regions of the country – Greater Accra, Western Region, Central Region, and the Volta Region. The marine capture fisheries form the backbone of the fisheries sector, contributing (70.6%) of the total fish production (MOFAD, 2018) and comprise three main sectors – the Artisanal canoe sector, the Semi-industrial sector, and the Industrial fisheries sector. These sectors provide an enormous contribution to the social and economic development of the country. This work however focuses on the artisanal sector.

Artisanal fisheries

The artisanal fishery which is the main focus of this study, traces its origin to the 1700s when it was purposely for domestic consumption. The artisanal fishing sector is characterized by open beach fishing mainly with the use of basic fishing equipment such as canoes, and fishing nets and often powered with outboard motors. The use of canoes can be found in almost all landing sites in fishing communities along the coastal settlements of Ghana. It

is generally considered as small-scale fishing due to its subsistence nature (Ninsin, 1991). According to Mensah (2010), Ghana's artisanal fishing sub-sector consists of about 11,219 traditional canoes with 85 percent of them motorized while the remaining 15 percent being non-motorized, and employs a wide range of fishing gears such as purse seines (i.e., poli and watsa), beach seines, drift gill nets, and surface set nets; as well as bottom set-nets and hook line used by some artisanal fishermen. The sector is currently said to be the most important sector within the marine sector to the total volume of fish landed. It produces about 70-80 percent of the total annual volume of marine fish catch comprising mainly of small pelagic fish species and employs about 98 percent of the total number of workers in the fisheries sector (MOFAD, 2013). Artisanal fishing is a seasonal business and is very much practiced along the coastal settlements of Ghana. It is most common along the shores of Western, Central, Greater Accra, and Volta Regions.

Evolution of the Artisanal Fishery Sector

Artisanal Fishery in the past

Over the years Ghana's artisanal fishery has evolved into a vibrant industry with a mixture of both traditional and modern fishing fleets although the exact origin of artisanal fishing in Ghana is not easy to ascertain. Lawson and Kwei (1974) described Ghana's artisanal fishery as primitive and mainly subsistence due to its lack of technical knowledge, capital intensiveness, and the use of highly simple fishing equipment. Ninsin (1991) also recalls that artisanal fishery in Ghana was organized around kinship domains; where production team members (fishermen) comprised of members of a matrikin. Both men and women were involved in specialized roles. Here, individual

family heads (*ebususpanyin*) were made heads of each enterprise due to their position as the political and spiritual heads of the kinship group. He was also responsible for ensuring that the production unit in the fishing enterprise were all members of the kinship group. This system and labor arrangement was mainly popular amongst the Ga-Adangmes likewise the Fantis. According to Aryeetey (1999), the dependence on the family for work group promoted effective labor management. Similarly, women fish traders and processors also recruited their daughters, sisters, and other female relatives to form work groups. The period was also marked by a highly labour-intensive fishing industry despite the simple nature of fishing. Fishing was done with dugout canoes and simple gears such as paddles and usually with tarpaulin sail in times when the direction of the wind was favorable. Family heads were entrusted with all fishing equipment in the trust of the family. Other times, they were given the responsibility of repairing damaged fishing equipment. More so, the relationship between fishermen and their female counterparts was also instrumental in times when fishermen needed capital to procure fishing equipment.

Wives and relatives of fishermen also played a very important role in fishing communities. Women's involvement in the artisanal fishery was made possible due to the convivial relation and cultural arrangements that were inherent in most fishing communities, especially among the *Fantis* and *Ga-Adangmes* (Overa, 1998). Overa (2003) revealed that most women who were fish traders and processors were either married to fishermen and were engaged as *fish wives*, and were mostly responsible for the sales and processing of their husbands' catch. Occasionally, *fish wives* render an account of all proceeds

from fish sales to crew members during lean seasons; from which significant gains are saved with the family head and debts also paid.

Understanding the Concept of Fish Mammy

Women are a key occupational group in artisanal fisheries worldwide. Studies of their role have shown a distinctive and diverse pattern. Particularly in Ghana's artisanal fisheries, female fish traders are seen as innovators, entrepreneurs, and capitalists (Walker, 2001). In the artisanal fisheries sector, women's contributions are visible in many activities involving the processing and distribution of fish. These activities have been adjudged vital since they facilitate the transfer of fish to consumers (Overa, 1993). Besides, the widely held view that female's role in artisanal fisheries is undergoing a transformation and increasingly becoming diverse provide a further reason to study their work. Indeed, the earlier notion that suggest women's role in artisanal fisheries as inferior has been challenged by the works of Ninson (1991), Overa (1992, 2003) and Walker (2001). These works reveal that Fante, Ga, and Ewe women have been actively involved in Ghana's artisanal fisheries as capitalists – an occupational position that included the ownership of canoes, fishing nets and outboard motors in which Overa (1992, 2003) described as 'Fish Mammies'. They are often described as "capitalist exploiters" (Ninson, 1991). These studies also had at its focus the career path of fishtraders or women in coastal communities and the pathways they went through to become fish mammies or capitalists.

The concept of 'fish mammies' denote women who occupy higher hierarchies in the artisanal fishery industry as owners of fishing equipment mainly canoe, fishing net and outboard motor (Britwum, 2009). Here, they are

required to undertake similar roles of a male canoe owner as described by Britwum (2009) and Ninson (1991). Indeed, fish mammies may exercise considerable personal power, hire and sack workers in their canoes, and provide various types of care for fishermen. It is a complex task in itself, and considering the environment in which this is undertaken has led to the role of the fish mammy being described as unique (Overa, 1992, 2003). Currently, fish mammies are indispensable in artisanal fisheries even though they are not themselves involved in the fishing activities, however, their investment in the activity and provision of capital for fishing trips have ensured development in the sector. Owning a canoe is an indication of hard work and prestige, a sort that is important in securing one's fish trade due to the constant supply of fresh fish. Aryeetey (1998) states that women's ability to diversify their roles in the artisanal fishery is mainly due to their versatility in occupational pursuits, often readily combining micro-jobs. It is not surprising that their success as capitalists and owners of marine properties have largely depended on these abilities. Kwon (2005) noted that, "Everywhere, women are overcoming traditions, customs, superstitions and prejudices and becoming major contributors in the marketplace. In China, for example, women are responsible for (25%) of the businesses established since 1978. In Hungary, women started more than 40% of all businesses since 1990. In Mexico, (32%) of women-owned businesses were started less than 5 years ago. In almost every region of the world, the proportion of women in the labor force has grown substantially, yet there still experience male dominance in most work spaces. In transition countries, women are estimated to comprise (20%) to

(25%) of entrepreneurs” (p. 9); with similar trend occurring in Sierra Leone, Ghana and Zambia (Overa, 2011).

This might explain why women along the coastal settlements in Ghana have sought to cross the gender defined division between marketing and fishing by investing in marine properties. The paucity of scholarly attention on fish mammals gained momentum in the past two decades with studies that sought to explore the means that fishtraders and women alike went through to become marine property owners. These authors were of the view that political, social and cultural factors inherent in coastal communities were solely the conditions that enabled fishtraders and women to become fish mammals. In fact, Walker (2001) pointed out that the British colonial doctrine of freedom of the seas which held sway in coastal communities was pivotal for coastal women and fishtraders access to marine properties. Besides, Ninson (1991) accounts that the modernization of the artisanal fisheries in the early 1960's which saw the onslaught of new fishing equipment such as outboard motor provided fishtraders the commercial interest to extend their investments into new fishing equipment into owning them so as to make possible their access to fresh fish to facilitate their trade. Besides, fish mammals became the sole financiers of fishing trips and owners of means of production, a position that was seen as a shift of power mainly because fishermen now largely depended on them; thus conferring on them the title “capitalist exploiters” (Overa, 1992). Although fish mammals are not involved in fishing activities, however their investment into the activity and having their careers as distributors and processors on the line, they take active involvement in issues regarding the fisheries. Walker (2001) recalls of how fish mammals in colonial times

agitated on behalf of fishermen usually when they needed to stop foreigners from fishing.

Gender norms and customs along coastal settlements of Ghana

Fishing is notably the main occupation for men and women in fishing communities along the coast of Ghana. It serves as an important source of national revenue and income for families whose lives depend on it. Besides, studies on Ghana's fishing industry have constantly acknowledged the men and women whose roles have led to its development. Besides, these men and women are seen to work in societies largely classified as traditional. Odotei (1999) noted that the technical and entrepreneurial abilities by men and women in the sector were harnessed in an organizational space that is modeled on local traditional and customary practices inherent in fishing communities along the coast; within which certain gender ideologies are prescribed. In fact, Britwum (2009) also understands that the nature of gendered hierarchies in the fishing industry were maintained by the traditional gender roles of the respective fishing communities; thus, having implication on women's production relations in ways that shape their economic opportunities. Taking into account that, Overa (2003) attributed the variations in social and cultural practices along coastal communities as responsible for how women economic opportunities are affected and differences in traditional gender authority in respective artisanal fisheries.

Along the coast of Ghana, stretching from Axim in the Western Region to Keta in the Volta Region comprises three main ethnically distinct fishing communities (i.e. Akan, Ga-Adangme, and Ewe) that are divided along matrilineal and patrilineal descent systems respectively. For matrilineal

groups, property and inheritance rights are passed through the mother's line whereas, patrilineal decent system transfers such rights through the father's line (Manuh, 1998). Dodoo (1998) recognizes kinship as a sociocultural institution that transmits wealth, traditional benefits or privileges, and rights, including responsibilities to lineage members. These differences as noted by Overa (2003), also include variations of language, marriage practices, and socioeconomic organization of production systems within their fisheries, even though, livelihood strategies are similar to the extent that kinship and marriage have gained a stranglehold overfishing and trade in the communities altogether. However, they branch out based on their preferred view of women's and men's models of good behavior throughout their life phase. Even though other views suggest that the onslaught of modernization has made kinship ties irrelevant (Nukunya, 2016), Overa (2011) found kinship in fishing communities as one of the most important socio-cultural practices that have gained status in artisanal fishery despite the technological and economic modernization that has taken place in the industry.

Besides, men's and women's access to resources and the extent to which they invest their labour, loyalty, and interest highly depends on it. For instance, in matrilineal societies, unlike patrilineal ones, women are seen as "carriers" of the lineage, thus are conferred traditional custody of children (Takyi & Dodoo, 2005); and allowed access to other lineage properties (Oppong, 2001). This form of social organization has been able to survive despite external political and economic influences (Salifu, 2020). This is critical to the discussion of why most women in coastal communities find the opportunity to become canoe, fishing net, and outboard motor owners and why

others are constrained in that regard. Women in matrilineal kinship often assert themselves to earn a living on their volition without recourse to their husbands. Salifu (2020) understands that Akan women are expected with the responsibility to safeguard the material needs of their home and lineage to strengthen their position in their marital home. Besides, this view also endorses the assertion that “kinship is an ideology which defines the room each of the sexes (i.e. man and woman) has to manage their affairs (Poewe, 1981; p.11). According to Overa (2003), it is revealing to understand that the role of kinship in these coastal communities have also been highlighted as a conduit for constituting labour in artisanal fisheries, and has also served as a basic ideology prescribing fishing community gender ideologies shaping economic opportunities.

Kinship and Gender Marine Property Ownership

In relation to property ownership, kinship connections between individuals are an essential customary-based stakeholder; usually established through marriages to ensure the transmission of wealth and some traditional privileges to its members (Dodoo, 1998). Ghana, just like any other country acknowledge kinship as a means of determining one’s descent and familial relationship either from a female or male ancestor respectively (Gedzi, 2012). Takyi and Dodoo (2005) agree that the majority of Ghanaians are divided along matrilineal and patrilineal descent lines despite the many other linguistic and ethnic groups in Ghana (Ghana Statistical Service, 2010). The Akan, which constitute the largest ethnic group in Ghana are identified with the matrilineal (female) decent system, while other ethnic groups including the Ga-Adangbes follow the patrilineal system of descent (Ghana Statistical

Service, 2010). For matrilineal groups, property and inheritance rights are passed through the mothers, whereas the patrilineal descent system transfers such rights through the father's line (Manuh, 1997).

Many women who work as fish traders or processors in the artisanal fishery sector do not go on to become fish mummies (i.e., owners of means of production). Becoming a fish mummy is regarded by some as an accomplishment of women who "made it" as marketers, traders, and processors (Overa, 1992), what Maslow (1987), the renowned motivational theorist calls self-actualization. Britwum (2009) cited the norms and customs in fishing communities as the obstacles largely responsible for women's subordination in the artisanal fishery sector. It is also shown that gender norms and customs vary along the coastal settlements of Ghana; such that there are notable differences regarding language, kinship arrangements, and marriage practices enabling women to transcend gender norms in fisheries (Overa, 2003). However, this is not possible in some fishing communities in Ghana.

Owning a canoe is considered an important pursuit for securing the future of the owner's children especially in matrilineal societies in Ghana (Tetteh, 2007). Women are considered powerful in matrilineal fishing communities, hence in order to justify their figurehead status, they are encouraged to own a marine property (Tetteh, 2007). Overa (1992) added that kinship ideologies in some fishing communities despite the harsh conditions of gender norms enables women access to fishing equipment that are exclusive for males. That is, while most women are denied from engaging in masculinized role in artisanal fisheries such as owning fishing equipment, their kinship ties make them increasingly privileged unlike others. Besides, the

tendency with which women in fishing communities are able to cross the gender division to become owners of fishing equipment largely depend on their marriage with a fisherman such that they become in charge of the properties they invested together upon the demise of their husbands. Britwum (2009) adds that the assistance of familial relations is fundamental to the success of fish mammies in coastal communities in ways that they even use relatives in their enterprise to help them surmount some of the challenges they encounter.

Empirical Review

A number of studies have investigated the contributions of fish mammies, as well as how women in artisanal fisheries are generally marginalized and faces inequality. This section will review relevant and related studies that either discuss how masculinized organizational discourses redefine and maintain women roles, women creative agencies against patriarchal excesses.

Contributions of fish mammies in artisanal fisheries

A study by Olaoye and Ojebiyi (2019) sought to investigate the contributions of Women Fish Merchants, otherwise known as Fish Mammies in Ogun State in Nigeria. The researchers employed a quantitative research method with the aid of an interview guide to investigate the contributions of 120 Women Fish Merchants who were selected purposively from eight selected fishing communities in Ogun State. The study revealed that despite women's marginalized role in artisanal fisheries, their contribution to the fishery industry in Ogun State has become instrumental due to their elevated roles as financiers of fishing trips, providers of fishing equipment, and main

distributors of fish. In analyzing the data, frequency counts, percentages, mean and chi-square were applied. It also used Analysis of Variance (ANOVA) to conduct inferential statistics.

The result from this study indicated that Women Fish Merchants provided economic and social support to fisher folks in the selected communities such as ensuring food security through the constant finance of fishing trips. Overall, the study found that fish mammies' ability to perform their roles effectively is dependent on their family structure. A chi-square analysis showed a significant relationship between family structure and their role in artisanal fishery. More so, the activities of Women Fish Merchants led to the reduction of feminine vulnerabilities in their respective families in ways that other female members of their families were employed as labour to assist them in their business. Furthermore, the study concluded that financial institutions should be set up in fishing communities to provide financial supports in the form of loans to enable them to facilitate fish mammies' businesses.

Olaoye and Ojebiyi (2019) primarily focus on the economic contributions of Women Fish Merchants in Ogun State, Nigeria, highlighting their roles as financiers, providers of fishing equipment, and distributors of fish. While the study acknowledges the significance of these contributions, it overlooks the underlying gender dynamics and patriarchal norms that shape and constrain these women's roles within the fishing industry. Also, the use of a purely quantitative methodology, though effective for capturing broad patterns, lacks the depth needed to explore the nuanced gender identities and power relations central to understanding fish mammies' experiences.

Moreover, the study's finding that family structure significantly influences the effectiveness of fish mammies introduces a gendered element, yet it stops short of critically analyzing how these dynamics interact with societal norms and expectations. In contrast, this research addresses these gaps by employing a qualitative approach that delves into the socio-cultural and gendered dimensions of fish mammies' roles, aligning with Judith Butler's theory of Gender Performativity to provide a more comprehensive understanding of how gender identities are constructed and performed within the patriarchal context of artisanal fisheries.

A similar study in Ghana by Overa (2002) found that fish mammies in Moree often use their position as mothers and wives within the fishing economies to empower members of their families by recruiting them as laborers in their business. The study was conducted with an ethnographic design with the aid of an interview guide. Its main objective was to examine how women in Moree use their positions as mothers, wives, and daughters in their strategies to contribute to the artisanal fishing industry. The major argument was that the matrilineal social arrangement of the fishing community empowered women with economic independence to own properties and, as such were able to use their domestic positions as wives and sisters to contribute economically to the fishing industry.

Overa's (2002) study on fish mammies in Moree highlights how these women leverage their roles as mothers and wives to economically empower their families, using their domestic positions to recruit family members as laborers in their businesses. The study's focus on the matrilineal social structure and its role in granting women economic independence is insightful,

particularly in showing how women contribute to the artisanal fishing industry. However, the study falls short in addressing how fish mummies navigate and perform roles traditionally associated with men, especially in the masculinized domain of fishing. Additionally, it does not explore how kinship norms influence their perceptions and practices as canoe owners, leaving a critical gap in understanding the gendered dimensions of their roles within the patriarchal structure of the fishing industry. My research addresses these omissions by critically examining the intersection of gender performativity and kinship norms, providing a more nuanced understanding of how fish mummies operate within and challenge the gendered expectations of their work.

Torell, Bilecki, Owusu, Crawford, Berah & Kent (2019) primarily conducted an impact assessment of USAID Sustainable Fisheries Management Project on gender mainstreaming and gender integration of women in Ghana's fisheries sector between 2014-2019. The study was based on literature review particularly content analysis of documents and qualitative methods of data collection through key informants interviews with 24 officials from implementing partners from NGOs, governmental organizations, educational institutions and staff from the Ministry of Fisheries and Aquaculture Development respectively; while focus group discussion of women occupational group comprising fish processors, fish traders and owners of fishing equipment constituting 120 women from six selected fishing communities. They sought to reiterate the impact gender mainstreaming on their respective productive activities of women perceptions, increasing

capacity, providing capital and tools, and increased support for fisheries management through rejecting illegally caught fishes.

The result of the study shows that SFMP activities have impacted women beneficiaries positively in ways that they are able to contribute to fishery management through activities such as capacity development sessions.

In particular, the study concluded that women who own fishing equipment (i.e. fish mummies) are equipped through the various training with the ability to assess loans to facilitate pre-harvest activities and provide social welfare to fishermen and children education. More so, capacity development sessions related to innovations, conflict management, advocacy and leadership have empowered women canoe owners to be able to voice out concerns in fishery management.

However, the study's focus on the positive impacts of gender mainstreaming does not critically examine the challenges or limitations these women face in a male-dominated industry. It also does not delve into how these women navigate the patriarchal norms that may still constrain their roles and voices within the industry. Thus, this research builds on these insights by addressing the complexities of gender roles and power dynamics in the artisanal fishing sector, offering a more critical perspective on how fish mummies both challenge and are shaped by these socio-cultural structures.

Categories of women who are fish mummies

Specifically, a comparative study was done between two fishing communities; Dixcove and Aboadze in the western region of Ghana by Ameyaw, Breckwoldt, Reuter and Aheto (2020) to analyse the role of women in artisanal fisheries within the context of their scale of operations, and assess

the influence of their socio-economic positions in their respective fishing communities. Both fishing communities were selected based on their similar social, cultural, and economic characteristics such as language and occupation. The study employed a mixed-method design with the aid of a questionnaire, key informant interviews and participant observation. The researchers observed the women in these communities performing their various fishing activities such as smoking and whiles they were performing their household chores. Data was collected between November 2014 and March 2015 from 200 women who were randomly selected from the two fishing communities. The two main women occupational groups in the study were fish mammies and fish wives. Both of whom are fish processors but operate on a different occupational scale such that the former are canoe owners whiles the latter are traders and relatives of fishermen.

It was observed that, fish mammies in both communities wield considerable amount of power that actually set them apart from other occupational groups such as fish traders, and processors. This study also discovered that fish mammies' possession of fishing equipment such as canoe, outboard motor and fishing nets and their entrepreneurial skill equip and enable them enjoy competitive advantage over their male counterparts in ways that are able to diversify and grow their capital exponentially. Gustavsson (2021) subscribing to the views of Ameyaw et al., (2020) adds that women's fisheries entrepreneurship challenged traditional gender relations at the post-harvest stage in artisanal fisheries.

Gustavsson (2021) sought to explore how women entrepreneurs in fisheries are shaped by their familial connections. In this study, a qualitative

method with the aid of interview recruited 24 women who had varied background working as/with processors, sellers or marketers, fisheries organizations, fishing families and capturing in the UK fishing industries particularly England and Wales. She also set out to explore the entrepreneurial activities of these women as influenced by their domestic position as mothers and other life course activities shaped by motherhood. The study discovered that most women entrepreneurial activities are shaped by their family connections such as depending on their relatives who are fishermen or worked in fisheries for fish and access to fishing resources to manage their risk of entrepreneurship. More so, while most of these women come from fishing families, their identities as women entrepreneurs in the UK fisheries were overshadowed by their connections to their families. As such, Britwum (2009) concurs that women's entrepreneurship in fisheries is enhanced by their dependence on relatives in fisheries who are mostly men and some as their husbands.

However, Gustavsson's study does not critically examine how these familial dependencies might limit the autonomy of women entrepreneurs or perpetuate patriarchal norms within the fishing industry. As such, this research aims to address by exploring the nuanced dynamics of gender roles and power relations among fish mummies in coastal Ghana.

Gender and Traditional Co-management

Studies by Franco-Meléndez et al., (2021) on Understanding the Management and Exploitation Areas of Benthic Resources (MEABRs) in Chile's Biobio Region: Insights from Artisanal Fishers and Decision-Makers" sought to provide comprehensive understanding of management and

exploitation of fisheries resources. The research paper uses two kinds of data for experiments. Firstly, questionnaire-based data was obtained from both artisanal fishers and decision-makers. This data was in the form of ordinal data, which measured different levels of responses to questions, from very positive to very negative. Secondly, statistical data was collected over 18 years (between 2000 and 2017) from 78 Management and Exploitation Areas of Benthic Resources (MEABRs). This data was used to analyze the differences between important factors that are fundamental for collective actions. Specifically, the authors divided respondents into three main categories: gender (male or female), fishers' organizational roles (leader or member), and their participation into organizations of which they are part. This was done in order to assess the participation of women within the organization and to better understand how the organization has developed in the region. This paper concludes that fishers have varied perspectives on MEABRs, and that the institutional dimension is the most influential on MEABR performance according to women's perspectives, while men highlighted the ecological and economic outcomes. Women's perspectives were highlighted in this research paper because they are often overlooked in the management of natural resources. This research was important in order to gain a better understanding of how the MEABR has developed in the Biobio region, and to identify any gender-specific factors that could influence the success of the system. It is noted that women have been influential in an institutional context, and that their perspectives have been reflected in the permanence of the MEABR. It is also highlighted that MEABR's that are run by women often have an ecological focus, such as seaweed collection, due to the depletion of the main

target species in the area. In addition, it is noted that most women consider the MEABR to be a complementary activity, and that they often undertake other social support activities, such as "Pro-employment". Finally, it is reported that few studies have focused on women at the local level in Chile, but that gender equality approaches in artisanal fisheries are available from other parts of the world. More so, women's actions can lead to more sustainable fishing, and their organizational capacity can empower them not only as fisherwomen and workers, but also as resource managers.

Firstly, while the study commendably includes gender perspectives, it does not delve deeply enough into the structural barriers that limit women's participation in decision-making within these organizations. The categorization of respondents into broad groups, such as gender and organizational roles, may oversimplify the complexities of power dynamics and socio-economic factors that influence women's roles in fisheries management. Additionally, the study's reliance on ordinal data from questionnaires might limit the depth of understanding of individual experiences, particularly when assessing nuanced issues like gender-specific challenges in fisheries. The authors' focus on the institutional dimension as perceived by women is insightful, but the study could have further explored how these institutional frameworks might perpetuate existing gender inequalities, rather than merely highlighting women's influence within them. Furthermore, while the study acknowledges the ecological focus of women-run MEABRs, it stops short of critically examining the reasons behind this focus, such as whether it is a strategic choice or a reflection of the limited opportunities available to women in the region. The assertion that women

often see MEABR activities as complementary could be further analyzed to understand whether this perception limits their potential for greater economic empowerment and leadership in fisheries management. Lastly, the study rightly points out the scarcity of research on women in local-level fisheries management in Chile, but it could have engaged more with existing global literature on gender equality in fisheries to provide a more robust comparative analysis. Overall, while the study contributes to the understanding of gender roles in fisheries management, it could benefit from a more critical approach to the underlying gender dynamics and the potential for transformative change in the sector.

Similarly, Nunoo, Asiedu, Olauson & Intsiful (2015) in-depth study on traditional marine fisheries management systems in Ghana in order to provide information to enhance the management of the artisanal fisheries sector. They collected data through document analysis, field observation and questionnaire-based interviews. Document analysis was conducted between May 2014 and January 2015. Questionnaire-based interviews were conducted between 26th and 30th of July 2014 with 140 respondents consisting of 35 each from Dixcove, Elmina, Chorkor and Adina. Responses from the interviews were coded using IBM Statistical Package for Social Scientist (SPSS) computer software version 20.0 (2012) and analysed for trends in response to research questions. Field observation was used to observe fishing activities and to obtain necessary information on diversity of fishing gears, canoe repairs, sharing of catch and purchasing of premix fuel. In the traditional fisheries management system of Ghana, women have a unique role to play in sustainable fisheries management. In the four studied fishing communities,

women were not allowed to go to sea and were considered as taboo for fishing. This was one of the measures used to reduce the pressure on the fishery resources. Women are part of the Community Based Fisheries Management Committee, which is responsible for setting fishing rules and regulations in the community. Additionally, women are also involved in the enforcement of these rules, as they are able to observe and report any illegal fishing activities. Furthermore, women are also involved in the decision-making process, as they are the ones who often decide when and where fishing activities should take place, and who to give access to the fishing resources. Women were part of the Community Based Fisheries Management Committee, which is responsible for setting fishing rules and regulations in the community. Additionally, women are also involved in the enforcement of these rules, as they are able to observe and report any illegal fishing activities. Furthermore, women are also involved in the decision-making process, as they are the ones who often decide when and where fishing activities should take place, and who to give access to the fishing resources. In addition, some women also take part in rituals and ceremonies to ensure the sustainability of the fish stocks.

While the research effectively illustrates women's involvement in decision-making and enforcement within Community-Based Fisheries Management Committees, it does not critically engage with the socio-cultural factors that underlie these roles. For instance, the study mentions that women are prohibited from going to sea, labeling it as a taboo, but it does not delve into how this restriction may reinforce gender disparities in access to resources and opportunities within the fishing sector. Additionally, the study could have

provided a more in-depth analysis of how these traditional roles of women, such as participating in rituals and ceremonies, actually translate into tangible outcomes for sustainable fisheries management. The repeated emphasis on women's enforcement roles and decision-making could have been critically examined to determine whether these roles are symbolic or if they have substantial influence on fisheries management outcomes. Moreover, while the use of SPSS for data analysis is appropriate, the study's reliance on trends from questionnaire-based interviews might overlook more nuanced or context-specific insights that could have been gleaned through other qualitative methods, such as in-depth interviews or focus group discussions. The study also somewhat generalizes the role of women across the four communities, without sufficiently accounting for potential differences in how women's roles might vary by location or cultural context.

Specifically, Huang & You (2013) sought to study the perception of ocean governance and marine resources management in Taiwan. The study employed a stratified random sampling by county which was completed with 1,120 telephone respondents from October to December 2010. The response rate was (17.5%) (1,120/6,408). The researchers used post-stratification weighting by gender and education to improve the accuracy of the following analysis. The chi-square goodness-of-fit test was used to assess the significance of the results. Additionally, the study employed seafood guidelines and an ecolabeling and traceability system, considered local culture when developing marine recreation industries, and cooperated with the media and schools on marine education to increase marine knowledge. The study found that the average number of familiarity terms regarding marine issues

was 7.80 ± 4.15 out of 19. There was no significant difference between genders in terms of knowledge. However, the average number of known items was higher for those with higher education and those aged 40-49. Therefore, it can be concluded that women's knowledge of marine issues may be lower than that of men with higher education and those aged 40-49.

A critical aspect missing from the study is a deeper examination of how the lower marine knowledge among women, compared to their male counterparts with higher education and those in the 40-49 age bracket, affects their involvement in marine governance and resource management. Additionally, the study could have benefited from a more detailed analysis of how local cultural factors and educational outreach impact marine knowledge across different demographics, especially about gender disparities.

Women and Masculine Dominated Institutions

Overa (n.d.) sought to explore the extent to which local gender ideologies (i.e. beliefs and values about gender roles) influence the ability of women to convert capital from the 'female market sphere' (i.e. the economic activities and resources that are typically accessible to women) into ownership of fishing equipment (i.e. the resources needed to fish) in the 'male fishing sphere' (i.e. the economic activities and resources that are typically accessed by men). The study was conducted using a variety of methods, such as interviews and surveys, to collect data in three ethnically diverse communities in Ghana: Moree (Fante), Kpone (Ga-Adangbe) and Dzelukope (Anlo-Ewe). The paper concludes that the female fisheries entrepreneurs in these three communities have different access to capital resources in the male fishing sphere. It suggests that kinship ideologies, post-marital residence patterns, and

gender division of labour are key factors influencing the access of women to fishing capital resources. The paper also concludes that local gender ideologies have a considerable influence on the ability of women to convert capital from the female market sphere into ownership of fishing equipment.

Overa's study significantly contributes to the current research by offering a nuanced perspective on how local gender ideologies influence women's access to fishing resources. It highlights how cultural beliefs and gender roles shape women's ability to acquire and manage fishing equipment, providing a framework to understand similar dynamics in other contexts. By focusing on kinship ideologies, post-marital residence patterns, and gender division of labor, the study offers insights into the factors affecting women's economic activities in the fisheries sector. These findings can be compared with other studies to enrich the analysis of gender influences in fisheries management. Additionally, the study reveals the barriers women face in converting capital from female-dominated economic spheres into male-dominated fishing spheres, which can help identify specific challenges within the local context being examined. Overall, Overa's research adds depth to the current study's exploration of women's roles and challenges in the fisheries sector.

Godwin et al. (2006) sought to extend the theoretical understanding of the entrepreneurial process for women within male-dominated contexts. The study employed a combination of theoretical and empirical approaches. The theoretical approach draws upon institutional, resource-based and network theories to explain the potential benefits of forming a mixed-sex entrepreneurial founding team. The empirical approach is based on previous

research and studies which have examined the experiences of women entrepreneurs and the challenges they face in male-dominated contexts. The paper argues that forming a mixed-sex entrepreneurial founding team may benefit women entrepreneurs in these contexts, by providing them with enhanced legitimacy, access to a larger number of resources, and a stronger, more diverse social network. As such, the paper aims to identify strategies and tactics that women entrepreneurs can use to increase their participation and influence in male-dominated cultures and industries. The main finding in this study is that forming a mixed-sex entrepreneurial founding team may provide women entrepreneurs in male-dominated contexts with enhanced legitimacy, access to a larger number of resources, and a stronger, more diverse social network. Additionally, the paper provides evidence from previous research and studies that suggests that, in some cultures, partnering with a man is a requirement for a woman to gain access to the fundamental ability to conduct business and handle money.

Godwin et al. (2006) extend the theoretical understanding of women's entrepreneurship in male-dominated contexts by integrating institutional, resource-based, and network theories. The study posits that forming mixed-sex entrepreneurial teams can enhance women's legitimacy, resource access, and social networks. Empirically, it builds on previous research to highlight how partnerships with men can help women overcome barriers in male-dominated industries. This paper identifies strategies that women can use to improve their influence and participation in such environments, offering a valuable framework for understanding how women can navigate and succeed in traditionally male-dominated entrepreneurial settings. This work contributes to

the current study by providing theoretical and practical insights into how gender dynamics and strategic partnerships can impact women's entrepreneurial success in various contexts.

Similarly, Bird and Brush (2002) conducted a study to develop a new perspective on organizational creation that broadens the view of the venture start-up process and new venture attributes by encompassing the relative balance of feminine and masculine perspectives. This new perspective also looks at the individual differences in gendered maturity, and how this impacts the venture process and the new organization. The research method used to collect data in this paper is qualitative in nature. Data was collected through questionnaires, interviews with the founders, observations, and interviews with key subordinates and outsiders. The study found that the traditional or masculine perspective on organizational creation is not sufficient to fully understand the venture start-up process and the new organization. It is necessary to also consider the relative balance of feminine and masculine perspectives in the entrepreneur's venture start-up process and new venture attributes. The paper also suggests that individual differences in gendered maturity can impact the venture process and the new organization, and that when founders and ventures are "sorted" on gender maturity and gender balance, researchers and practitioners may be able to see the founding process occurring in different ways and with different outcomes.

Bird and Brush (2002) propose a novel perspective on organizational creation by integrating both feminine and masculine viewpoints into the understanding of the venture start-up process. Their qualitative study, involving questionnaires, interviews with founders and key stakeholders, and

observations, reveals that traditional masculine perspectives alone are insufficient to fully grasp the complexities of new venture creation. The research emphasizes the importance of considering gendered maturity and balancing feminine and masculine perspectives to gain a comprehensive understanding of the venture process and organizational attributes. This approach provides insights into how gender dynamics can influence the formation and evolution of new organizations, suggesting that a nuanced view of gender roles can lead to different outcomes and a more holistic understanding of entrepreneurial ventures. This contribution is valuable for the current study as it highlights the need to consider gender perspectives and maturity in evaluating entrepreneurial success and organizational development.

Shelley et al., (2011) examine the impact of gender on policing, specifically the inequalities and gender conflicts experienced by female officers in the profession. Their study also explored how gender inequalities can be addressed by police agencies and the wider community. They further examined the various forms of control and segregation that female officers face, such as sexual harassment, social exclusion, and lack of community support, and explores how these can impact the recruitment and retention of female officers. The study employed qualitative and quantitative research methods. Qualitative research was used to gain an in-depth understanding of the experiences of female officers in the police force, while quantitative research was used to analyze statistical data. The qualitative research was conducted through interviews and surveys, while the quantitative research involves analyzing existing data on female officers in the police force. The

study reviewed existing literature on the subject, to gain an understanding of the current state of gender inequality in the police force. The research found that female officers experience a range of gender conflicts and unequal treatment based on their gender, including sexual harassment, social exclusion, and lack of community support. Additionally, the research found that the community's perception of female officers is largely positive, which may be a contributing factor to their increased recruitment and retention. Interestingly, some female officers adopted a masculine identity in order to fit in with their male colleagues, while others have chosen to resist the masculine identity and challenge the gender expectations placed upon them. Female officers have also reported using a variety of tactics to counteract the gender inequality they experience, such as forming female-only networks, avoiding certain activities or places, speaking up about their experiences, and working to create a more inclusive environment. Ultimately, the research found that female officers are resilient and capable of navigating the masculine culture of the police force.

Shelley et al. (2011) examine gender impacts on policing, focusing on the inequalities and challenges faced by female officers, using both qualitative (interviews and surveys) and quantitative methods (statistical data analysis). They find that female officers experience significant gender conflicts, such as sexual harassment and social exclusion, yet show resilience and adaptability. The study highlights the positive community perception of female officers, contributing to better recruitment and retention. However, it overlooks intersectional factors like race and socio-economic background, lacks a comprehensive analysis of systemic reforms within police agencies, and does not fully explore the long-term career impacts of gendered coping strategies.

These gaps suggest the need for further research to address systemic issues and develop effective gender equity policies in law enforcement.

Summary of Chapter

The concept of gender performativity, introduced by Judith Butler, suggests that gender is a socially constructed category enacted through performances. In Ghana's artisanal fisheries, this theory applies to fish mammies who navigate masculine roles within a patriarchal industry, reinforcing cultural constructs but also facing constraints imposed by societal norms. This prompts debates on women redefining gender roles and achieving empowerment. However, critiques highlight the theory's focus on masculine discourse and call for an African feminist perspective to address the unique struggles of African women. Ecofeminism recognizes the connection between women, nature, and care for sustainability. In Ghana's artisanal fisheries, ecofeminism acknowledges fish mammies as "carers" of the ecology, impacted by environmental devastation and exploited by technological modernization and capitalist patriarchy.

Ghana's fisheries sector consists of capture and culture fisheries, with the artisanal sector playing a crucial role, employing a significant portion of the workforce and contributing to the majority of the fish catch. The sector has evolved from subsistence fishing to a vibrant industry, with women holding important roles as fish mammies or owners of fishing equipment. Gender norms and kinship systems influence women's economic opportunities and resource access in fishing communities along Ghana's coast.

Overall, Ghana's artisanal fishery sector is essential to the country's fisheries industry, and women play significant roles within it, shaping economic activities and contributing to the sector's development.

CHAPTER THREE

RESEARCH METHODOLOGY

Introduction

Research methodology is used in this work in reference to the framework within which the research was conducted. It covers methods and procedures which serves as the means through which the central problem of the research is addressed (Harrell & Bradley, 2009). Therefore, the aim of this chapter is to outline the methods that were employed in this study. The section will provide a report on the study design, study area, research population and the sources of data. Moreover, the sampling techniques, data collection instrument and procedure, the data analysis as well as ethical guidelines are also discussed.

Research Paradigm

According to Hammersley (2013), the interpretive research paradigm aims to understand the varied ways of viewing the world through diverse perspectives and beliefs. Thus, the study was conceived within the interpretive research paradigm; particularly to gain an in-depth understanding about the participants' experiences, challenges, and ocean governance prospects within the uniqueness of study contexts rather than seeking to generalize akin to the positivistic paradigm (Creswell & Creswell, 2013). Much so, this paradigm is consistent with the qualitative research approach that aims at opening up multiple avenue for inquiry (Tuffour, 2017; Yin, 2003).

Research Design

Informed by the various methodological orientation, the study adopted an ethnographic case study to explore contextual factors that underpin the experiences, challenges and fish mammals' prospects for ocean governance in the artisanal fisheries in coastal Ghana. Drawing from the interpretivist episteme, Creswell (1998) defines ethnography as the description and interpretation of a particular social group. Thus, the goal of the research is to understand the experiences and challenges of fish mammals within the context of the socio-cultural conditions inherent in their respective communities. In other words, the study aimed at relating the views and insights of the research participants regarding their experiences and challenges to their respective social and cultural domains (Parker-Jenkins, 2018).

That is, the study seeks to uncover the kinship arrangements of the study areas and describe how it shape the gender roles of fish mammals; in a more intensive and holistic description and analysis of the experiences and challenges of fish mammals (Yin, 2003). To provide an in-depth analysis of fish mammals, I gathered contextual information from multiple sources such as through informal conversations with fishermen, male canoe owners, and fish processors/traders before the interviews with fish mammals in respective contexts. The informal discussions with fishermen, fish processors/traders, and male canoe owners helped with incipient themes to explore from the fish mammals during the fieldwork (Swain & King, 2022). This concurs with Yin's position that a case study researcher can use multiple forms of data rich in context to build an in-depth case. Fish mammals' views of how their respective gender socialization and kinship norms; as well as the dominant

masculine ideals in the artisanal fishery underpin their experiences were inquired.

Tight (2010) argues that the use of case study is specifically well suited in circumstances where it is difficult to separate a phenomenon's variables from its context. In this vein, the use of the ethnographic case study enabled the research to elicit in-depth insights of the communities' socio-cultural dimensions that underpin fish mammals' experiences, challenges and prospects for ocean governance in their respective artisanal fisheries.

Ethnographic Approach to the Study

According to Punch (2005 cited in Uzun and Aydin, 2012) the term ethnography comes from cultural anthropology, where 'ethno' means 'people', and 'graphy' means to 'describe'. Thus, ethnography involves describing people's culture and understanding their way of life from their own point of view (Uzun & Aydin, 2012). Ethnography involves the researcher 'covertly or overtly participating in people's life for an extended period of time, observing what happens, listening to what is discussed, asking questions and collecting other relevant data' (Hammersley & Atkinson, 1995, pp. 1-10). Ethnography is also capable of capturing 'the full richness of experience' of multiple and simultaneous phenomena (Greene & Hill, 2005, p. 13). Ethnographic design has been one of the most preferred methodological approaches in Butler's performativity analysis (Lester, 2008; Mendez, 2012), and was crucial for this study to capture the sociocultural contexts in which event of fish mammals' performance of canoe ownership roles were and sustainable fishing practices occurred.

The ethnographic method made it possible to explore the perceived role and social practices that reinforce the role of a canoe owner in matrilineal and patrilineal fishing context through non-participant and informal conversation as it occurred. For instance, the ethnographic approach detailed how the physical environment within which fishery activities were undertaken contributed to fish mammies adopting masculine and feminine approach in their role as canoe owners, which may have been difficult to explore solely through an in-depth interview. Hence, ethnography approach was adopted to complement the case study approach due to its capacity to provide deeper understanding of the everyday lives of fish mammies and oft-take-for granted by participants could be observed and analyzed. As earlier indicated, this made possible using multiple methods – non-participant observation and informal conversation as part of the ‘ethnographic gaze’ (Hammersley & Atkinson, 1995, p. 59). My immersion within the study communities by virtue of my insider position as in the case of Elmina and gatekeeper facilitation in Chorkor enabled me to identify and contextualize events in order to reveal the different ways fish mammies perform fishery related roles in Elmina and Chorkor respectively (Fox & Alldred, 2015).

Description of the Study Areas

As already indicated, the study’s main objective is to explore fish mammies phenomenon; consider the categories of women who are fish mammies, their experiences and associated challenges but also prospects for ocean governance in Ghana’s artisanal fishery. To achieve this objective, two research locations were purposefully selected: Elmina and Chorkor; both fishing communities in Central and Greater Accra Regions. Elmina and

Chorkor were selected as study sites because they are well-known for artisanal fishing and have a high level of female participation in fish-related activities (Samey, 2015). These sites have different kinship systems with associated varied local gender ideologies and systems that influence women marine property owning positions; and the systems encourage social support systems from conjugal and non-conjugal members. Both communities regard Tuesdays as a sacred non-fishing day where fishers take respite, repair damaged fishing equipment, and render accounts.

Elmina

The town of Elmina in Ghana is also known as “La Mina” by the Portuguese and “Edina”, Anomansa, or Amankwaa Kurom by the native Fantes. It is also referred to as “the Little Europe” because of its early contact with the Portuguese in 1471 (Adjaye, 2018). Elmina is the administrative capital of the Komenda/Edina/Eguafo/Abirem (KEEA) Municipality on the south coast of South Ghana in the Central Region (Ashun, 2017). Elmina exists as a cosmopolitan town although it has Fantes as the dominant ethnic group (Honka, 2014). Meanwhile, other ethnic groups with fishing traditions such as the Gas and Ewes have also settled there in search of job opportunities in the fishing industry (Koranteng, 2012). Generally, the people of Elmina practice the matrilineal kinship system such that it serves the basis for admitting crew members to constitute fish production unit.

Elmina is an important fishing town in Ghana and the Central Region due to its vibrancy in artisanal fishing; unlike Sekondi and Tema which mainly operate semi-industrial and industrial fishing (Aheto, Asare, Tenkorang, Quaynor, Asare & Okyere, 2012). Fishing activities in the community is

further bolstered by an ideal fish landing site adjudged as the third largest in Ghana after Takoradi and Tema harbor (Aheto et al., 2012). The landing site is surrounded by the Mpoben Fish Market and Ayisa Market where smoking and drying of fish is done (Kyei-Gyamfi, 2019). The ideal nature of the landing site serves to attract fishers from all walks of life. It also serves as an important historical town due to its instrumental role in the Trans-Atlantic slave trade in the thirteenth century apart from its fishing potentials. Other economic activities such as salt mining, canoe and boat building, trading and tourism are also present in Elmina (Ashun, 2017). Besides, the fishing community prohibits fishing on Tuesdays as custom demands it as a resting day for the sea gods. Furthermore, the Elmina 2015 Strategic report reveals that about 75 percent of total inhabitants of the town derive their livelihood from fishing (KEEA, 2015); with 34.2 percent of women actively engaged (Ghana Statistical Service, 2014). The relevance of fishing in Elmina is further showcased by its annual Bakatue festival believed to endow the industry with the spiritual countenance needed for a prosperous fishing season.

Today, Elmina serves as a vibrant hub of artisanal fishing due to the active involvement of women in the sector. They are mainly responsible for the processing and marketing of fish. Okusu (2020) noted that women in Elmina also serve as intermediaries between fishermen and fishtraders; due to their absolute rights as a canoe owner or wife of a canoe owner. Thus, this makes Elmina an ideal site for the study.

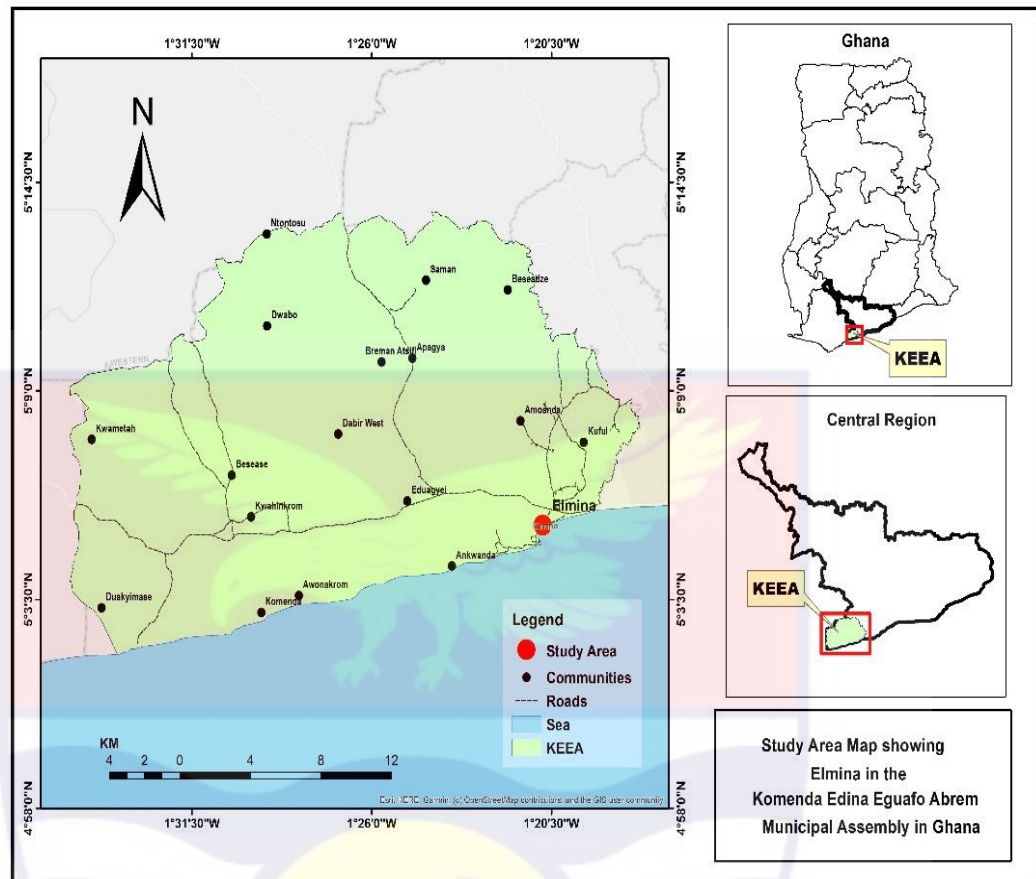


Figure 1: A map showing Elmina
Source: GIS Unit, Department of Geography and Regional Planning (2024)

Chorkor

The second study site of Chorkor is also one of the oldest fishing communities and premiere of artisanal fishing along the shores of the Accra Metropolis in the Greater Accra region of Ghana. It is found in the Ablekuma South sub-Metropolis with a population of 78,915 (Udofia et al., 2014). According to Onumah et al. (2020), the name Chorkor is a conflation of two Twi words “Tswa Kor” meaning “Cut and Go”. Presently, Chorkor exists as a cosmopolitan community although it has Ga-Adangbe as the dominant group. Women in this town uphold the patrilineal kinship system. Fishing is the main economic activity of the town from which both men and women derive their livelihood.

According to the Accra Metropolitan Assembly (2010), Chorkor is the most established center of artisanal fishing dating as far back as the 18th Century. The community has Tuesday as the sacred fishing holiday. During this day, fishermen mend their torn fishing nets and do any maintenance works on their canoe and outboard motors. At the same time, fishtraders also take their smoked fish to the fishing market to sell (Onumah et al., 2020). It is found that the fishing activities of women and men are also facilitated by their access to the means of production in Chorkor of which their wealth depend on. This is in the case of fish mammies who due to their ownership of certain marine properties such as canoe, fishing nets, smokers etc. are seen as wealthy in Chorkor (Sobang, 2014). In addition, these women offer required support to fishermen for their fishing expeditions or trips in Chorkor with the view of gaining access to fresh fish.

In the light of the above, this research is expedient in considering the artisanal fishery in Chorkor and Elmina for an in-depth appreciation of gendered nature of the issue under discussion and for a better analysis of the experiences, challenges and prospects of fish mammies.

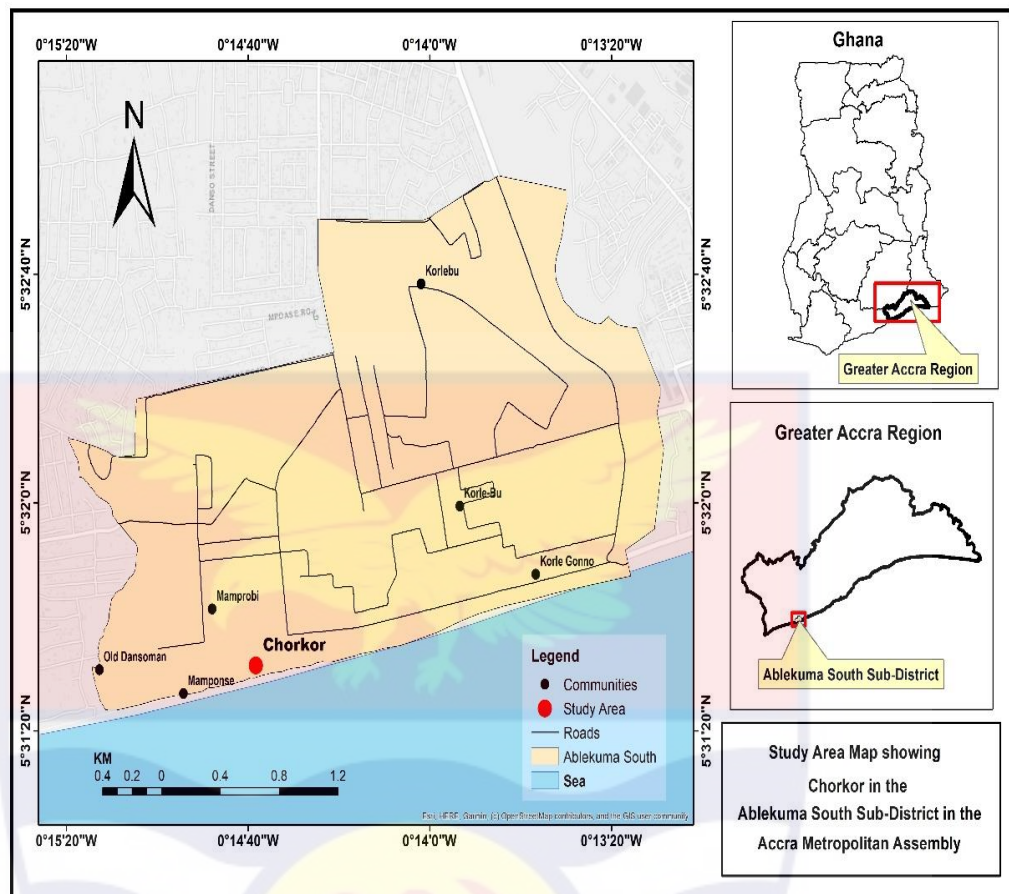


Figure 2: A map showing Chorkor

Source: GIS Unit, Department of Geography and Regional Planning (2024)

Sources of Data

A qualitative study, seeking to garner in-depth insights from a relatively small number of informants usually employ an interview as the main data collection tool (Yin, 2003). Researchers mention that primary and secondary sources of data constitute the two main ways by which data can be collected for research purposes (Yin, 2009). Here, the study uses primary data that were obtained through informal conversation, non-participant observation, and in-depth interviews with fish mammies in Elmina and Chorkor respectively. Ranging from informal and unstructured discussion, the interviews focused on the experiences particularly how kinship norms have shaped their perceptions of appropriate roles and practices of fish mammies in

the respective contexts. This is due to the purpose of the study which needed specific information that was not readily available from secondary sources.

Research Population

Research population has been explained by Babbie (2008) as the bringing together of various components from which a sample is drawn. The population for this study is two-fold. First, it includes male canoe owners, fishermen, and fish traders/processors from the respective fishing communities. Second, it comprises fish mammies who own canoes, fishing nets, and outboard motors in each study community. Fish mammies, in this study, are defined as women involved in artisanal fisheries with ownership of key fishing equipment. The study explores their experiences, roles, and contributions to artisanal fisheries and examines how these factors facilitate ocean governance and sustainable fishing practices.

Sampling Procedure

When conducting research, finding the right individuals to interview can be challenging without careful and strategic planning. Here, it is recommended that researchers seek gatekeepers to assist with the recruitment of participants if necessary (Lata, 2020; Parker-Jenkins, 2018). On that basis, I engaged a gatekeeper in both Elmina and Chorkor. My gatekeeper's valued reputation as a fish mammy in Elmina suitably facilitated my access to other fish mammies and enabled me to obtain quality data (Narag & Maxwell, 2014).

With my gatekeepers' assistance, I provided my personal background information and the study purpose to the fish mammies. Particularly, I explained to them that their participation in the study would contribute to

understanding the activities of fish mammals, including their experiences, challenges, and prospects for ocean governance in artisanal fisheries. This proved worthwhile as it was reflected in their attitude during interview sessions in Elmina and Chorkor.

The criterion purposive and snowballing sampling techniques were used to recruit the fish mammals. According to Neuman (2011), a criterion purposive sampling technique involves the search for particular individuals who meet certain conditions. White and McBurney (2013) reiterated that criterion purposive sampling is used when the researcher uses discretion and judgment in selecting participants with specific characteristics. To this end, fish mammals who were mainly canoe owners were selected in both study areas.

I interviewed a total of 10 fish mammals, with five fish mammals from Elmina and five from Chorkor, selected through purposive and snowball sampling. I also employed the snowballing technique to recruit potential participants who possessed the same characteristics through solicited referrals. Even though the snowballing approach has been criticized for the tendency to produce a uniform study population due to the reliance on networks of people with similar characteristics (Neuman, 2011), the technique proved to be worthwhile since it enabled access to individuals who met the selection criteria, such as fish mammals who acquired their canoes based on their kinship relations in Elmina, and those who acquired their canoes from accumulated capital due to their patrilineal privileges in Chorkor.

Moreover, I employed a convenient sampling technique to recruit male canoe owners, fishermen, and fish processors or traders from each study site

for informal conversations before meeting the fish mammals for in-depth interviews. This sampling was used to gather perceptions about fish mammals. Given that this sample for the study was readily available but difficult to frame comprehensively, Yin (2003) advises that a convenient sampling technique must be applied even though their views cannot be generalized to other persons with the same social characteristics. In each context, I engaged with four fishermen, two male canoe owners, and four fish processors in informal conversations.

Data Collection Methods and Instruments

The data collection tool that was used for the study is both informal conversation semi-structured interview and non-participant observation. Malhotra and Birks (2007) mention that the major advantage of an interview is its adaptability, as the interviewer can follow up on ideas, probe responses, and generate open discussion of issues with participants. Although an interview is criticized for lacking objectivity due to potential human interference (Kvale, 1996), the instrument was useful in exploring views and developing ideas about the research questions from the participants rather than gathering facts and statistics as in the case of a questionnaire. It also made it possible to respond quickly to what the participant said by tailoring subsequent questions to the responses provided by the participant (Mack & Woodsong, 2005).

The main data collection instrument for the study was in-depth interview guide supported by non-participant observation and informal conversations. The interview guide was unstructured and covered questions that were based on the study objectives. Questions were as open as possible in

order to get participants to express their own ideas in their own words and to raise additional issues. Participants were informed that there was no one appropriate answer to each question but rather they had the opportunity to explore the range of experiences, challenges and prospects in artisanal fishery. For both fishing communities, although the various guides were written in English Language, the interactions were conducted in the local language, Fanti and Ga respectively. Interviews were conducted at the participants' houses to ensure a quiet and non-distractive environment. The interview was divided into four sections. The first section captured the social background of the participants; where they were prompted to provide information regarding their age, place of birth, level of education, marital status, religion and ethnicity. The second section inquired about participants' career as fish mammy where information on their socialization prior to becoming a fish mammy and experiences were sought to provide insights on their current job in the artisanal fisheries. The third section asked information about the activities of fish mummies particularly, the gender issues confronting those activities. Some of the questions were: do you feel that gender expectations are different for you compared to male owners? In what ways? Do you feel you are treated differently by your peers and crew members of your canoe because of your gender? How have your experiences as a canoe/fishing net/outboard motor owner changed the way you see and understand yourself as a woman? The last section explored issues regarding the challenges they face as fish mummies and how most of the challenges are solved on their own accord. Participants were asked their views on the prospects as fish mummies despite the challenges they face.

In addition, the need to explore further the category of women who were fish mammies in both study sites necessitated interaction with a male canoe owner, fishermen, and fish processor or trader through informal conversations to inquire about their perception of fish mammies in each artisanal fishery. Additionally, a non-participant observation was conducted to provide visibility to some of the insights put forward by the fish mammies.

In addition to the interviews, non-participant observations were conducted to gain insights into how fish mammies performed their roles as canoe owners in a male-dominated domain. It became evident that this method was necessary to capture certain contemporaneous practices that are consistent with appropriate gender roles of a canoe owner perceived by fish mammies and social practices that reinforce appropriate gender roles within the artisanal fisheries in Elmina and Chorkor respectively. As Spradley (1980) argues, non-participant observation often becomes necessary when a researcher discerns the opportunity to access the scene unobtrusively. I did not use a checklist to guide the observations due to their contemporaneous nature; however, I meticulously recorded them in field notes. This approach allowed me to document the social practices and interactions that highlighted the role of fish mammies and their enactment of gender roles in their respective domains.

Informal Conversation

An important part of ethnographic research is to be able to obtain incipient ideas through informal conversation, especially about an occupational group who are somewhat a difficult to reach population or are socially excluded (Parker-Jenkins, 2018; Swain & King, 2022). Prior to fieldwork, I went on a casual visit to a friend fisherman in Elmina. While I

was with him in a tent where a lot of fishers were taking respite from a busy day, I was surprised to hear a Mobile Money vendor tease a fisherman about having bantered with a fish mammy whom he supposedly worked for. As the conversation ensued, my friend prompted me to participate and take note. At the same time, most of the fishers – three fish processors and male canoe owners started to tease the fisherman about the saga with the fish mammy. This enabled me to be neutral as I was found to be the only person not engaging even though some fishers knew me as someone who grew up in Elmina and is a childhood friend with some of the fishermen. Except my friend who knew my position as a researcher at the moment, the others took for me for a visitor. However, the circumstances provided the chance to engage in an opportunistic conversation with the fishers. More so, the informal conversation became spontaneous as I noticed that a conversant would jump in and provide an added perspective to an answer. This could be attributed to the nature of the setting, particularly under a shed where most fishers take respite.

In an active environment where most fishers were taking respite, logging responses would have been more obvious to the conversants to change their reactions. However, I noted contemporaneous themes on the notepad application on my mobile phone, since I did not audio record the conversation as I felt this would seem and appear as an interview modality. Thus, the conversants were made to clarify the themes towards the end of the conversations to ensure some sort of validity (Davis & Brown, 2024). Throughout, I made a response-based note on my smartphone out of the sight of the conversants. Those who saw me engaged on my phone thought I was

checking livescore from a football games, yet it did not change their expressiveness towards me.

This was different in Chorkor. The informal conversation began when my gatekeeper and myself were negotiating access from fish processors whom we encountered at a smoking shed. My gatekeeper was more involved because I was not conversant in the Ga language. Besides, the initial intent was not to engage in an informal conversation until they disclosed they know *Ya Nyɛ* (the Ga name for a fish mammy) and started disclosing their perceptions of them. My gatekeeper would summarize the conversation to me after each encounter. The ideas I garnered from the informal conversations served as an instrumental themes to shape my interview guide. More so, it helped me to glean important cultural minders such as how fish mammies are called in their respective contexts to enable me negotiate access (Parker-Jenkins, 2018).

Data Collection Procedures

This study is based on semi-structured interviews comprising ten fish mammies five each from the study sites. The informal conversation involved two fishermen, fish processors, and one male canoe owner each from Elmina and Chorkor respectively. The interviews were conducted in Elmina and Chorkor between 3rd December 2021 and 15th March 2022. Participation in the study was largely response-driven. Some of the key research questions grounding this study, and interview questions include: what are the experiences of fish mammies in artisanal fisheries? How does the nature of artisanal fisheries pose a challenge to fish mammies? How did your socialization prepare you for your current job (and position as a fish mammy)? Between male and female canoe owners – who is preferred and why? As

stated earlier, the two study communities were selected based on their kinship arrangements; which have considerable influence on women's ability to own properties and the overall gender ideologies in the communities. The communities' longstanding reputation in artisanal fishing along the coastal settlements of Ghana influenced their selection.

Data collection in Elmina lasted for four weeks, from 3rd December 2021 to 7th February 2022. To explain further, because I come from Elmina I could not have started the fieldwork at Chorkor since as a novice researcher the challenges that may come as an outsider in a research setting could get me frustrated and discouraged. However, I believe that being an outsider or insider has its own merits and demerits. I informed my landlady who is a fish mammy my study objectives and also discussed my projects with fishermen acquaintances. However, most of them viewed me primarily as '*Edina nyi*' which means the one who hails from Elmina and "Pee, a friend, coming to visit". Also, others viewed me as '*Krakye ni*' implying that I am a gentleman. The word also implies ascendancy over the local people due to my educational status, my ability to use English and my wearing of spectacles. Being seen in this way could have limited access to the target population, but speaking *Edina Fanti* fluently, (i.e. local dialect) behaving modestly, dressing acceptably, and sharing childhood memories with them gradually eased me off the label. This became worthwhile as it facilitated building rapport with my study participants (Fiaveh, 2020; Lata, 2020)

After the interview with my landlady, she recommended that I come to the landing site at 1 pm so she introduced me to her fellow fish mammies at the landing site. Over there she introduced me to them as a son who is

conducting a research on them about their experiences and challenges as women who own canoes in a male dominated sphere in fisheries. Suddenly one of them yelled, “*y3 3dwuma nu y3 dzen*” (Fanti expression meaning their work is hard). Due to their busy schedules, they insisted I interview them at the landing site at 3pm each day. Due to my fluency in Fanti, I conducted the interview all by myself. Four of the interviews with the fish mammies were conducted at the landing site as they recommended. All the interview sections went smoothly and uninterrupted, except that they were intermittently called upon by their customers as they came to purchase their fish, but that was very normal concerning the prevailing environment. The landing beach is the most utilized space in fishery by both men and women; unless Tuesdays when it is empty due to non-fishing taboo. Notwithstanding, this did not affect the process significantly as I stayed very focused on my questions and ensured that we comprehensively exhausted all planned questions for that material moment.

The advantage I gained from interviewing the fish mammies at the landing site was that I received additional information from their fellow fish mammies and observed their business mechanisms while interviewing them. I realise they lose their temper whenever ‘*ghetto boys*’ tend to take fish from their basins. I found out that other *ghetto boys*” who were given willingly served as watchmen of the canoes in the night. Additionally, interviewing the fish mammies at the landing site allowed me to observe how they enacted certain social practices and perceived roles of a canoe owner in Elmina that they talked about during the interviews.

In addition to the interviews with the fish mammies, I engaged in an informal conversation with male canoe owners, two fishermen and two fish traders and processors about their perceptions of fish mammies within the community. These were acquaintances whom I have informed about my study prior to the fieldwork. This became necessary as the fish mammies felt reluctant to provide in-depth insights about the knowledge and perception their community have about them. As such, the data from the informal conversations served as incipient ideas that I explored from the fish mammies in a subsequent semi-structured interviews; to corroborate the understanding of the categories of women who are fish mammies and perceptions held about them. The informal conversations were held at the shore, others in their houses and the fishermen in their canoes. In all, I conducted five (5) informal conversations.

The story was different in Chorkor. Everything seemed strange; a new milieu yet I was excited as it was my first time at Chorkor. I had prior informed a friend who stays at Mamprobi (immediate adjoining town of Chorkor) about my work and he volunteered to be my gatekeeper throughout the fieldwork at Chorkor. We have been friends since 2014 from the time we enrolled at the University of Cape Coast. Earlier, he had given me information about the study community and the people; specifically, about how hospitable they are to visitors and rowdy they can be. Upon my arrival in Accra, I tutored and oriented him about the interview questions. We had three simulation interviews before we finally went to Chorkor. On the 15th of February, exactly 3.16pm we strolled the community and incidentally ended up at his friend's house across the Chemu Lagoon to introduce me to him. After

spending some time with him, we left to the shore to try to familiarize ourselves on the field. Although it was a Tuesday, we could witness from the scene at the shore all manner of persons engaged in one activity or the other. We saw fishermen mending their nets, children swimming and carvers working on canoes. We stood in front of one canoe labeled *Nyame Tease* (Comes from a popular cliché in Akan language which mean God Lives) to keenly observe the scenery. Although I could not speak and understand *Ga*, I enjoyed the scenery at the beach. We finally approached a fisherman and asked if he knew about fish mammies in the area. He directed us to other fishermen to inquire. We did not get any proper feedback until we decided to leave the community at exactly 7.22pm. This continued for nine days-which I saw as a period of rapport building and observation, before we finally met a fish mammy who agreed to grant us an interview. Subsequently, she offered me assistance to reach out to other fish mammies by inviting them to her house for interviews.

On the second day, we strolled through the town to places such as the Chorkor market and schools. We planned to go to the shore again to get to know if we would get someone to lead us to a fish mammy. On our way to the shore, we passed through a hub where there were a lot of women busily smoking their fishes while others were arranging their smoked fishes in baskets. In fact, they were so busy that we could not engage conversation. So my friend decided to ask one permission to take pictures. She told us not to feature them vividly in the picture so they gave us a spot where they will not come in the picture. One of the women asked “*Nɛgbɛ bo yɔɔ?* (A statement in Ga language which means ‘where are you from?’)” My friend responded that I

am from the University of Cape Coast doing research on women who own canoe for academic purposes. I showed my student identity card to one of the gentlemen that was arranging firewood. But I told my friend to tell them that my study will need their views on how fish mammies are perceived in the community. *“Over the years, we’ve had a lot of people come here to interview us. Some even promise to bring us loans to put in our business but we have not heard from them”*. One of the women angrily said *“their lives have not been improved since the time some NGOs promised them of loans”*. In fact, these experiences made them cynical about us whether or not our project will improve their lives. To prevent this from happening I explained my research objectives and gave them the choice to share their experience or not so that they felt equally powerful in making decisions. However, some of these people expressed an interest to be interviewed at a later date and time. We empathized with them instead of defending the previous researchers’ deeds as one of the usual strategy for deceiving participants to grant them interview.

I was honest with them about my inability to help the community by providing financial assistance as a student. I did not give them any false hope. Perhaps this also helped me to make strong bonds with them. Mallozzi (2009) observes that showing empathy towards participants’ enables trust building, and is important for equalizing the power relations between researchers and participants (Emmel et al., 2007). Gradually, they were eased and one of them granted us interview in Ga. Suddenly all the women around were willing to be interviewed. Since we were close to the shore, one of them showed us the canoes that were owned by women and directed us to their houses. Unfortunately, the fish mammy we were directed to (Awo CK3) was engaged

in a serious melee with her husband on our arrival so we decided to follow up on her later. Before we left the scene, we learnt from a bystander that the husband had been mismanaging the wife's canoe. On our way back, we met some fishermen at a house and we decided to interview them. We asked them if they knew a fish mammy and they told us the canoe they work in belongs to a woman and they all stay in one household built by her. They told us she is not around but we should come the next day to interview her.

The fishermen had left for fishing on our return, so we got another woman to lead us to the fish mammy. In fact, she became excited upon learning that I was from the University of Cape Coast since her only son had completed University of Ghana and has long since had a lot of endearment for school. After the interview, she recommended us to two of her sisters whom she had given two of her five canoes to manage. We came back the next day to interview one of the sibling. Unfortunately, the second one had gone to Winneba to meet her fishermen to solve a problem. Despite that, she invited two other fish mammies who lived not far from her house to interview. All the interviews were carried out by my gatekeeper since I could not speak Ga fluently. In fact, it stultified the ability to probe certain responses for more insights into their experiences and challenges. In most cases, the fish mammies would make me wait until they are done with their domestic chores and other duties before the interview were carried out. This provided me the opportunity to observe how fish mammies enacted certain social practices that reinforced appropriate role of a canoe owner. Also, other observations were made during the interviews. Notwithstanding, all the interview questions on

the guide were asked appropriately. Fieldwork at Chorkor ended between the period from 15th March to 5th April, 2022.

Table 1: Summary of the sample for the survey

Method	Participants	Number of participants
Informal	<i>Fish Processors</i>	4
Conversations	<i>Fishermen</i>	4
	<i>Male Canoe owners</i>	2
	Total	10*
Interviews (Semi-structured interview guide)	Fish Mammies	
	Elmina	5
	Chorkor	5
	Total	10**
Non-participant Observation	All fish mammals	

* Participants were recruited through convenient sampling technique in each study site

** Participants were recruited through purpose and snowball sampling technique.

Data Processing and Analysis

All the interviews with individual participants were translated and transcribed. The data was grouped under various thematic areas that were noted during the informal conversations with male canoe owners, fishermen and fish traders and processors in both study areas. Due to the central focus on the experiences, challenges and prospects of fish mammals in artisanal fisheries, demographic data were collected only on the fish mammals. In the process of explaining the categories of women who are fish mammals and how the respective gender ideologies and kinship arrangements in the respective communities underpin their challenges, the views of male canoe owners, fishermen and fish traders and processors from the informal conversation were

analysed to aid the understanding of how their embodiment of the gender ideologies influence their perception of fish mammies in attempt to corroborate and expand on the views of fish mammies and how their communities perceive them as an occupational group. The research analysis was guided by the objectives and research questions of the study. The first objective explored the categories of women who are fish mammies. The other objectives, which were to examine the experiences of fish mammies in artisanal fisheries, interrogate the contributions of fish mammies to the development of artisanal fisheries, examine the challenges faced by fish mammies and identify the prospects of fish mammies in artisanal fisheries.

Due to the storied nature of the interview, the study proceeded with narrative analysis. According to Diute and Lightfoot (2004), a narrative analysis denote the study of one's experiences in the form of a story mainly to summarize a long life. This analytical process helped me understand and make sense of how certain social discourses within the respective fisheries featured in fish mammies understand appropriate gender roles and social practices that reinforced these gendered performances within the fisheries. Stories are constitutive of one's identity (Presser, 2016), and make possible interpretations of how connections are made between one's past, present, and future selves (Sandberg & Fleetwood, 2017). The recorded interviews and other non-participant observation notes were typed and saved as Word documents. This allowed for coding and theming. The data was reduced through coding. This simplified the complex aspects of the data as words, terms, phrases, or sentences were assigned to categories of the data. I did this by skimming through the transcripts on the Word document page and

identifying the major points raised in the transcripts. Initially, each transcript was read to gain familiarity and also to identify common themes from the different narratives. This process helped to cut out conversations which were slightly off topic, a technique describe by Riessman (1993) as data reduction. This technique denote the reduction and organization of narratives into core narratives that emphasized the objectives of this study. After coding, theming was done using Microsoft Word and Excel. The display of data through themes was followed by analysis. Here, the thematic analysis was useful in identifying common elements across study participants reported events (Fiaveh, 2019); by identifying common themes across different narratives reported by the study participants. Here, I present the overarching themes and then use the narratives of the participants to provide description of the study findings. This process was done for all the research questions. Finally, the non-participant observations that emerged were transcribed to support the respective themes that emerged.

Lastly, constant comparative analysis was utilized mainly because the study involved two distinct study contexts that are characterized by different sociocultural practices such as kinship norms and withheld gender ideologies. Withal, this analytical technique was based on the researcher's desire to understand the nuances of fish mummies' experiences about the specificities of the sociocultural practices inherent in the respective artisanal fisheries in Elmina and Chorkor. Hannes et al. (2010) believes that constant comparative as analytical approach helps qualitative researchers to facilitate validity of data by considering the multiple understanding of the phenomena under study. In using this technique, the researcher adopted Stake's assumption of

triangulation to analyse counter-narratives of the participants in the respective study areas to critique the theoretical frameworks employed in the study.

Limitation of Study

While this study contributes to understanding how fish mammies perform roles associated with men in a masculine domain in artisanal fisheries, particularly their challenges and ocean governance to enhance sustainable fishing, it is essential to address the study's limitations. The true limitation of this study lies in its limited generalizability. Elmina and Chorkor's findings may not apply to other fish mammies in other fishing communities, such as those in the Volta and Western Regions of Ghana. Despite these regions also being patrilineal and matrilineal like Chorkor and Elmina, their unique sociocultural conditions and sociopolitical nuances make it challenging to generalize the results of this study to those contexts. Also, the unique inherent sociocultural conditions and sociopolitical nuances may influence fish mammies' ocean governance practices in ways that differ from Elmina and Chorkor, further complicating the generalizability of the study's findings.

Ethical Consideration

The study is informed by high ethical standards by first explaining the study aims to the participants in terms of its academic nature and/or purpose. Again, issues of anonymity and confidentiality were explained to participants and their consent was obtained prior to their participation. Participants were told clearly that the research will not seek any information such as names and telephone numbers, and that research data will not be disclosed to anyone except those involved in the research project and will solely be used for academic purposes. Recording of interviews was also consented to by

participants. They were informed about their freedom to withdraw from the research at any time or may choose to ignore a question that is not appropriate.

However, the need for participants' anonymity was challenged by the participants in Chorkor particularly. Participants insisted their actual names are used in the reporting of the findings since they remain as the most invisible and unnoticed group in the fisheries sector and yet they are an important occupational group in the artisanal fisheries. A dilemma here was whether my sense of moral obligation to their plea would erode the principle of confidentiality and anonymity in research convention. Tolich (2016) argues that details and context are important in qualitative research, as anonymity such as disguising the identity of research participants with pseudonyms does not usually guarantee the richness of qualitative data. Tolich (2016) understands that pseudonyms is not the only single resolution to ensuring anonymity and confidentiality in qualitative research. In this study, the researcher resorted to using context-specific names rather than generic names to avoid creating a misleading image of the participants and also to maintain a 'thick description' hallmark of a qualitative study (Freeman, 2014; Oakes & Price, 2008).

Trustworthiness of the Study

In social science research, ensuring validity is a common concern. This holds particularly true for qualitative research which focuses on trustworthiness of the study, and which encompasses the credibility of conclusions drawn from the research design and the researcher's access to participants' knowledge (Sapsford & Jupp, 1996). In this study, the researcher adopted Stake's (1995) triangulation approach, which seeks to understand

participants' experiences through multiple data sources, moving beyond the positivistic pursuit of a singular “true reality.” The study's trustworthiness rests on the comparison of diverse data sources: informal conversations, in-depth interviews, and non-participant observation. Informal conversations with male canoe owners, fishermen, and fish processors informed discussions during interviews with fish mammals, confirming interpretations of their community perception. Furthermore, a comparative analysis of narratives between fish mammals in Elmina and Chorkor exposed counter-narratives, broadening the study's perspectives beyond its original scope. One other important step I used to ensure validity and reliability in this study was the advisory roles of my thesis supervisor who perused my instrument thoroughly and read through this research work with critical lenses and pointed out other perspectives I never thought of. This helped improved my analysis and presentation of data. All these steps ensured that I maintained objectivity throughout the study.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

Introduction

This chapter presents data and discussion of the findings seeking to explain fish mammies' experiences, challenges, and prospects in artisanal fisheries in coastal Ghana. The findings are discussed within the frameworks of the theories used in the study. There are five broad themes in the discussion of the findings presented according to the specific objectives of the study. The first thematic area explores the categories of women who are fish mammies in coastal Ghana. The perception of male canoe owners, fishermen and fish processors, and traders is also examined to corroborate the views of fish mammies regarding how their community perceives them entirely. The socio-demographic backgrounds of the fish mammies are also presented to enable easier understanding and interpretation of the data. The experiences of fish mammies were also examined. The third thematic area analyzes the contributions of fish mammies to the development of artisanal fisheries in coastal Ghana. The fourth thematic area examined the challenges faced by fish mammies. The final theme explores the prospects for fish mammies in artisanal fisheries in coastal Ghana. All these are informed by the kinship structures and gender ideologies prevailing in the two study sites.

Socio-Demographic Characteristics of Participants

A total of twenty people comprising ten (10) fish mammies from Elmina and Chorkor, four (4) fishermen, four (4) fish processors, and two (2) male canoe owners participated in the study. The participants in this study were predominantly female and shared similar occupational descriptions (Table 1). The age distribution of the fish mammies ranged from 44-72 years with a mean age of 58 years. The majority of participants in the study were married (6) and were all in monogamous relationships. The participants' real names were concealed with pseudonyms as a guarantee of their right to anonymity agreed upon before each interview session. Four (4) of the participants who were from a matrilineal community (i.e., Elmina) acquired their canoes through inheritance from their spouses; whereas one (1) who identified as a caretaker had the canoe as a bequest from an uncle who nurtured her. Of the five women from Elmina, three (3) were widows while two (2) were married with four (4) and eight (8) children respectively.

In Chorkor, fish mammies' modes of acquiring their canoes were different. That is, fish mammies in the Chorkor community did not have access to lineage and economic resources thereby making them more economically independent than women from the matrilineal community. This again reflects the situation of women from patrilineal kinship where inheritance privileges within their patrikin are curtailed and makes them solely depend on the husband's wealth (Sedziafa et al., 2018). Mensah and Fitzgibbon (2013) believes that the duolocal marital arrangements of the Gas enshrined in the patrilineal kinship norms make it possible for each couple, especially the female spouse more economically independent as they become

principal breadwinners within their separate homestead. Thus making space for Ga women to sunder their subordination to men to improve their socioeconomic positions (Anarfi & Fayorsey, 1999; Odotei, 1999); through trade and other careers to enhance their livelihood (Oppong, 1970). To this end of the five participants, two (2) purchased their canoes from their own accumulated capital from fish trade and processing. Three (3) of the women acquired their canoes as a gift from a sister whom they worked with growing up.

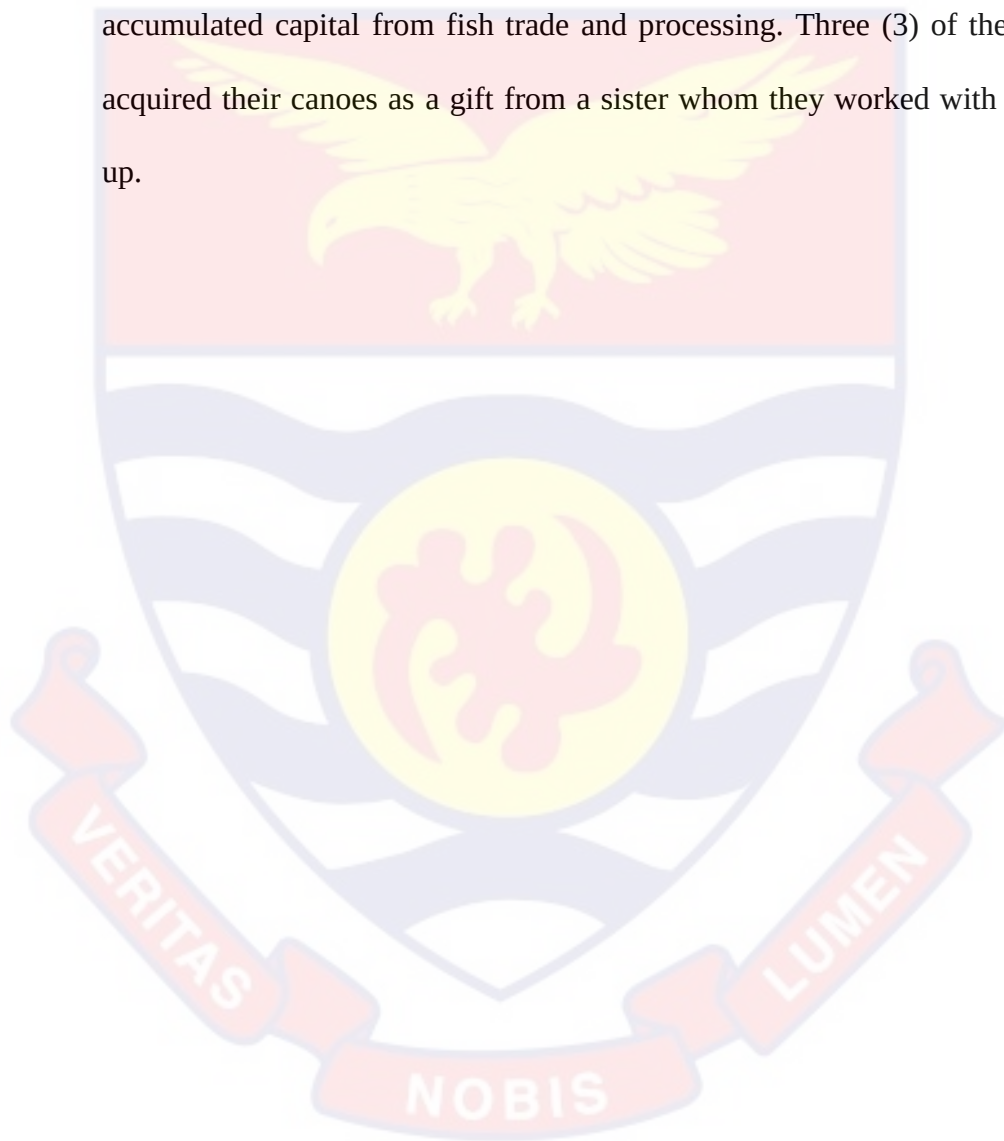


Table 2: Socio-Demographic Characteristics of Fish Mammies

P#	Pseudonym	Gender	Age	Ethnicity	Marital status	Mode of Acquisition	Number of children	Years of being a canoe owner
1	Auntie Mansa	Female	59	Fanti	Widowed	Inheritance	7	3
2	Ama Badu	Female	62	Fanti	Widowed	Inheritance	4	22
3	Efua Essoun	Female	55	Fanti	Widowed	Inheritance	5	11
4	Sis. Sarah	Female	49	Fanti	Married	Caretaker	4	7
5	Ekua Tawiah	Female	68	Fanti	Married	Inheritance	8	15
6	Naa Oboshie	Female	72	Ga	Married	Bought	1	38
7	Naa Lomiokor	Female	66	Ga	Married	gift	3	18
8	Naa Karley	Female	52	Ga	Married	gift	5	13
9	Naa Kuokor	Female	34	Ga	Divorced	gift	2	8
10	Awo	Female	51	Ga	Married	bought	4	9

Source: Fieldwork, 2022

The participant's marital status and mode of acquisition were highlighted to reflect the kinship norms that are inherent in their respective fishing communities. These were seen as important indicators that endow women with the ease of transposing to become owners of fishing equipment in the male-dominated sphere of the artisanal fishery. Overa (2003) noted that women's economic opportunities in Ghana's artisanal fisheries are entirely owed to local gender ideologies of fishing communities according to their kinship arrangement.

Which category of women are fish mummies?

This section explores the category of women who are fish mummies in an artisanal fishery in coastal Ghana. It will explore the histories and trajectories of how these women became fish mummies.

Considering the little information in the literature about the background and characteristics of women in an artisanal fishery in coastal Ghana. This is particularly the case where a lot of research has added little clarity. Information on fish mummies' origins, backgrounds, and career paths can provide an important socio-cultural perspective on management scenarios that will be a fundamental consideration for a sustainable fishery. It will also provide an opportunity to identify how socio-cultural arrangements in fishing communities empower fish mummies in different contexts, as well as highlight significant differences in the local arrangement despite the institutional and economic modernization in artisanal fisheries.

Family Backgrounds and Career Path of Fish Mammies

Family-based fishing enterprise

The narratives from the fish mummies reflected their journey from childhood into the fishing business. My interviews revealed that fish mammies in Elmina mostly belonged to fishing families, otherwise known as family fishing enterprises as Auntie Mansa's experiences illustrates.

*After my challenging childhood, I, Auntie Mansa, now a 59-year-old widow, had my fortunes significantly changed when I married a fisherman in Elmina. At the age of 16, I stopped schooling after my father's passing and went to live and work with my maternal uncle's wife, who was a fish processor in Komenda. During my time there, I developed an interest in fish processing and marketing while assisting my uncle's wife in the smoking shed. After five years of hawking, I established myself as a fish processor and trader. I built trade networks with fishermen from whom I acquired fish to facilitate my business. At the age of 27, I met my husband, and after four years of marriage, we started a canoe ownership business together. Our arrangement was that I would sell the fish while my husband joined the crew on fishing expeditions. Over the years, I learned about the appropriate gender roles of a canoe owner and the social practices that reinforced these roles in the fisheries, thanks to my late husband. After my husband's passing, I inherited the canoes, which granted me access to his familial connections and my own production relations in the fisheries. This became an important resource for me to recruit and engage fishermen to work in my canoe. I depend on my matrikin relations such as my uncles and my husband's co-workers for fisheries-related assistance. I also have one of my children who completed high school serving as a crew member in one of the two canoes. I continue to relish this opportunity since my son provides me assistance in terms of gear acquisitions and ensures the crew members do not exploit me, their mother. Now, I hold a favorable hierarchical position alongside male canoe owners in the artisanal fishery in Elmina. I exercise considerable personal power over my fishermen and enforce rules within the canoe. Additionally, I take care of all aspects and expenses related to fishing trips, which has earned me the title *Edwumadzewura*.*

Figure 3: Auntie Mansa's Journey to being a Fish Mammy.

The above extract suggests that fishing families constitute individuals whose entrepreneurial activities emerge from fisheries in the form of boat and gear ownership (Menzies, 2003). The particularities of belonging to fishing families provide a unique vantage point for fish mammies in Elmina to succeed as canoe owners. In Auntie Mansa's case, for the most part, her basic production process operates largely within the medium of kin-based crew recruitment to enhance her economic freedom of owning fishing equipment. By depending and having access to her husband's co-workers is made possible due to matrilineal kinship norms (Britwum, A. O., n.d.; Sedziafa & Tenkorang, 2016); as well as gaining access to their husband's property in their absence (Kutsoati & Morck, 2012). Stark (2011) saw this privilege as a labour incentive to wives in a matrilineal household. Auntie Mansa has an extensive support network based on her kinship which she enjoys as social and symbolic capital. The economic freedom enjoyed by women in matrilineal kinship environment enable them to secure property for their lineage through their access to lineage properties unlike, women in patrilineal communities (Sedziafa et al., 2017). As such, they are able to draw upon the labor and knowledge of their family network to facilitate their work as in the case of Auntie Mansa. This was described in a variety of ways, but the central theme was around the fishing families being the key social organization that distinguishes other occupational groups from fish mammies. Conversely, fish mammies in Chorkor had a very different experience in their outlook as canoe owners. Naa Oboshie recounted her experience.

I am Naa Oboshie, a 65-year-old mother of one, and I live in a separate abode in Nima, following the Ga duolocal marital custom. After over three decades of processing and selling fish at Malata market, I decided to move to Chorkor to settle down, ensuring easier access to fish supply for my processing and trading business. During my upbringing, I would assist my mother in selling fish, smoking them, and purchasing fresh fish from fishermen. After several years of processing and marketing fish, I made the decision to enter the canoe ownership business to secure unrestricted access to fresh fish at the time when the supply of fish from the fishermen decreased because of the population of fish processors in Chorkor increased.

In Chorkor, I reside with my two younger sisters, but I visit my husband in Gbese on designated days to fulfill my marital duties. I realize I cannot rely on my husband, who is a driver, for financial assistance, and instead, I depend on my own accumulated revenue to acquire canoes. Despite the hardships, I have managed to acquire five canoes. Out of these, I have assigned one canoe to each of my sisters to manage due to old age and ill-health.

Currently, I live with my fishermen and their wives in my homestead in Chorkor. I work alongside the wives of my fishermen in my smoking sheds and ensure their well-being. I am regarded as a mother figure to the fishermen and their wives, and I have a strong reputation within the Chorkor community. I have deliberately assigned specific roles in my homestead, taking charge of the processing and marketing while appointing respective leaders to oversee the canoes.

Figure 4: Naa Oboshie's Journey as a Fish Mammy

In Chorkor, fish mammies like Naa Oboshie neither come from family-based fishing enterprises nor have relatives who own canoes. Due to the patrilineal kinship norms and marital residential patterns, fish mammies often live apart from their spouses. This marital arrangement reinforces gender segregation of roles among the Ga community, leading to women being oppressed with increased domestic duties and economic burden (Mensah & Fitzgibbon, 2013). However, Odotei (1999) suggests that Ga women under such arrangements can subvert their subordination to enhance their socio-economic positioning. This aligns with Kuumba's (2006) perspective on African Feminism, which highlights that African women are not downtrodden

but agentic, utilizing culturally assigned roles to drive their liberation. Naa Oboshie exemplifies this by delegating fishing duties to her fishermen and focusing on post-harvest responsibilities

Fish mammies in Chorkor, like Naa Oboshie, are viewed as successful fish traders and processors, with other occupational groups in the fishery looking up to them. Their prosperity is attributed to their skills as shrewd businesswomen in the Chorkor fish markets rather than their belonging to fishing-based families. This resonates with Rubinoff's (2000) study of fishing for status and the development of fisherwomen in Goa, India, which revealed that women outside higher local caste hierarchies strive to become successful fisherwomen to enhance their status. A similar dynamic may be observed for fish mammies in matrilineal communities. Songsore, McGranahan and Kjellen (2004) study found that Ga fishermen in Central Accra tend to withhold financial support from their spouses, asserting that the women make more money from trading. Over several decades, the realization of unequal financial burdens has motivated Ga women to develop their careers, gaining domestic influence and power (Oppong 1970; Anarfi & Fayorsey 1999; Odotei 1999).

Canoe ownership remains an esteemed position in the fishing hierarchy, enticing various occupational groups aspiring to be part of the artisanal fishery. It grants women exclusive access to fish resources needed for their trading and processing businesses (Overa, n.d.). Torell et al. (2019) found that fish mammies wield power in making sustainable fishery management decisions, directing fishermen on the type of fish to catch and determining fishing schedules. While women's inequalities are often attributed to patriarchal constraints on their agency, Stark (2011) argues that women's

interdependence on patriarchal structures can also generate power. For example, their position as mistresses to capitalist husbands offers privileges to control household economies and productive assets. Britwum (2009) notes that fish traders' production relations with fishermen through kinship ties and marriage serve as social capital, granting access to fresh fish. Additionally, Ninsin (1991) demonstrated how wives of fishermen, upon receiving their husbands' share of fish, diversified their trade due to uninterrupted access to fresh fish. Drawing on the African Feminism theory, Steady (1997) asserts that African women utilize institutionalized modes of female resistance to counter various forms of domination. This holds true for women in matrilineal communities who, through their positions as wives and relatives of canoe owners, have overcome inequalities to become fish mammies. You used two characters, how do they resonate with the other fish mummies?

What are the experiences of fish mammies in artisanal fisheries?

Artisanal fishery in coastal Ghana remains one of the most controversial spaces within which women have attempted to assert gender equality. This remains true for fish mammies whose position likened to male fishermen capitalists (i.e. male canoe owners) play significant role in the fish value chain. It is fish mammies who finance fishermen and acquire fishing equipment for their fishing trips. They exercise considerable personal power over fishermen and enforce rules within their enterprise. It is a complex task in itself, even before considering the gender of the individuals who perform it. Fish mammies have to control, care for and provide every expense needed to facilitate fishing trips. Redefining the scope of the behaviors and attitudes traditionally associated with 'female' in a setting characterized by masculine

ideas and attitudes has raised interesting issues yet to be studied in fisheries. A study of how the traditional gender identities of fish mammies align with the masculine ideals inherent in the artisanal fishery has been the subject of a little scrutiny of the study of fish mammies. To expand our understanding of fish mammies and identity, I focus on gendered performances and on how social norms define gendered behaviors in the context of artisanal fishery in Elmina and Chorkor under the section on experiences. The section is presented under three themes:

- 1. Appropriate gender roles perceived by fish mammies in Elmina and Chorkor artisanal fishery*
- 2. Social practices that reinforce appropriate gendered performances within the artisanal fishery*
- 3. Fish mammy identity, gender roles, and performances within the artisanal fishery*

Each of those broad themes points to the idea of gender performance in the Elmina and Chorkor artisanal fishery context by asking how the traditional gender roles and identities of fish mammies align with the masculine ideals inherent in the artisanal fishery; and the ways that their roles and expectations are embedded in the patriarchal structures. “Doing gender” provides a very useful basis to analyze gender as a performative dimension of our daily masculine and feminine interactions (Butler, 2006). Comas-d’Argemir & Soronellas (2019) believe that the performative nature of gender constitutes what men and women do in specific contexts, and thus permits us to view the manifestation of varying gender behaviors and practices as constitutive of one’s identity in a specific situation and context. That is, our idea of

masculinity and femininity depends on the context in which one finds himself or herself (Owusu & Bosiwah, 2015.). Thus the operation of gender at different levels and the fluidity of masculine and feminine performances are dependent on the interactions between cultural and structural factors (Deutsch, 2007). Comas-d'Argemir & Soronellas (2019) identified kinship as one of the levels in which the fluidity of gender performance regarding feminine and masculine acts is expressed.

Studies have revealed that one's belonging to a matrilocality and patrilocality is the single most significant factor in their masculine and feminine acts. In some cases, post-marital kinship arrangement serves as a tool to reinforce gender-segregated roles as observed with the Ga patrilineal marital arrangement by (Mensah & Fitzgibbon, 2013). The researchers believed that Ga uses duolocal marital arrangement as a kinship strategy to cajole a female spouse with marital expectations of domestic duties which consistently consolidate her feminine identity and also remain under the husband's subordination. This becomes the basis for socialization in a patrilineal society as more women are raised to be submissive to their hierarchically-positioned husbands (Sedziafa & Tenkorang, 2016). Stark (2011) shows how unmarried women in Finland were raised with a reputation for wifehood and motherhood. Unlike this, matrilineal societies' neolocal marital and conjugal arrangements make it possible for female spouses to enjoy patriarchal privileges and other delegated autonomy off their husband's hierarchical positions (Kawarazuka et al., 2019; Stark, 2011).

Several researchers have noted earlier the organizational and social practices that embody appropriate gender roles for both men and women.

These roles comprise caretaking, nurturing, and other ancillary roles such as cooking and service provision (Hinton et al., 2003). Also in the case of Ghana, Golo and Erinoshio (2023) revealed that the patriarchal nature of its artisanal fisheries industry has made possible the marginalization of women from decision-making even on matters that affect their livelihoods. According to Prokos and Padavic (2002), hegemonic masculinity is the dominant form of strengthening the power of men at the cultural and organizational level through a variety of forms such as power, control, competitive individualism, independence, aggression, and the capacity for violence. According to the authors, police organizations have always tended to restrict women's inclusion by deploying masculine images to portray what it means to be a cop. Shelley et al. (2011) found in a study of recruitment and promotion that female police officers perceived that were expected to perform aggressive and mannish acts to avoid confrontations. Women in illegal arms groups through their participation in combats and wars have also ended up giving up their femininity and sexuality to feel incorporated into the masculine discourse in their organization. Women are often early in life convinced that traditional masculine traits are precedents of their promotion to senior administrative roles and their ability to act like men guarantees their success (Kaelberer, 2019). However, few studies that address identity issues among women in a male-dominated sphere reveal cultural conflicts that arise as women tend to negotiate their own identities (Underman & Hirshfield, 2016; Hirshfield, 2014; Hirshfield & Joseph, 2012).

Appropriate gender roles perceived by fish mammies in Elmina and Chorkor artisanal fishery

By approaching gender as a social construction rather than as natural frame trait, it is possible to uncover the complex ways fish mammies perform roles traditionally associated with male canoe owners in both Elmina and Chorkor. However, what pertains to the appropriate gender role of a fish mammy unfolds differently in each context, creating specific gendered experiences and generating different sets of needs for fish mammies. Butler's approach to gender as performative has also been extremely relevant in studying the experiences of fish mammies in Elmina and Chorkor artisanal fishery. Butler (2006) puts forth a nuanced view of gender as not fixed and natural, but as an illusion maintained by dominant power relations. In her view, gender is manifested through instances of performativity and the repetition of acts that give the impression that one is masculine or feminine. This is shown in an interview with a fish mammy from Elmina who adopts a tough and mannish persona as an appropriate gender role for a canoe owner:

"...in this job, there is certain seriousness that you need to keep as a woman to be effective otherwise you will not be able to make your profits. Especially at the landing site, you can't show your weakness otherwise the fishermen relatives will come for the fishes and you will not see. You have to be aggressive" (Ama Badu, Fish Mammy, 62 years, Elmina).

This corroborates the view of Overa (n.d.) who reveal in her study of gender ideology and maneuvering space for women entrepreneurs that Fanti women who own canoes adopt mannish and masculine identity in dealing with

their fishermen to consolidate their ownership status. A key observation made on the excerpt above is when a Auntie Mansa was seen to forewarning ‘hustle boys’ to keep their distance from her canoe that has just brought fish to the landing site. In many instances, I observed her engaged in serious banter with one of her fishermen who gave out octopus to a relative without informing her. However, what Butler failed to recognize is how different socio-cultural contexts conditions appropriate gender roles for fish mammies; women who perform roles traditionally associated with men. In the Chorkor case, perception of the appropriate gender role of fish mammies unfold differently compared to fish mammies in Elmina. Rather, they perceive their role as mothers and wives among others as more appropriate for a woman who owns a canoe. They do not become masculinized in the same way as their counterpart in Elmina because gender differences exist within respective kinship norms. Another identifiable feature of fishing in Chorkor is that the community do not have a landing site as Elmina do. Here, fishermen upon arriving from the sea anchor their canoes 200 meters away from the shore and then transship the fishes ashore. To couple with, it makes it almost impossible for *Yaa Nyɛ* to come to the beach to enact masculinity as in the case of fish mammies in Elmina. An interview with a fish mammy in Chorkor revealed that:

“...once in a while I go to the beach when they bring the fishes but for a very long time I haven’t gone there. The fishermen carry the fishes home for the women to prepare them for smoking, just as you’ve seen...I am not bothered

about them stealing because they always bring more home”

(Awo CK3, Fish Mammy, 51 years, Chorkor)

A male canoe owner emphasized that exhibiting a masculine trait as a woman canoe owner should be a one-off event but should continually focus on their feminine abilities; signaling that as an appropriate gender role for fish mummies in Chorkor artisanal fisheries. When asked who he prefers as a canoe owner, he revealed that:

“I know canoe ownership is male occupation but women too can become canoe owners. Nothing should stop them. A woman who owns a canoe cannot be like a man who owns a canoe even though sometimes they should act tough”

(Lampsey, Fisherman, Chorkor)

Despite that, a fish mammy in Elmina shared her experience:

“my late husband when he was alive used to teach me about fishing. At the landing site, I watch what he does anytime they return from sea with the fish. He was very aggressive and tough. He told me that a canoe owner must be wild to succeed otherwise the fishermen will exploit you” (Ama Badu, Fish Mammy, 62 years, Elmina)

Besides, Butler's view of gender as performativity also opens up a space in which to regard the (gender) identity transitions experienced by the fish mummies; from the men and women interviewed for this study, a male canoe owner in Elmina revealed when I asked, *between male and female canoe owners – who is preferred and why?* He retorted:

“I prefer a man who is a canoe owner because a woman cannot go to sea, they cannot mend fishing nets, they cannot enter into their own canoe...but a woman who has money and can be tough can succeed as a canoe owner” (Uncle Kwame, male Canoe Owner, Elmina).

Being sober and calm as a canoe owner was increasingly seen as unimportant based on the fact that fishermen as an occupational group are strong-willed, as such compromising with them is tantamount to collapsing their enterprise. A fisherman in Elmina elucidated:

“I work for a male canoe owner, who is also part of the crew members. Although he appointed a boatswain [bosun] but still he made every decision. Do this, do that and so on and on. Things were simpler so I expect woman canoe owner to take charge or else the fishermen will make decisions that will collapse your job”

(Badu, Fisherman, Elmina)

However, the situation is not the same with fish mammies I studied in Chorkor. One of the main factors that influenced fish mammies to adopt a more feminine style in their canoe management is due their recognition of how fishing families organized their fishing enterprise in Chorkor as consistent with the patrilineal kinship. One of them said:

“...most of the canoes in Chorkor are owned by families and the family heads are made the owners...I saw that anytime the fishermen who are family members are always available for fishing trips so I decided to build a house and gradually

I was able to add more canoes. People come to me and they want to work for me. A lot of my fishermen are not from this town. So then I decided to accommodate them like how the families who owns canoe so that I have them available for fishing trips” (Naa Oboshie, Fish Mammy, 72 years, Chorkor)

Here expression of kinship ideals becomes an important factor for fish mummies relying on their femininity even as they perform roles traditionally associated with men. As stated earlier, kinship norms within respective sociocultural contexts directly influence what one perceives as appropriate gender roles due to the gender expectations made possible by their socialization. This is evident in the studies by Eddleston and Powell (2012) on the differences between male and female entrepreneurs in terms of their approaches towards achieving a successful work/life balance found that females almost always combine personal lives and business to maximize benefits. To some extent, fish mummies in Elmina perceive that exhibiting and maintaining a mannish and masculine persona constitute the appropriate role of a canoe owner. Besides, the majority of fish mummies underwent a process of identity transition through gendered socialization internal to the artisanal fishery by their husbands who imparted on them masculinized agencies as the most appropriate gender role in the artisanal fishery. Acker (1992) argued that male-dominated institutions marginalize female employees by building images, symbols, and ideologies that legitimize hegemonic masculinity in the workplace. According to a fish mammy:

“I know a lot of things about fishing because of my late husband. He taught me how weather conditions influence fishing and some of the spiritual encounters at sea. He also told me that as a canoe owner, you have to be hard on your fishermen...” (Auntie Mansa, Fish Mammy, 59 years, Elmina).

As a result, exhibiting masculine traits is seen by fish mammies in Elmina as a need and appropriate for women who own canoes. This resonates with the view that women are often early in life convinced that traditional masculine traits are precedents of their promotion to senior administrative roles and their ability to act like men guarantees their success (Kaelberer, 2019; Tedrow & Rhoades, 1999). Eddleston and Powell (2008) explain in their study on how gender identity explains what male and female business owners look for from their careers that some women are socialized to exhibit masculinity as business owners on the basis that they yield maximum reward.

This also means that their identity becomes more controlled and dependent on the dominant masculine ideals inherent in the artisanal fisheries in Elmina. Despite that, Stark (2011) argued that women's interdependence on patriarchal structures could equally be generative of their power such that their position as mistresses to capitalist husbands offers them privileges to control their husband's productive assets in their stead. She further revealed that this is dependent on the neolocal marital arrangement, typical of matrilineal Fanti communities in coastal Ghana. However, fish mammies in Chorkor relied on their feminine agency to further along their canoe management without depending on their husbands. Odotei (1999), (Mensah and Fitzgibbon (2013)

believe that Ga women who live in separate marital residences use their feminine agency as a bargaining tool to dislodge their subordination from there to enhance their socio-economic positioning. This was shown in the case of a fish mammy who shared:

“I live in Laterbiokoshie but my husband is a fisherman at Chokor. In 2013 I bought a canoe and put him in charge. But I go there to take fish for my chop bar. Apart from that I take care of the fishermen. I built a small hut at the shore where they live with other female workers...even the canoe I will sell it because my husband is mismanaging it” (Awo Ck3, Fish Mammy, 51 years, Chorkor)

Furthermore, it refers to the masculine nature of their artisanal fishery: fish mummies perform roles that are traditionally associated with males, while some of their female values such as motherhood become appropriated in a way that is seen to benefit the fishing industry at Chorkor. Most fish mummies expressed that without their feminine role, the artisanal fishery including the fishermen may suffer a breakdown.

“I am a mother. All the fishermen that work for me together with their wives are under my care. We live together as one family. I do my part as a mother will do and I leave the rest to them” (Naa Karley, Fish Mammy, 52 years, Chorkor)

Social practices that reinforce appropriate gendered performances within the artisanal fishery

Fish mummies' experiences with new gendered roles and norms within the artisanal fisheries mirrored stereotypical societal expectations of the

woman's role such as the role of caretaker as in the case of fish mammies in Chorkor; whereas the new gendered role for fish mammies in Elmina mirrored stereotypical masculine roles as reflected in the artisanal fishery. Concerning their respective socialization before becoming fish mammies, it is clear that they had very prominent socializing experiences related to the masculinized values and ideals of the fisheries and the career of a canoe owner. To them, the majority of the work of the canoe owner is completed at the landing site. Over there, fishermen populate the site, as well as masculinity, is the pervasive norm. A fish mammy explained that sometimes vulgar words and sexually explicit jokes, toughness, and physicality were common and constituted some of the common traits that the men expressed for which they strive to conform. Just along the landing site in Elmina, I counted not less than 6 fishermen and fish processors who were engaged in quarrels usually in the exchange of vulgar words. In most cases, the fish mammies become aggressive and use curse words to ward off fishermen who pose intrusion. To them, adopting a tough and unemotional persona enables them to fit in.

“my husband told me to be tough always with the fishermen and is true because in their midst you cannot show your weakness. Sometimes I am insulted by some of their relatives who I refuse to give fish but I don't react. I act tough but later I confront them” (Efua Essoun, Fish Mammy, 55 years, Elmina).

“I have been in the fisheries for a very long time and I know how things work here. You don't need anybody to tell you to be hard” (Sis. Sarah, Fish Mammy, 55 years, Elmina)

However, social practices of fish mammies in Chorkor artisanal fisheries were too dissimilar from fish mammies in Elmina. Even as canoe owners (i.e. playing a role traditionally associated with men), they are expected to play the typical motherhood role. Early on, they learn that becoming a canoe owner will ease their access to fresh fish to facilitate their fish smoking and processing business. Even though social and cultural practices in the Chorkor artisanal fishery is similar to Elmina fishery in that it is male-dominated, yet fish mammies are expected to perform women's and motherhood role. Perhaps, the absence of a well-structured landing site as in the case of Elmina do not make possible a site where masculine ideals will be enacted. Individual fish mammies organized fishing business in their domestic homes in which their femininity dominated. A fish mammy shared a memorable experience that shaped her perception about the social practices in that reinforce appropriate gendered performances within the fisheries:

"I saw that the families who owned canoes in Chorkor had women who were selling and smoking the fishes whenever the fishermen bring them. The women also prepared food for them. And the fishermen were bringing fishes all the time. At the end of every season the women will do account and then pay the fishermen. So when I began, I decided to do the same thing. I cook for them every day. They have taken me as their mother. I advise them and make sure there are taken care off" (Naa Oboshie, Fish Mammy, 72 years, Chorkor)

The impact of this experience has become the basis that fish mammies use to resist the expectations to be masculine and stern.

“...sometimes I act tough to make a point but they already know that I am motherly. Sometimes if I want them to get something across, I pamper and treat them fine” [laugh]. Fishermen like nice treatment (Naa Kuokor, Fish Mammy, 34 years, Chorkor).

While fish mammies in Elmina would act tough at the landing site, they sometimes get ridiculed even though they still feel that reneging on their masculine identity would make them get twice abused and ridiculed. This was the case as I witnessed a serious confrontation between a fish mammy and a fisherman who apparently was trolling her to humble herself that the canoe belongs to her late husband.

“they call us so many names, even the fish traders sometimes insult us...initially I will say it is nothing but these days I insult them back. If you say you won’t mind them they will keep on insulting you” (Sis. Sarah, Age, Fish Mammy, 49 years, Elmina)

However, some of the fish mammies have realized that acting tough and stern does not inure to their long-term benefit as women who work in a male-dominated culture. They explained that other fishermen and even some of their friends who are fish traders and processors would criticize them as pompous even though they feel they are appropriately doing their job as fish mammies. Yet when they put on their traditional feminine persona, they take them for granted.

“...the fishermen sometimes get angry and verbally abuse me whenever I act stern. But they don’t like it when you are cool with them (Ama Badu, Fish Mammy, 62 years, Elmina

“the other time I went for a funeral and I met a friend and a customer who for some time has not been coming to buy fish from me. I asked her the reason and to my surprise she said I treat her like a stranger whenever she comes to buy fish at the landing site. So I begged her and explained that it is the nature of the job. She understood” (Auntie Mansa, Fish Mammy, 59 years, Elmina).

From the moment that the fish mammies began working as fish traders, they encountered the masculinity of the artisanal fishery and had to contend with that identity. A fisherman explained when asked about how fish mammies are treated differently by crew members because of their gender. However, performances are enacted by fish mammies in Chorkor to prevent a backlash from the fishermen hence each time they reflect on the relationship between their feminine identity and masculine performance and resolve that the tough performance is not congruent with their conventional women identity. In that regard, they believe that their feminine performance is a reflection of their culture because there is clear distinction between the woman and the man. Some of the fish mammies revealed when I asked whether they feel their gender expectations are different now that you are a canoe owner

“...a woman who owns a canoe is different from a man who owns a canoe. I am a fish processor so when it comes to issues about fishing and buying some equipment I leave it to the

boatswain and the fishermen to take care of. Sometimes I give my opinion but they know best. If it is about processing and trading that one I make all the decision” (Naa Karley, Fish Mammy, 52 years, Chorkor)

“my husband is in charge of everything. As for me getting fish for my chop bar is all I care about. Can I join them for fishing, I can’t. They can’t also prepare and smoke the fishes” (Awo CK3, Fish Mammy, 51 years, Chorkor).

Fish mammy identity, gender roles, and performances within the artisanal fishery

In the theory of performativity, there is no gender identity outside of the performance but rather formed within the performance. More so, individuals continually refine and recreate their gender identities through gender-related performance. Merton hypothesized that each social status includes not only one associated role but also a series of associated roles (Merton, 1957). This “set of roles” consists of complementing the relationship of roles that individuals have by occupying a specific social status. Besides, Eddleston and Powell (2008) Fish mammies in Elmina spoke of having several related and overlapping roles instead of having a single role. To speak of their social status as ‘*Ɛdwumadzewura*’ as their only identity is misleading in that there appears to be no single role but rather a role-set. The fish mammy in Elmina as she is referred to as ‘*Ɛdwumadzewura*’ has an internal role in managing her canoe and the fishermen and at the same time external (reproductive) role concerning dispensing domestic roles.

Construction of Identity: Ɛdwumadzewura and Yaa Ny3

The fish mammies who were interviewed in Elmina stated that they have become the female equivalent of fisherman capitalists upon becoming a canoe owners in the fisheries. The women stood at the same level as their male peers for the newly acquired identity which required them to perform the same role as a male canoe owner. In doing so, these women have given up their traditional female identity and performed as females imitating male canoe owners to the extent their real names are replaced with the moniker ‘3dwumadzewura’ as their primary identity in their community. A fish mammy shared her experience:

“I don’t even hear people call me by my real name...even at the premix station, the fishermen call me 3dwuamdzewura”

(Auntie Mansa, Fish Mammy, Elmina).

Meanwhile, the situation in Chorkor is different. Fish mammies believe that maintaining a more feminine and motherly relation with their fishermen and the community is responsible for their identity.

“...I don’t know where the name came from but most women who own canoe in Chorkor are called Yaa Ny3 because to them I am their mother... (Naa Lomiokor, Fish Mammy, Chorkor)

Even though fish mammies in Elmina consider themselves feminine, however, the fisherman and male canoe owners believe that once they enact the same performance of male canoe owners their identities become similar and should not be differentiated.

“...the only thing is that they cannot go to fishing with the men like some male owners do but I don’t see any difference in what

they do...they are even responsible than some of the male owners” (Coach, fisherman, Elmina).

However, some of the fish mammies have often faced difficulties in juxtaposing their conventional identity as a woman and the expectations of the masculine industry. Some of them still consider themselves feminine and believe that their stern and mannish performance as fish mammies are not congruent with their identities as women. They see the *3dwuamdzewura* identity as more appropriate and necessary only when they are at the job site (i.e. landing site). They believe home duties enable them to separate their canoe ownership masculine identities and expectations from their identity as women. When asked whether they feel their gender expectations are different now that they are a canoe owner, some recounted that:

“...I go to the landing site very early in the morning to see to it that all the fishes the fishermen brought are sold. After that I come home to cook for my children...at home I am free even though I receive calls from my fishermen but I am more relaxed at home” (Auntie Mansa, Fish Mammy, Elmina).

Herein lies the difference between fish mammies in Chorkor and Elmina. Fish mammies in Chorkor believe that playing a role that is traditionally associated with men is not an enough reasons to stop them from being woman. To them they are intentional about their role as it is their source of their legitimation. To them, adopting a masculine style is mundane as it contradict with their gender identities.

“...the smoking shed is on my compound as you can see. All my workers live here so this place is my workplace and at the same

time my home. When the fishes come, others who are responsible for smoking will do. Sometimes I supervise but I also make sure they are fed as a mother will do (Naadei, Fish Mammy, Chorkor).

Eddleston and Powell (2008) explain that women business owners who associate more with their traditional gender identity place more importance on socioemotional ideals. However, some of the fish mammies recounted that they often face difficulties in negotiating their identity as a woman since they started work in the fisheries as fish processors and traders. They often felt the experience they garnered as fish processors have equipped them with the ability to maintain their fluidity of roles as canoe owners/fish mammies.

“I spend most of my days at the landing site but after 1pm, you will not find me there. I come home and do my house chores and make sure my children are fed” (Sis Sarah, Fish Mammy, 49 years, Elmina).

“I used to come home very late the time I was a fish processor. When I come too I prepare the fish and smoke them. Before I finish then it is already late but still I manage to perform my domestic duties. Right now, I don’t smoke fish anymore because of my eye problem. But I am able to combine canoe ownership and domestic duties better than when I was a fish processor” (Ama Badu, Fish Mammy, 62 years, Elmina)/

Even though the masculine qualities of a canoe owner were not consistent with their traditional identity, Butler (2006) believes that the key to

gender as performative lie in the constant repetition and re-enactment of the role socially perceived as appropriate for a canoe owner.

Contributions of fish mammies in the artisanal fishery

This section explores the contributions of fish mammies in an artisanal fishery in coastal Ghana. It looks at other aspects of the role of fish mammy that is specific to their gender aside from their generic contributions to the fishery. The operationalization of the term, fish mammies is far most completely encapsulated in Overa (2003) that, *“by investing in canoes, outboard motors and new types of the net, and by hiring and managing male crews”* [Emphasis added]. Along this, Olaoye and Ojebiyi (2019) investigated the contributions of women fish merchants, otherwise known as fish mammies in Ogun Waterside, Nigeria. Torell et al., (2019) highlighted the entrepreneurial decision regarding when to fish and the kinds of fish species to catch as contributions of fish mammies that are fundamental to sustainable fisheries management policies. The authors found that fish mammies provide fishermen with finance, fishing nets, fishing gear, sales of fish, and total control over fish harvest. Similarly, Ameyaw et al. (2020) found that fish mammies are also important in providing access to capital for women in the fishing communities, allowing them to invest in their businesses and create sustainable livelihoods; an obligation that has been measured by fisheries enumerators as masculine (Ogden, 2017). This overdetermined view masks the contributions of fish mammies informed by their feminine gendered experiences rendered invisible by the idealized notion of masculine fisheries. This current study re-examines the contributions of fish mammies in artisanal fishery informed by their kinship backgrounds and resultant gender roles. I

argue that some fish mammies in the study imbue femininity into their roles such as providing mother care and other gender stereotypical roles. Recognizing the specific gender contributions of women such as fish mammies in fisheries has been adjudged as necessary for policy on sustainable fishery management (Torell et al., 2019).

As a canoe owner, I feel responsible as a mother

*I came here as a teenager and she took care of me as her child.
For the past thirteen years, she has been the mother figure in
my life...giving me place to sleep, feeding me and my wife and
others too (Borketey, Fisherman, Chorkor)*

The participants in the study revealed equally important contributions that go unnoticed by fisheries enumerators. Since men are considered the default canoe owners, women's mere existence as canoe owners can challenge and subvert the idealized masculine role of a male canoe owner. Here, I observed that fish mammies and her workers live in one homestead. This runs up against Judith Butler's performativity theory that regulatory discourse of certain contexts enforces on individuals an appropriate gender role by constraining one's agency. Speaking to fish mammies in Chorkor and exploring their contributions, Naa Oboshie recounted how she started as a fish mammy and how that strategy facilitated her fish trading and processing:

*"I saw in Chorkor here that the male canoe owners had their
workers staying at different places and sometimes getting all of
them for a fishing trip is difficult. They come today and the next
day you don't see them. So I decided to build a house for my
fishermen so that we can all live in one household to be able to*

get all of them for fishing trips will be easy” (Naa Oboshie, Fish Mammy, 72 years, Chorkor).

Whereas the fish mammies in Chorkor adopted a nurturing and mothering approach towards their workers, the converse is the situation in Elmina. Fish mammies in Elmina rather adopted a tough and aggressive persona on the proviso that the environment in which they operate is unfriendly, exploitative and masculine. Several fish mammies expressed difficulty in balancing the demanding role of a fish mammy and a mother, even though fish mammies in Chorkor due to their gender socialization accustomed them to perform their stereotypical gender roles even with production activities. According to Hochschild (1973) women in masculine-dominated organizations tends to ‘defeminize’ themselves in order to be comfy in such atmosphere. Agreeing with Butler’s performativity, this viewpoint underlies women urge to create performance that helps them to negotiate hyper masculine culture in the artisanal fisheries. Even though, Garcia (2003) believes the defeminization of women in a male-dominated institution is supportive of the masculine ideals. Ama Badu described the situation:

“...I am not the one to teach my fishermen how to fish. These men are experienced and some are even older than me. They see me as their owner whose job is to provide fuel and repair costs. Sometimes when I want to tell them something, I tell their boatswain to convey it” (Ama Badu, Fish Mammy, 62 years, Elmina)

Meanwhile in Chorkor, exhibiting mother care by fish mammies towards her fishermen made critics (i.e., male canoe owners) think that she may not succeed as a canoe owner. Similarly, Martin (1979) studies on the occupational role dilemmas and the choices of female police officers found that policewomen insisted on their femininity as against the masculine of police organization to be able to shy away from the masculine duties of the job to become more service oriented such seeking non-patrol assignment and exhibiting low motivation towards work. However, Hochschild (1973) termed this as 'deprofessionalization' strategy by women rendered to sever ties with male colleagues in ways that will make them exclusive and avoid comparison with men. However, that motivated her to go much higher and harder than most of these men. She expressed that:

"I heard some yaa kyɛ [male canoe owners] saying that when you pamper fishermen they will collapse your work. It is not true. You see the house we live in, we eat together, work together. Some of their wives I have employed at my smoking shed. I pay their children's school fees. I scold them when they misbehave. Just yesterday one of the wives reported her husband to me that she is cheating on her with another woman. I did my investigation and I summoned the fisherman and threatened her that I will evacuate him from my house and he begged and begged and begged. With all these treatments, they serve me well (Naa Karley, Fish Mammy, 52 years, Chorkor).

Other fish mammies in Chorkor also took pride in this management practice and believed that this will allow them to promote the few women

who are fish mammies in Chorkor by offering what the 'yaa ny3' is capable of, and also entice other women to become fish mammies. Naa Lomiokor noted that:

“I worked with my sister for over 13 years and right now I am on my own as a yaa ny3 for the past 18 years. The way my sister treated her workers made them bring her more fish. She was like a mother to them. So I am also treating my fishermen the same way. Fishermen only have to be treated well and they will do anything for you” (Naa Lomiokor, Fish Mammy, 66 years, Chorkor).

“...I also worked with my sister when I was about 17 years. At that time business was good and the fishermen use to bring a lot of fish home. Growing up, I also decided to become a Yaa Ny3 just like my elder sister” (Naa Karley, Fish Mammy, 52 years, Chorkor).

These ideas are supportive of the traditional notion that motherhood and parenthood uniquely are feminine endeavors such that the *Yaa Nyɛ* (translated as a mother who owns a fishing net) in the study performed femininity through prioritizing parenting over canoe ownership while still embracing the label, demonstrating that the roles are not mutually exclusive. Nkealah (2022) emphasizes that African women's tendency to show care, kindness, and love typifies the tenets of African Feminism. Humaneness is a central attribute of African Feminism that emphasizes the kindred spirit, love, family, kindness, and care that most African women have (Nkealah, 2022). Some African women believe that exhibiting feelings of care helps to improve

human relations. Despite that, Nkealah, (2022) argues that this is not an ascribed quality that all women possess because they are women; rather it is an effort that some African women cultivate by acknowledging that a healthy human relationship is central to our coexistence.

Other fish mammies also noted that fishermen are difficult to please, inflexible and inconsiderate. Auntie Mansa recounted that:

“I used to give them a basin of fish any time they don’t catch plenty of fish so that they can also sell and get some money. Sometimes I even give them money from own purse. But I have stopped because they’ve started cheating me. Just 6 months ago I was told that my fishermen have caught three basins of ‘Nkan’ but when I went to the landing site it was only 2. I asked the boatswain that I leant they brought three basin and he insisted they were two. One of them told me that they sold it to another canoe and I confronted the boatswain about it (Auntie Mansa, Fish Mammy, 59 years, Elmina).

Overa (n.d.) noted that fish mammies in matrilineal communities insist on being mannish towards their crew members to maintain a tough and aggressive persona. Odotei (1991) understands this as an appropriate gender behavior of a canoe owner that serves as a bargaining strategy for women to reshape their interests. A male canoe owner in Elmina asserted that:

“I prefer a male canoe owner to a female because over here, you have to be tough and aggressive on your fisherman or they will collapse your job. So if you are a woman and you want

your work to survive, you have to be tough too” (Uncle Kwame, Male Canoe Owner, Elmina).

Poverty Reduction

Indeed, there is a growing interest in the role of gender in mediating the distribution of livelihood benefits accrued from fishing (Matsue et al., 2014). However, the dearth in gender-disaggregated data on power relation of different occupational groups in fisheries has made it difficult to implement fisheries policies on sustainable livelihoods and poverty alleviation (Okali & Holvoet, 2007). There is limited analysis in existing literature of the role social capital have in influencing fishing livelihood strategies (Weeratunge et al., 2010). Matsue et al., (2014) found that, in Kenya, *Mama Karanga* access to and control over capital and fisheries resources and relations with fishermen enhanced livelihoods and also influence fishing decisions. While Walker (2002) and Allison (2003) describe how Ghanaian and Ugandan women have used the revenue generated from postharvest activities to enhance their livelihoods and lever themselves out of poverty. At present there is dearth in literature on how fish mammals’ management practices ensure poverty reduction in the communities they are based, despite the significant amount of authority that they wield. Sustainable Torell et al. (2019) have recommended an extensive studies to explore the activities of other women occupational groups (fish mammals inclusive) to enable it integration into sustainable fishery policies. Interviews with fish mammals from both fishing communities showed that the scale of their management practices help to ensure poverty reduction.

“In this community [Chorkor], fishing is the main work. Even the food vendors buy fishes from us to sell their food...due to that I decided to employ the wives of my fishermen to work with me in my smoking shed so that they can also earn some money to assist their husbands because these days, they come home with plenty fishes like they used to” (Naa Karley, Fish Mammy, 52 years, Chorkor)

“...fishing is declining, so I don’t see that in the next ten years people in Chorkor will love to go into fishing so it is the children education I want to support. These days we don’t even get plenty fish to sell so sometimes I support the women I work with children’s education...” (Naa Lomiokor, Fish Mammy, 66 years, Chorkor).

Similarly, fish mammies in Elmina who are predominantly fish traders also recounted the need to cushion or empathize with their fishermen due to the current state of fisheries to enable them support their livelihoods and families. A fish mammy noted:

“...sometimes they return from sea with just two basins of fish and you will not know whether to sell them and keep the money or give it to them. In many times I sell and give them the money otherwise if I decide to keep, they will go home with nothing because fishing is bad these days” (Sis. Sarah, Fish Mammy, 49 years, Elmina).

How does the nature of artisanal fisheries pose a challenge to fish mammals?

The artisanal fishery industry has long drawn on masculine ideals to define what it means to be a fisherman and to resist the inclusion of women into that occupational space under the premise that it is physically demanding and irreverence to the sea god (Adjei & Sika-Bright, 2019; Britwum, 2009; Odotei, 1999). Even though the use of physicality in fisheries is a rare event. As such, these masculine ideals have dissuaded women from entering the profession. Ogden (2017) also noted that the fishery is identified as masculine both organizationally and culturally, particularly about fishing as the ‘real fishery work’. Nevertheless, fishery enumerators often cling to masculine contributions and downplay the number of contributions from fish traders and processors and other women occupational groups in the industry (Dasig, 2020; Ogden, 2017). Considering that fish mammals are undertaking a role that is traditionally associated with male canoe owners; these structures could pose challenges to fish mammals. Unfortunately, the available literature that documents the challenges of fish mammals in artisanal fishery often lacks a gender-sensitive analysis of the challenges (See. Ameyaw et al., 2020; Olaoye & Ojebiyi, 2019).

Masculinity is thoroughly embedded into the artisanal fishery particularly, the canoe ownership sphere which glorifies masculine characteristics of the job while undermining many duties that are feminine (Overa, n.d.), especially in the matrilineal community of Elmina where fish mammals perform the stereotypical masculine role of a male canoe owner to bequeath themselves a new identity as ‘*Ɛdwumadzewura*’ or ‘*Ɛbuwawura*’.

However, the complex ways in which fish mammies' identities are constructed and the implications for their traditional gender identity cannot be ignored. As these women do not simply become like men upon becoming canoe owners, it implies that the process of gender transformation may result in serious ramifications for these fish mammies. Morash and Haar (1995) revealed in their analysis of the police institution that its masculine basis often signals to women that they are out of place regardless of their desire and effort to dispense their masculine duties. Similarly, fish mammies in artisanal fisheries in coastal Ghana are maligned male occupational groups, especially the fishermen despite living up to the masculine expectations of their role. Of relevance to this study is the fact that despite fish mammies' desire to homogenize with their male counterparts by living up to the masculine demands of their job, their traditional gender identities have manifested themselves in ways that have maintained clear boundaries between a female canoe owner and a male canoe owner. The section that follows examines cases in which fish mammies who perceived and performed masculinity as an appropriate gender role in artisanal fishery identities were stigmatized in one context; whereas, in another context fish mammies who embraced femininity as an appropriate gender role in the artisanal fishery rather had their identities exalted.

Stigmatized Identity

Stigma has a gendered dimension, and women experience it differently. At the moment that all fish mammies from Elmina in this study have become masculinized, they enter a grey zone in which they are no longer part of the female market, but are also not part of the canoe-owning sector in

artisanal fishery altogether. Generally, men see fish mammies as out of place hence must align more towards the masculine ideals to be accepted (Overa, n.d.). The rejection stems from judgment regarding their transgression from their traditional gender role as fish traders or processors. As shown in previous sections, fish mammies particularly in Elmina combine tough and aggressive personas as social practices that reinforce appropriate gender performance as a canoe owner. However, this brings with it specific implications such as being ungrateful, domineering, disrespectful, abusive, exploitative, and other aspects that stigmatize these fish mammies. A fisherman in Elmina revealed that:

“...those women when you do them good, that one no one hears but the moment you do one wrong they will let everybody know that you are the bad one (Coach, Fisherman, Elmina).

Conversely in Chorkor, fish mammies’ reinforcement of feminine social practice mainly with a motherly care approach as the most appropriate gender performance of a canoe owner such as, through delegating most of the masculine role of canoe management to their fishermen has made possible the facilitation of complementarity and trustworthiness between *Yaa Ny3* and their fishermen. In contrast to their counterparts in Elmina, the *Yaa Ny3* identity is seen as insignia of charity and cooperation. This was the case among fishermen and fish processors in Chorkor.

“...I was about 21 years when I was brought here from Winneba by a fish trader who buys from Yaa Ny3. She gave me a place to sleep and provided me with meals every day. She is like my mother. Right now I have three children and I still live

in her house. She has even my wife a job to work as a fish processor (Lamptey, Fisherman, Chorkor)

Meanwhile, the cost of stigma on fish mammies in Elmina generates numerous challenges to their work in ways that make it difficult to maintain their fishermen or even recruit some to work in their canoes. The stigma surrounding their presence is partly due to the masculinity they enact in their gender performance. The situation highlights the difference between male and female canoe owners.

“...fishermen don’t like scolding. They feel disrespected when you scold them but I see male owners do that all the time. Sometimes they leave your canoe and go to work for male owners instead...” (Sis. Sarah, Fish Mammy, 49 years, Elmina)

“...these days it is difficult getting fishermen to work for you. When they misbehave and you scold them, they gossip to other fishermen and they see you as disrespectful and ungrateful (Ama Badu, Fish Mammy, 62 years, Elmina).

This also suggests that fish mammies in Elmina despite reinforcing their performances, masculine ideals do not necessarily mean they stand in an equitable position as their male counterparts. That is to say, for fish mammies in Elmina to meet the dominant standard successfully they have had to compete with men and negate important aspects of their identity as women by reinforcing the masculine ideals of a canoe owner in their gender performance at a cost. The artisanal fishery is underlying the overriding referent of masculinity. Particularly in Elmina, fish mammies carry out a significant rupture with their dominant feminine identity to be like men in a context

defined by male standards with the imperative to perform masculinity. A fish mammy shared her experience:

“...managing fishermen is not easy for me as a woman...they treat us very differently from the male canoe owners even though we all do the same job. The difficult thing is even getting them to work for you (Auntie Mansa, Fish Mammy, 59 years, Elmina)

A fisherman explained that:

“...you know women, a small thing they become emotional, overreact and disrespect you. There are so many fishermen who will not like to work for these women (Badu, Fisherman, Elmina)

However, for fish mammies in Chorkor, this represents a different level of performativity since for them the imperative is not to become like men necessarily but to recognize the need to grant autonomy to the fishermen whom they work with facilitated long-term support with which they have benefitted.

“...fishermen love going to sea. That is their joy and purpose so as a Yaa Nyɛ, my job is to make them wake up in that joyful mood to be able to go to sea. I provide them whatever they need. In fact, most of the things I let them do it because I have limited knowledge (Naa Lomiokor, Fish Mammy, 66 years, Chorkor).

The most important thing to recognize about the configuration of performativity in these contexts is the kinship norms and gendered

socialization inherent in these communities. As such, the extent of their rupture from their conventional feminine identities depends on the sociocultural factors (i.e., kinship norms and gendered socialization) in this case as well as their preferences. According to Butler:

This relational or contextual point of view suggests that what the person “is,” and, indeed, what gender “is,” is always relative to the constructed relations in which it is determined. As a shifting and contextual phenomenon, gender does not denote a substantive being, but a relative point of convergence among culturally and historically specific sets of relations (1990, p.14).

These constructed relations and inherent socio-cultural practices are what set apart the experiences of fish mammies in Elmina and Chorkor since each artisanal fishery is distinct in how they have incorporated women canoe owners. The need for homogenization in the Elmina artisanal fishery create a stigmatized but misleading identity for fish mammies; showing that their gender transformation is a gendered one. According to a fish mammy:

“...but when the male owners shout at them for wrongdoing they seem to be fine with it. When you tell a fishermen to stop doing what you don’t like, they make you feel like you don’t have the right to do so. When you do it the more, they leave and go to disgrace you to other fishermen that you are mean and disrespectful” (Efua Essoun, Fish Mammy, 55 years, Elmina).

In as much as fish mammies in Elmina see performing masculinity in the artisanal serve as an open door and offering them opportunities to

maneuver without thinking about the implications for their traditional identity as women.

What are the prospects of fish mammies' to ocean governance in artisanal fisheries?

On the part of the prospects, fish mammies in Elmina and Chorkor revealed that their presence in the artisanal fishery is fundamental to ocean governance and sustainable fishery management. Despite the contributions of women in marine fisheries, their lack of participation in ocean-related decisions remains a topical concern among feminists and gender advocates in marine studies (Arulnayagam, 2020; Gissi et al., 2018; Torell et al., 2019). This has been attributed to cultural and social barriers in coastal communities that entrench male ideals in the fisheries against the potential inclusion of women in marine decision-making. Jo (2010) believes that the knowledge and experiences of women as an occupational group in the marine fishery is enriching thus, a great loss to ocean governance as it continues to remain underutilized. When one considers women's natural inclination with the ecology or nature, it is apparent how it is necessary to give women the platform to contribute to ocean sustainability; a position that has been asserted by ecofeminists (Mies & Shiva, 1993).

Calhoun, Conway, and Russell (2016) have intimated the need for ocean governance policies to recognize women as active participants in ocean-related decisions since their experience as nature carers is likely to enrich and yield holistic results. To this end, Gissi et al., (2018) understand that effective ocean governance will depend on the voices of females in the fisheries. Governance constitutes the political, social, economic, and administrative

systems and related formal and informal institutional arrangements involved in the management of natural resources (Folke et al., 2005). However, it is intimated that for effective ocean governance to achieve sustainability, women are needed to provide moral and ethical traction (Jaggar, 1992). According to Gissi et al. (2018), the potential inclusion of women in ocean governance will depend on examining the roles and contributions of women in fisheries. Despite the dearth of studies on the contributions of women in ocean governance (Keen et al., 2018), exemplifying and discussing some of the contributions of fish mammies will yield important scenarios that could be considered for ocean governance regimes. It is known that women in Ghana's artisanal fisheries are equipped and possess the confidence and are capacitated to actively engage in ocean governance due to their lifelong engagement in sustainable fishery practices (Torell et al., 2019). Moreover, shedding lights on some of these sustainable fishery practices is deemed pertinent especially by fish mammies whose position in the fisheries are more privileged.

The consideration of women in the ocean governance regime is a growing need (Gissi et al., 2018). Elsewhere, women's sustainable fishery practices have been recognized for their potential contributions to ocean governance. Fonseca et al. (2016) observed that women in artisanal fisheries in Brazil despite the limited ocean resources were able to deploy resource management practices to meet the sustainability of these resources. Mina et al. (2016) studies in Mexico and Colombia pacific on economic experiments of fish caught by fishermen in Mexico and recorded women having more sustainable catch than men. Studies in Sub-Saharan Africa have documented women's sustainable fishery practices (Harper et al., 2013, 2017; Matsue et

al., 2014; Torell et al., 2019; Walker, 2001). Despite that, studies have also attributed customary beliefs and traditional practices as the reasons for women's lack of involvement in ocean governance in Ghana (Torell et al., 2019). Yet, exploring fish mammals' sustainable management practices provides important scenarios worthy of ocean governance. This will likely shed light on the nature of fish mammals relationship with the ocean ecology and how it has shaped their lives and political action against its unsustainable use.

Chemical fishing regulation

“Sometimes the fishes goes bad 10mins after bringing them home.

You just know that they were caught with DDT and Dynamite and you can't say you are returning it” (Efua, Fish Processor, Elmina)

A report by the High Seas Task Force (2006) report on *Closing the Net: Stopping Illegal Fishing on the High Seas* revealed that Developing countries, such as sub-Saharan Africa loses about US\$ 1 billion in catches yearly to illegal fishing. Roheim (2008) attributes this to factors such as inadequate national laws, or insufficient funds for implementation. Thus, the reliance on technology to facilitate proper surveillance is costly, inadequate and easily tampered with. In Ghana, corruption and ineffective enforcement constitute some of the factors of improper IUU regulation (Akpala, 2022). Roheim (2008) recommended the need to empower occupational groups on seafood value chain in charge of IUU regulation. One of the prospects of fish mammals' fishery practices identified in the study was that they help regulate chemical fishing by fishermen so as to protect their income of marketers and

fish traders; as well as the fish species in the ocean. For instance, a fish mammy in Elmina hinted:

“I tell my fishermen to stop catching fish with DDT and Dynamite...I always tell them that if buyers find my fishes were caught with DDT, I will deduct that money from their own”

(Auntie Mansa, Fish Mammy, 59 years, Elmina)

Even though capitalistic motives have been criticized as the bane of the destruction of the ecology by ecofeminists (Mies & Shiva, 1993), rather, fish mummies who are seen as equivalent of male fisherman capitalist value the protection of the ocean against chemical exploitation. Central to the ecofeminist position, the gendered division of labour almost places a lot of burden on fish mummies since their reproductive and productive roles anchors on their partnership with the ocean. This explains the militant approach by some of the fish mummies in combating illegal fishing. Some of the fish mummies shared stories about the good old days where fishes were sizable and worthy of sales.

“...sometimes I feel bad for these small fishes because 20 years ago, the fishes were big in size and were attractive to buyers. These days many buyers don't like small fishes...” (Naa Lomiokor, Fish Mammy, 66 years, Chorkor).

However, current management and regulatory strategy to combat Illegal, Unreported and Unregulated fishing is without recourse to management scenarios of fish mummies. Relatedly, marine resources in both study communities are depleted due to the usage of unsustainable technologies by fishermen to exploit the ocean. Despite their capitalistic motives as an

occupational group, it is rather surreal that fish mammies in both study communities have adopted management strategies to combat chemical fishing and have made their fishermen to refrain from the practice. Fish mammies revealed:

“...before I prepare the fish for smoking, I pour water on it for about 10mins. When the water is brown you know that they were not caught with chemicals but when it turns black you know that they were caught with chemicals” (Naa Karley, Fish Mammy, 52 years, Chorkor).

One of the female workers of the Yaa Nyɛ revealed the bruises and injuries she sustained when preparing fishes for smoking which made her stay out of work for almost a year.

“...all my ten fingernails were bruised when I was washing fishes for smoking in the shed. I didn't know they were caught with DDT...” (Adotsoo, fish processor, Chorkor).

In fact, this dreadful experience confirms the assertion by ecofeminist that the destruction of the environment by men oppresses women and often lead to their marginalization. Notwithstanding,

“...I know when a fish is caught with DDT or Omo. They are shinny and slippery especially the ones that are caught with Omo. As for the DDT, you will see blood clot on the eyes of the fish. Mostly I check it before I sell them to my customers” (Sis. Sara, Fish Mammy, 49 years, Elmina).

The responses above show concerted efforts by fish mammies to prevent illegal fishing to safeguard their revenue and show great potential for ocean governance.

Co-Management Potential

Fish mammies bemoaned their exclusion from co-management structure in their communities. Due to their hierarchical position in the fishery and their community, they believe must be involved in decisions that mattered directly on fishery resources and fishermen. More importantly, A fish mammy in Elmina lamented:

“...how can we protect fishermen and our fishery when even the leaders of some of them are teachers and political party chairmen? We are supposed to be the ones making fishery decision with people whose lives depend on the sea” (Ama Badu, Fish Mammy, 62 years, Elmina).

To corroborate the above response, a fish mammy in Chorkor noted:

“...the so-called leaders in this community do politics. They only care about what they will benefit from the sitting government especially when election is about to happen. The canoe owners and some fishermen should be the ones to make decisions to solve the problem we are facing in the fisheries” (Naa Oboshie, Fish Mammy, 72 years, Chorkor).

Majority of fish mammies in Elmina agitated against their exclusion from influential positions in the artisanal fishery against the backdrop that they are better educated by their husbands on ecological issues hence are capacitated to contribute to decisions related to sustainable fishing.

“...I know a lot about the type of fishes that comes in every season than even some of the b3soun. My husband taught me that there is a season for herring, salmon and tuna. I even know the type of fishes caught from lagoon. Sometimes when certain fishes come and is not their season, I think there is something wrong” (Auntie Mansa, 59 years, Elmina).

Chapter Conclusion

Fish mammies in coastal Ghana's artisanal fisheries embody diverse backgrounds and roles, shaped by their communities and social norms. They navigate the contrasting environments of Chorkor and Elmina, with some adopting masculine personas while others prioritize their femininity. Despite some facing stigmatized identities, fish mammies play pivotal roles in sustainable fishery management, providing financial support, gear, and control over harvests. Their contributions challenge traditional gender norms and offer prospects for more inclusive ocean governance, enriching decision-making and promoting sustainable practices. Empowering women like fish mammies in governance structures can lead to more effective and ethical ocean management, including regulating illegal fishing, preventing environmental exploitation, and facilitating co-management efforts, thus contributing to the protection and sustainability of marine resources while supporting livelihoods in coastal Ghana's artisanal fishery.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Introduction

This chapter presents the summary, conclusions, and recommendations of the study. In the first section, a summary of the study findings is presented, as discussed in the previous chapter. The second section presents the conclusions drawn from the findings. Finally, the third section of the chapter offers some recommendations to the various stakeholders.

Summary of the Main Findings

The study has explored the experiences, challenges and prospects of fish mammies to ocean governance in coastal Ghana. This research is underpinned by three theories: Judith Butler's Gender Performativity, Filomena Chioma Steady's African Feminism and Ecofeminism. The aim of the research is inspired by five crucial questions: *Which category of women are fish mammies?; What are the experiences of fish mammies in artisanal fisheries?; How do the activities of fish mammies contribute to the development of the artisanal fisheries?; How does the nature of artisanal fisheries pose a challenge to fish mammies?; and What are the prospects of fish mammies' for ocean governance in artisanal fisheries?* I have argued that central to this study is the analysis of gender in the artisanal fishery in coastal Ghana, and not just the masculinity that is carried out in the artisanal fisheries. I have also argued that this has a profound impact on fish mammies' experiences considering the space in which they perform their management duties as canoe owners. Rather than perceiving gender as a natural trait, approaching gender as a social construction in the study helped understood the

complex ways in which women engage in management activities traditionally associated with men in two different study sites and kinship contexts.

On the category of women who are fish mammies, the study revealed that fish mammies as occupational group distinctively belongs to fishing-based families. Although fish mammies from both context displayed distinct manner of affluence, however, the study revealed that unlike in Chorkor, fish mammies in Elmina inherited the canoes from the spouses with whom they worked together in the fisheries before their passing. This created specific gender experiences for fish mammies in Elmina and generated different sets of needs for them, unlike their counterparts in Chorkor, whose pathway of acquisition of canoes depended on their unilateral feminised efforts through revenue mobilisation from fish trading and processing.

Given that fish mammies have been incorporated into their respective roles in different ways, the study found that the contributions of fish mammies unfold differently in each of the study areas, creating a specific gender-based management approach. Fish mammies in Chorkor adopted feminine approach while fish mammies in Elmina tended to ground their approaches with reference to masculine values and beliefs inherent in the artisanal fishery. These are very personal issues for fish mammies, as the study found that their respective gender socialisation prior to becoming fish mammies was not the same in the two research contexts. The fish mammies in Elmina indicated that the need to become efficient managers of their fishing equipment depended on their masculine orientation towards artisanal fishery, as their husbands taught them. Whereas fish mammies in Chorkor adopted a gender stereotypical role

of a fishtrader in the artisanal fisheries in their expressed ideologies to manage their canoes and fishermen.

Considering the masculine space in which fish mammies ply their activities, the objective was to explore how it poses challenges to fish mammies in Elmina and Chorkor. The study found that often times, fishermen and other occupational groups such as fish traders and processors, would unfairly malign fish mammies in Elmina due to their masculine persona. This stems from the disjuncture in their identity once when they are seen enacting masculine performances at the landing site. The majority of the fishermen and fish traders interviewed recognise that the artisanal fishing in Elmina requires fish mammies to renounce their traditional conception of femaleness and adopt behaviours commonly associated with male canoe owners; which has made them accused for being disrespectful and ungrateful towards fishermen and other women occupational groups. Due to this stigmatised identity, most fishermen in Elmina are more inclined to work for male canoe owners than fish mammies whom they perceive as ungrateful, mannish, and disrespectful. However, it was noted that fish mammies in Chorkor are primarily dignified by fishermen due to their feminine approach towards canoe management.

The main findings on the prospects of fish mammies for ocean governance in artisanal fisheries revealed that fish mammies in both study areas demonstrated a good level of indigenous knowledge in making decisions to improve sustainable fisheries. In particular, fish mammies in both study areas were able to prevent their fishermen from engaging in chemical fishing and any other form of illegal fishing. They also bemoaned their exclusion from management decisions considering their hierarchy in the fishing industry.

They demonstrated rich ecological insights and took greater interest in safeguarding the livelihoods of fishermen and other workers through poverty reduction.

The study sought to explore the experiences of fish mammies in artisanal fisheries in coastal Ghana. It was noted that gender in the artisanal fishery is manifested through instances of performativity and the repetition of acts traditionally associated with males in the context of canoe ownership. Butler's approach to gender as performative has been relevant in studying the experiences in ways that it enabled the research to uncover the importance of the impact of gender roles of a canoe owner on fish mammies' identities in both Elmina and Chorkor artisanal fishery. For instance, fish mammies in Elmina constructed a new hybrid gender identity by conforming to masculine ideals of canoe ownership made possible by their masculine-orientated gender socialisation prior to becoming a fish mammy. In contrast, fish mammies in Chorkor despite the masculine nature of the artisanal fisheries made evident maternal and caretaking traits as appropriate gender roles of a canoe owner due to their feminine orientation of the artisanal fishery, as is influenced by the patrilineal kinship norms.

Conclusions

This study illuminates the distinct experiences and gender performances of fish mammies in artisanal fisheries in coastal Ghana, a group that remains largely invisible both in Ghana and globally. The findings reveal that fish mammies in Elmina and Chorkor follow different pathways to acquiring canoes, which leads to varied perceptions of gender roles and social practices that reinforce these roles within their respective fisheries. In Elmina,

fish mummies often adopt masculine values and behaviors, influenced by matrilineal kinship norms and gendered socialization fostered by neolocal post-marital residence. In contrast, those in Chorkor tend to embrace more traditionally feminine roles, even within the male-dominated artisanal fisheries.

The application of Judith Butler's theory of gender performativity highlights how gender is performed and constructed in the specific contexts of Elmina and Chorkor. This perspective challenges the idea of gender as a fixed set of characteristics, instead showing that it is actively shaped by social and cultural dynamics. The theory reveals how regulatory power surrounding gender shifts within different contexts, influencing the social practices of fish mummies in these communities. This underscores the importance of considering socio-cultural factors, such as kinship norms, in understanding the fluid and dynamic nature of gender roles and power dynamics among fish mummies.

Despite the masculine dominance in artisanal fisheries, which often leads to the stigmatization of fish mummies in Elmina, both groups demonstrate knowledge and agency in decision-making for sustainable fisheries. They actively advocate against illegal, unregulated, and unreported fishing practices, showcasing their critical role in maintaining the ecological balance. The study also draws on African feminism to explore how fish mummies in Chorkor and Elmina assert their agency, mobilize resources to acquire canoes, and navigate traditional gender roles. It highlights their strategies to counter domination within the artisanal fishing industry, contributing to a broader understanding of gender dynamics in this context.

However, the application of performativity theory has its limitations, particularly in fully elucidating the perceived appropriate roles and social practices of fish mammies in Chorkor. Nevertheless, this research provides valuable insights into the gender and kinship dynamics within coastal Ghana's artisanal fisheries and underscores the need for gender-sensitive approaches in ocean governance.

Ecofeminism offered a lens through which to analyze the intricate relationship between fish mammies and the marine environment. It highlights their deep ecological knowledge and the critical role they play in sustainable fishery practices. While ecofeminism typically critiques capitalism and technological modernization, the activities of fish mammies, though parallel to capitalist endeavors, show how they use traditional norms and local knowledge to manage and protect marine resources. This analysis challenges the conventional ecofeminist critique of capitalism and calls for a more nuanced understanding that takes into account the socio-economic contexts of fish mammies in Chorkor and Elmina.

Contributions of the Study

As intimated earlier, our theoretical inclination accustoms us to view in every way traits of the phenomena that favour the theory. Besides, this research did not set out to test theories or develop one. Rather, it sought to provide answers to questions about the experiences of women (fish mammies) who are performing roles that are traditionally associated with men and how their favorable hierarchical position in the fisheries in Elmina and Chorkor facilitate ocean governance, among others. Thus, the theories helped to explain and ground the findings of this study. Even though, not all the

theories employed in this research made plausible the research questions, yet remained the useful lense through which I studied the realities of fish mammies experiences, challenges and prospects for ocean governance in Elmina and Chorkor. The study sought to understand the experiences and challenges of fish mammies in relation to performing a role that is traditionally associated with men through the prevailing masculinized discourse inherent in Ghana's artisanal fisheries. Thus, I provides a reflection of the theories that were employed in this research in terms of how they make plausible or make sense of the experiences of fish mammies in the study areas.

In her work on Gender Performativity, Butler suggests that gender identities are socially constructed through repeated performances of specific gender roles. This concept argues that the ways people present themselves as feminine or masculine create the concept of gender rather than adhering to pre-existing roles. Academic research on fish mammies has explored how kinship norms and gender ideologies influence their roles in male-dominated artisanal fisheries (Britwum, n.d.; Overa, n.d.). The findings support the idea that fish mammies' identities and gender roles are shaped by inherent kinship norms in their respective contexts and reinforced in the fishing communities. For instance, in matrilineal settings, fish mammies benefit from their male spouses and familial relations, which allows for some autonomy. On the other hand, in patrilineal communities, fish mammies work as traders and processors and even acquire canoes to facilitate their trade. The study sought to understand how women perform roles associated with a male-dominated domain in artisanal fisheries, and it found that the performativity theory had limited impact on the perceived gender roles and social practices of fish

mammies. In the patrilineal context (Chorkor), fish mammies tended to embed their perceived roles and social practices within feminine-stereotypical roles, while delegating some masculine roles to experienced male fishermen. This adherence to feminine-stereotypical roles can be attributed to the influence of patrilineal kinship norms, as seen in the nature of duolocal marital arrangements among the Ga community. Some commentators suggest that women's ability to creatively bargain with patriarchy is demonstrated in this context (Kawarazuka et al., 2019; Stark, 2011). Others argue that the duolocal marital residential pattern of the Ga community reflects gender role expectations embedded in their hierarchical behavior, even within the roles of fish mammies.

In artisanal fisheries, fish mammies (Yaa Nyɛ) face the challenge of balancing motherhood and traditionally male roles. This phenomenon aligns with the tenet of African Feminism, where women embrace cultural motherhood and use it in various forms to resist domination (Nkealah, 2021; Kabeer, 2000; Steady, 1997). In Chorkor, successful fish mammies as fish processors prioritize accessing fish and employ a unique feminine management approach that defies conventional norms in male-dominated fisheries. They confidently leverage on their feminine traits to excel in their roles. In Elmina, majority of fish mammies tend to adopt masculine social practices to gain acceptance in the male-dominated environment. Success for them often hinges on their ability to demonstrate and enact masculine practices and attributes effectively, echoing Pierre Bourdieu's concept of symbolic capital (1997). The study revealed that the gendered socialization they received from their husbands, uncles and other matrikin prior to

becoming owners of canoes were vital in instilling in them the masculine ideals; especially fish mammies who stayed in the same conjugal settings with their husbands before their demise. However, both contexts reveal the intricate interplay of gender roles, cultural norms, and women's agency in artisanal fisheries, showcasing diverse strategies women employ to thrive in traditionally male domains. These experiences offer valuable insights into gender dynamics within local fishing communities.

African Feminism asserts that African women embrace culturally accepted motherhood roles while employing their own methods of resistance against domination. Some fish mammies in Chorkor adopt unconventional approaches as canoe owners in the male-dominated artisanal fisheries, highlighting the agency of African women in negotiating their interests. In contrast, fish mammies in Elmina often conform to masculine ideals within the fishery, with their success tied to their adoption of masculine social practices, aligning with Pierre Bourdieu's concept of symbolic capital (1997).

The ecofeminism lens provided a unique perspective for analyzing the relationship between fish mammies and the ocean. Fish mammies, as integral members of fishing communities, often possess deep-rooted ecological knowledge of the aquatic ecosystems. The application of ecofeminist principles to this context underscores the importance of recognizing and valuing these often marginalized voices in discussions about sustainable fishery practices. Even though the Ecofeminism perspective loathe capitalism and technological modernization and finds the nature of fish mammies' activities parallel to the capitalist endeavors. Despite the potential conflict between profit-oriented endeavors and ecological well-being, fish mammies

often wield social influence within their communities. They utilize customs, traditional norms, and local knowledge to curtail illegal and unsustainable fishing practices. This paradoxical role underlines the complexity of the relationship between gender, capitalism, and sustainable resource management. The analysis of fish mammies' roles challenges the perception of ecofeminism's stance on capitalism and technological exploitation. It highlights the need for a more nuanced understanding of ecofeminism, acknowledging that various cultural and socio-economic contexts can shape ecofeminist responses to capitalism and technology as is the case of fish mammies in Chorkor and Elmina.

Recommendations

The study proposes the following recommendations for government and other fishery stakeholders based on the findings of the study.

Given the distinct experiences and gender dynamics of fish mammies in Elmina and Chorkor, it is important that the Ministry of Fisheries and Aquaculture develop gender-inclusive policies that recognize and address the specific needs and challenges faced by women in the artisanal fisheries sector. These policies should promote equal opportunities, participation and involvement, fair treatment, and empowerment for fish mammies, regardless of their gendered approaches to canoe management. More so, to combat the stigmatization and negative perceptions faced by fish mammies in Elmina, there is a need for these programmes to feature gender sensitization and awareness campaigns targeting fishermen, fish traders, and other occupational groups in the fishing industry. These campaigns should promote

understanding, respect, and appreciation for the diverse gender roles and contributions of fish mammies.

The study highlights the exclusion of fish mammies from management decisions in the fishing industry, despite their knowledge and insights on sustainable fisheries. It is recommended to actively involve fish mammies in decision-making processes and provide them with opportunities to contribute to the development and implementation of fisheries management strategies. This can be achieved through the establishment of inclusive platforms, such as advisory committees by development partners such as One Ocean Hub, USAID etc., where fish mammies can voice their concerns and perspectives. To enhance the agency and capacity of fish mammies, it is crucial to provide them with training, resources, and support to effectively carry out their roles in sustainable fisheries. This can include workshops on ecological conservation, financial literacy, entrepreneurship, and leadership skills.

Encouraging collaboration and networking among fish mammies, fishermen, fish traders, and other stakeholders in the artisanal fisheries sector can foster mutual understanding, knowledge exchange, and collective action towards sustainable fishing practices. Platforms for dialogue, cooperation, and information sharing should be established by the Fisheries Commission to facilitate these interactions and promote gender equality in the industry. Here, fish mammies in the respective study communities should endeavour to form groups so as to collectively and easily access productive resources such as fishing subsidies from the government and capital from banks and other financial institutions. By implementing these recommendations, it is hoped that the experiences and contributions of fish mammies in coastal Ghana's

artisanal fisheries can be recognized, valued, and leveraged for the betterment of the sector and the empowerment of women in fishing communities.

Suggestion for Further Research

This thesis has presented the gendered view of fish mammies' experiences, challenges, and prospects for ocean governance. However the study was based on a sample of fish mammies from two fishing communities (i.e. Elmina and Chorkor) in Central and Greater Accra Region respectively. Studying the experiences of fish mammies from other fishing communities in Ghana will reveal the particularities of the lives of fish mammies in the four coastal settlements in Ghana considering the sociocultural diversity of these coastal communities. This can shed light on issues such as gender socialisation of fish mammies prior to becoming canoe owners, ocean governance and garner sustainable fishery practices, etc. which will be key in facilitating an effective gender mainstreaming. A regional comparative analysis on the experiences, challenges and ocean governance prospects of fish mammies would be a valuable way to situate the experience regionally.

REFERENCES

- Acampado, A. G. (2019). Understanding experience: Dewey's philosophy. *International Journal of Educational Research and Studies*, 1(1), 1-6.
- Acker, J. (1992). From Sex Roles to Gendered Institutions. *Contemporary Sociology*, 21(5), 565. <https://doi.org/10.2307/2075528>
- Adjei, J. K., & Sika-Bright, S. (2019). Traditional beliefs and sea fishing in selected coastal communities in the Western Region of Ghana. *Ghana Journal of Geography*, 11(1), 1-19.
- Aheto, D., Asare, N., Quaynor, B., Tenkorang, E., Asare, C., & Okyere, I. (2012). Profitability of Small-Scale Fisheries in Elmina, Ghana. *Sustainability*, 4(11), 2785–2794. <https://doi.org/10.3390/su4112785>
- Ameyaw, A. B., Breckwoldt, A., Reuter, H., & Aheto, D. W. (2020). From fish to cash: Analyzing the role of women in fisheries in the western region of Ghana. *Marine Policy*, 113, 103790. <https://doi.org/10.1016/j.marpol.2019.103790>
- Anarfi, J. K., & Fayorsey, C. K. (1999). Male participants in the 'commercialization' of aspects of the female life cycle in Ghana. *The Continuing HIV/AIDS Epidemic in Africa*, 42-63.
- Anarfi, John K; Fayorsey, Clara K. (n.d.). *Male Protagonists in the "Commercialization" of Aspects of the Female Life-Cycle in Ghana*.
- Ansah, J. W., Oduro, G. Y., & Wilson, D. (2022). Narratives of Non-Compliance in "Tuesday Non-Fishing Day" in Ghana. In R. Boswell, D. O'Kane, & J. Hills (Eds.), *The Palgrave Handbook of Blue Heritage* (pp. 357–382). Springer International Publishing. https://doi.org/10.1007/978-3-030-99347-4_19

- Ashun, P. (2017). *Elmina, The Castles and the Slave Trade*. Cape-Coast, Ghana: Nyakod Printing and Publishing Co. Limited
- Assembly, A. M. (2022). Accra Metropolitan Assembly. *The Assembly LEGAL FRAMEWORK*.
- Babbie, E. R. (2020). *The practice of social research*. Cengage AU.
- Birkeland, J. (2012). *Design for Sustainability: A Sourcebook of Integrated Ecological Solutions*. Taylor and Francis.
- Bose, K. S., & Sarma, R. H. (1975). Delineation of the intimate details of the backbone conformation of pyridine nucleotide coenzymes in aqueous solution. *Biochemical and Biophysical Research Communications*, 66(4), 1173–1179. [https://doi.org/10.1016/0006-291x\(75\)90482-9](https://doi.org/10.1016/0006-291x(75)90482-9)
- Britwum, A. O. (2009). The Gendered Dynamics of Production Relations in Ghanaian Coastal Fishing. *Feminist Africa*, 12, 69–86. <https://www.jstor.org/stable/48725912>
- Butler, J. (1990). *Gender trouble: Feminism and the subversion of identity*. Routledge.
- Butler, J. (2004). *Undoing Gender* (0 ed.). Routledge. <https://doi.org/10.4324/9780203499627>
- Butler, J. P. (2004). *Undoing gender / [ebook]*. Routledge.
- Calhoun, S., Conway, F., & Russell, S. (2016a). Acknowledging the voice of women: Implications for fisheries management and policy. *Marine Policy*, 74, 292–299. <https://doi.org/10.1016/j.marpol.2016.04.033>
- Calhoun, S., Conway, F., & Russell, S. (2016b). Acknowledging the voice of women: Implications for fisheries management and policy. *Marine Policy*, 74, 292–299. <https://doi.org/10.1016/j.marpol.2016.04.033>

- Comas-d'Argemir, D., & Soronellas, M. (2019). Men as Carers in Long-Term Caring: Doing Gender and Doing Kinship. *Journal of Family Issues*, 40(3), 315–339. <https://doi.org/10.1177/0192513X18813185>
- Creswell, J. W., & Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed). SAGE Publications.
- Dasig, S. M. M. (2020). Difficult but fulfilling: Women's lived experiences as leaders in fisherfolk organizations in Bolinao, Philippines. *Gender, Technology and Development*, 24(1), 10–27. <https://doi.org/10.1080/09718524.2020.1728158>
- Dodoo, F. N.-A. (1998). Men matter: Additive and interactive gendered preferences and reproductive behavior in Kenya. *Demography*, 35(2), 229–242. <https://doi.org/10.2307/3004054>
- Eddleston, K. A., & Powell, G. N. (2008). The role of gender identity in explaining sex differences in business owners' career satisfaction preferences. *Journal of Business Venturing*, 23(2), 244–256. <https://doi.org/10.1016/j.jbusvent.2006.11.002>
- Edelstyn, G. A., MacRae, K. D., Bates, T., Kitchen, G., Nicol, N. T., & Spittle, M. (1978). Chemotherapy in breast cancer. *Lancet (London, England)*, 1(8068), 833. [https://doi.org/10.1016/s0140-6736\(78\)93048-9](https://doi.org/10.1016/s0140-6736(78)93048-9)
- Emmel, N., Hughes, K., Greenhalgh, J., & Sales, A. (2007). Accessing Socially Excluded People—Trust and the Gatekeeper in the Researcher-Participant Relationship. *Sociological Research Online*, 12(2), 43–55. <https://doi.org/10.5153/sro.1512>

- Fiaveh, D. Y. (2020). Masculinity, Male Sexual Virility, and Use of Aphrodisiacs in Ghana. *The Journal of Men's Studies*, 28(2), 165–182. <https://doi.org/10.1177/1060826519887510>
- Folke, C., Hahn, T., Olsson, P., & Norberg, J. (2005). ADAPTIVE GOVERNANCE OF SOCIAL-ECOLOGICAL SYSTEMS. *Annual Review of Environment and Resources*, 30(1), 441–473. <https://doi.org/10.1146/annurev.energy.30.050504.144511>
- Fonseca, M., Alves, F., Macedo, M. C., & Azeiteiro, U. M. (2016). O Papel das Mulheres na Pesca Artesanal Marinha: Estudo de uma Comunidade Pesqueira no Município de Rio das Ostras, RJ, Brasil. *Revista de Gestão Costeira Integrada*, 16(2), 231–241. <https://doi.org/10.5894/rgci593>
- Franco-Meléndez, M., Tam, J., van Putten, I., & Cubillos, L. A. (2021). Integrating human and ecological dimensions: The importance of stakeholders' perceptions and participation on the performance of fisheries co-management in Chile. *PLOS ONE*, 16(8), e0254727. <https://doi.org/10.1371/journal.pone.0254727>
- Gedzi, V. S. (2012). Women's property relations after intestate succession PNDC law 111 in Ghana.
- Ghana Statistical Service (GSS). 2010 population and housing census: National analytical report". Accra: GSS; 2013.
- Ghana. Statistical Service. (2013). *2010 population & housing census: National analytical report*. Ghana Statistics Service.

- Gissi, E., Portman, M. E., & Hornidge, A.-K. (2018). Un-gendering the ocean: Why women matter in ocean governance for sustainability. *Marine Policy*, 94, 215–219. <https://doi.org/10.1016/j.marpol.2018.05.020>
- Godwin, L. N., Stevens, C. E., & Brenner, N. L. (2006). Forced to Play by the Rules? Theorizing how Mixed–Sex Founding Teams Benefit Women Entrepreneurs in Male–Dominated Contexts. *Entrepreneurship Theory and Practice*, 30(5), 623–642. <https://doi.org/10.1111/j.1540-6520.2006.00139.x>
- Golo, H. K., & Erinosh, B. (2023). Tackling the challenges confronting women in the Elmina fishing community of Ghana: A human rights framework. *Marine Policy*, 147, 105349. <https://doi.org/10.1016/j.marpol.2022.105349>
- Gopal, N., Hapke, H. M., Kusakabe, K., Rajaratnam, S., & Williams, M. J. (2020). Expanding the horizons for women in fisheries and aquaculture. *Gender, Technology and Development*, 24(1), 1–9. <https://doi.org/10.1080/09718524.2020.1736353>
- Greene, S. & Hill, M. (2005). “Researching children's experience: methods and methodological issues”. In *Researching children's experience*, Edited by: Green, S. and Hogan, D. 1–21. Thousand Oaks, CA: Sage.
- Hammersley, M. (2013). What Is Qualitative Research? London: Bloomsbury Academic
- Hammersley, M., & Atkinson, P. (1995). Insider accounts: Listening and asking questions. *Ethnography: Principles in practice*, 2, 124-156

- Hannes, K., Lockwood, C., & Pearson, A. (2010a). A Comparative Analysis of Three Online Appraisal Instruments' Ability to Assess Validity in Qualitative Research. *Qualitative Health Research*, 20(12), 1736–1743. <https://doi.org/10.1177/1049732310378656>
- Hannes, K., Lockwood, C., & Pearson, A. (2010b). A Comparative Analysis of Three Online Appraisal Instruments' Ability to Assess Validity in Qualitative Research. *Qualitative Health Research*, 20(12), 1736–1743. <https://doi.org/10.1177/1049732310378656>
- Harper, S., Grubb, C., Stiles, M., & Sumaila, U. R. (2017). Contributions by Women to Fisheries Economies: Insights from Five Maritime Countries. *Coastal Management*, 45(2), 91–106. <https://doi.org/10.1080/08920753.2017.1278143>
- Harrell, M.C., Bradley, M.A., 2009. Data collection methods. Semi-structured interviews and focus groups. DTIC Document
- Hinton, J. J., Veiga, M. M., & Beinhoff, C. (2003). *Women and Artisanal Mining: Gender Roles and the Road Ahead*. 52.
- Hirshfield, L. E. (2014). 'She's not good with crying': The effect of gender expectations on graduate students' assessments of their principal investigators. *Gender and Education*, 26(6), 601–617. <https://doi.org/10.1080/09540253.2014.940036>
- Hirshfield, L. E., & Joseph, T. D. (2012). 'We need a woman, we need a black woman': Gender, race, and identity taxation in the academy. *Gender and Education*, 24(2), 213–227. <https://doi.org/10.1080/09540253.2011.606208>

- Huang, H.-W., & You, M.-H. (2013). Public Perception of Ocean Governance and Marine Resources Management in Taiwan. *Coastal Management*, 41(5), 420–438. <https://doi.org/10.1080/08920753.2013.822288>
- Kabeer, N. (2007). Marriage, motherhood and masculinity in the global economy: reconfigurations of personal and economic life.
- Kaelberer, M. (2019). Gender trouble on the German soccer field: Can the growth of women's soccer challenge hegemonic masculinity? *Journal of Gender Studies*, 28(3), 342–352. <https://doi.org/10.1080/09589236.2018.1469973>
- Kawarazuka, N., Locke, C., & Seeley, J. (2019). Women bargaining with patriarchy in coastal Kenya: Contradictions, creative agency and food provisioning. *Gender, Place & Culture*, 26(3), 384–404. <https://doi.org/10.1080/0966369X.2018.1552559>
- Keen, M. R., Schwarz, A.-M., & Wini-Simeon, L. (2018). Towards defining the Blue Economy: Practical lessons from pacific ocean governance. *Marine Policy*, 88, 333–341. <https://doi.org/10.1016/j.marpol.2017.03.002>
- Kutsoati, E., & Morck, R. (2012). Family ties, inheritance rights, and successful poverty alleviation: Evidence from Ghana. Retrieved from <http://www.nber.org/papers/w1808>
- Kuumba, M. B. (2006). African women, resistance cultures and cultural resistances. *Agenda*, 20(68), 112-121.

- Kyei-Gyamfi, S. (2023). 'Where there is fish, is where I put my head': Challenges of mobile fishers in Elmina fishing community in Ghana. *Singapore Journal of Tropical Geography*, 44(3), 459–478. <https://doi.org/10.1111/sjtg.12499>
- Lata, L. N. (2020). Negotiating gatekeepers and positionality in building trust for accessing the urban poor in the Global South. *Qualitative Research Journal*, 21(1), 76–86. <https://doi.org/10.1108/QRJ-03-2020-0017>
- Lawson, R. M. & Kwei, E. A. (1974), African Entrepreneurship and Economic Growth: A case study of the fishing industry of Ghana, Ghana Universities Press
- Lester, J. (2008). Performing Gender in the Workplace: Gender Socialization, Power, and Identity Among Women Faculty Members. *Community College Review*, 35(4), 277–305. <https://doi.org/10.1177/0091552108314756>
- Lewis, D. (2002). African Feminist Studies: 1980-2002. *Gender and Women's Studies Africa*.
- Lloret, J., Cowx, I. G., Cabral, H., Castro, M., Font, T., Gonçalves, J. M. S., Gordo, A., Hoefnagel, E., Matić-Skoko, S., Mikkelsen, E., Morales-Nin, B., Moutopoulos, D. K., Muñoz, M., Dos Santos, M. N., Pintassilgo, P., Pita, C., Stergiou, K. I., Ünal, V., Veiga, P., & Erzini, K. (2018). Small-scale coastal fisheries in European Seas are not what they were: Ecological, social and economic changes. *Marine Policy*, 98, 176–186. <https://doi.org/10.1016/j.marpol.2016.11.007>
- Mack, N., & Woodsong, C. (2005). *Qualitative research methods: A data collector's field guide*. FLI USAID.

Macrae, J. (1975). "Meningitis by the score." *The Practitioner*, 215(1289), 641–643.

Makar, A. B., McMartin, K. E., Palese, M., & Tephly, T. R. (1975). Formate assay in body fluids: Application in methanol poisoning. *Biochemical Medicine*, 13(2), 117–126. [https://doi.org/10.1016/0006-2944\(75\)90147-7](https://doi.org/10.1016/0006-2944(75)90147-7)

Malhotra, N., & Birks, D. (2007). *Instructor's Manual*. Pearson Education.

Mallozzi, C. A. (2009). Voicing the Interview: A Researcher's Exploration on a Platform of Empathy. *Qualitative Inquiry*, 15(6), 1042–1060. <https://doi.org/10.1177/1077800409334227>

Manuh, T. (2007). The passage of domestic violence legislation in Ghana. Retrieved from <http://r4d.dfid.gov.uk/PDF/Outputs/WomenEmp/GhanaDV.pdf>

Matsue, N., Daw, T., & Garrett, L. (2014). Women Fish Traders on the Kenyan Coast: Livelihoods, Bargaining Power, and Participation in Management. *Coastal Management*, 42(6), 531–554. <https://doi.org/10.1080/08920753.2014.964819>

McBurney, D.H & White, T.L. 2007. International Student Edition. Research Methods. (7th edition). Canada: Thomson Wadsworth.

Méndez, A. (2012). Militarized gender performativity: Women and demobilization in Colombia's FARC and AUC. Order No. NS27941, Queen's University (Canada)). *ProQuest Dissertations and Theses*, 288.

- Mensah I. (2010). An analysis of the performance of Ghanaian canned tuna export to EU market (1999-2009). Master's Degree Thesis in International Fisheries Management. Norwegian College of Fisheries Science, University of Tromso, Norway. 56p.
- Mensah, K. O., & Fitzgibbon, J. (2013a). Duolocal residence and gender relations in urban domestic water supply: Understanding the Ga in contemporary Ghana. *Canadian Journal of African Studies / Revue Canadienne Des Études Africaines*, 47(3), 501–518. <https://doi.org/10.1080/00083968.2013.865540>
- Mensah, K. O., & Fitzgibbon, J. (2013b). Duolocal residence and gender relations in urban domestic water supply: Understanding the Ga in contemporary Ghana. *Canadian Journal of African Studies / Revue Canadienne Des Études Africaines*, 47(3), 501–518. <https://doi.org/10.1080/00083968.2013.865540>
- Merton, R. K. (1957). The Role-Set: Problems in Sociological Theory. *The British Journal of Sociology*, 8(2), 106. <https://doi.org/10.2307/587363>
- Mies, M. & Shiva, V. (1994). *Ecofeminism*. Jaipur and New Delhi: Rawat Publications
- Mies, M., & Shiva, V. (1993). 19. People or population: towards a new ecology of reproduction. *Bloomsbury Collections*, 19, 277-296.
- Mies, M., & Shiva, V. (1993). *Ecofeminism*. Fernwood Publications ; Zed Books.
- Ministry of Fisheries and Aquaculture Development (MoFAD). (2013). 2013 Annual report (p. 78). Accra: Author

- Ministry of Fisheries and Aquaculture Development (MoFAD). (2015). 2014 Annual report (p. 63). Accra: Author
- Ministry of Fisheries and Aquaculture Development (MoFAD). (2018). 2018 Annual report (p. 78). Accra: Author
- Narag, R., & Maxwell, S. R. (2014). Understanding cultural context when collecting field data: Lessons learned from field research in a slum area in the Philippines. *Qualitative Research*, 14(3), 311–326. <https://doi.org/10.1177/1468794112473496>
- Nelson, L. (1999). Bodies (and Spaces) do Matter: The limits of performativity. *Gender, Place & Culture*, 6(4), 331–353. <https://doi.org/10.1080/09663699924926>
- Neuman, W.L. (2009). Social research methods: Qualitative and quantitative approaches(7th ed.). Boston, MA: Pearson/Allyn & Bacon.
- Ninsin, K. A. (1991). Economic modernisation and social change: Evidence from Mumford, a Ghanaian fishing village. *Africa*, 61(1), 98–116. <https://doi.org/10.2307/1160271>
- Nkealah, N. (2022a). Being Human in a Time of Catastrophe: African Feminism, Feminist Humaneness, and the Poetry of Joyce Ash. *Journal of Literary Studies*, 38(1). <https://doi.org/10.25159/1753-5387/10416>
- Nkealah, N. (2022b). Being Human in a Time of Catastrophe: African Feminism, Feminist Humaneness, and the Poetry of Joyce Ash. *Journal of Literary Studies*, 38(1). <https://doi.org/10.25159/1753-5387/10416>

- Nukunya, G. K. (2016). Tradition and change in Ghana: An introduction to sociology (Revised). Accra: Woeli Publishing Services.
- Nunoo, F. K. E. ., Asiedu, B., Olauson, J., & Intsiful, G. (2015). Achieving sustainable fisheries management: A critical look at traditional fisheries management in the marine artisanal fisheries of Ghana, West Africa. *Journal of Energy and Natural Resource Management*, 2(1). <https://doi.org/10.26796/jenrm.v2i1.67>
- Odotei, I. (1999). Gender and traditional authority in the artisanal marine fishing industry in Ghana. *Institute of African Studies Research Review*, 15(1), 15-38.
- Odotei, I. (1999). Gender and traditional authority in the artisanal marine fishing industry in Ghana. *Institute of African Studies Research Review*, 15(1), 15-38.
- Ogden, L. E. (2017). Fisherwomen—The Uncounted Dimension in Fisheries Management: Shedding light on the invisible gender. *BioScience*, biw165. <https://doi.org/10.1093/biosci/biw165>
- Okusu, J. S. (2020). *Co-management and Traditional Fisheries: The Case of Fante Fishers in Elmina, Ghana* (Master's thesis, UiT Norges arktiske universitet).
- Olaoye, O. J, W. G. Ojebiyi, T. O. Olalekan, S. A. Abdulsalami, & I. A. Opele. (2019). Contribution Of Women Fish Merchants In Artisanal Fisheries Development In Ogun Waterside Local Government Area, Ogun State. *Nigerian Journal of Fisheries*, 16(2), 1729–1736.

- Onumah, E. E., & Essilfie, F. L. (2020). Regional Analysis of Fish Farms in Ghana: A Stochastic MetaFrontier Approach. *Aquaculture Studies*, 20(2), 99–111. https://doi.org/10.4194/2618-6381-v20_2_04
- Oppong, C. (2001). A note on matriliney and marriage in Accra. *Journal of Asian and African Studies*, 7, 211-218.
- Oppong, Christine. (1978). MODERNISATION AND ASPECTS OF FAMILY CHANGE IN GHANA: with particular reference to the effects of work. In *Aspen Institute/Iran workshop on Modernization and Cultural Change: The Family May*.
- Overa, R. (1993). Wives and traders: Women's careers in Ghanaian canoe fisheries. *MAST. Maritime Anthropological Studies*, 9, 110–135.
- Overå, R. (1998). *Partners and competitors. Gendered entrepreneurship in Ghanaian canoe fisheries*. The University of Bergen.
- Overa, R. (2003). Gender ideology and manoeuvring space for female fisheries entrepreneurs. *Institute of African Studies Research Review*, 19(2), 49-62.
- Overå, R. (2011). Modernisation Narratives and Small-Scale Fisheries in Ghana and Zambia. *Forum for Development Studies*, 38(3), 321–343. <https://doi.org/10.1080/08039410.2011.596569>
- Owusu, M. A., & Bosiwah, L. (2015). Constructions of masculinity among the Akan people of Ghana.
- Parker-Jenkins, M. (2018). Problematising ethnography and case study: Reflections on using ethnographic techniques and researcher positioning. *Ethnography and Education*, 13(1), 18–33. <https://doi.org/10.1080/17457823.2016.1253028>

- Presser, L. (2016). Criminology and the narrative turn. *Crime, Media, Culture: An International Journal*, 12(2), 137–151. <https://doi.org/10.1177/1741659015626203>
- Prokos, A., & Padavic, I. (2002). ‘There Oughtta Be a Law Against Bitches’: Masculinity Lessons in Police Academy Training. *Gender, Work & Organization*, 9(4), 439–459. <https://doi.org/10.1111/1468-0432.00168>
- Pyc, D. (2016a). Global Ocean Governance. *TransNav, the International Journal on Marine Navigation and Safety of Sea Transportation*, 10(1), 159–162. <https://doi.org/10.12716/1001.10.01.18>
- Pyc, D. (2016b). Global Ocean Governance. *TransNav, the International Journal on Marine Navigation and Safety of Sea Transportation*, 10(1), 159–162. <https://doi.org/10.12716/1001.10.01.18>
- Riessman, C. K. (2003). Analysis of personal narratives. *Inside interviewing: New lenses, new concerns*, 331-346.
- Ritzer, G., & Stepnisky, J. N. (2018). *Sociological Theory*. 1124.
- Rubinoff, J. A. (1999). Fishing for status. *Women’s Studies International Forum*, 22(6), 631–644. [https://doi.org/10.1016/S0277-5395\(99\)00073-4](https://doi.org/10.1016/S0277-5395(99)00073-4)
- Rubinoff, L. (2000). 7. Capitalism, Ethics, and Ecology: The Tyranny of the Corporate Agenda. In J. D. Bishop (Ed.), *Ethics and Capitalism*. University of Toronto Press. <https://doi.org/10.3138/9781442674660-009>
- Salifu, J. (2020a). Kinship and gendered economic conduct in matrilineal Offinso, Ghana. *Africa*, 90(4), 683–700. <https://doi.org/10.1017/S0001972020000273>

- Salifu, J. (2020b). Kinship and gendered economic conduct in matrilineal Offinso, Ghana. *Africa*, 90(4), 683–700. <https://doi.org/10.1017/S0001972020000273>
- Sandberg, S., & Fleetwood, J. (2017). Street talk and Bourdieusian criminology: Bringing narrative to field theory. *Criminology & Criminal Justice*, 17(4), 365–381. <https://doi.org/10.1177/1748895816672909>
- Sapsford, R., & Jupp, V. (Eds.). (1996). *Data collection and analysis*. Sage in association with Open University.
- Sedziafa, A. P., Tenkorang, E. Y., & Owusu, A. Y. (2018). Kinship and Intimate Partner Violence Against Married Women in Ghana: A Qualitative Exploration. *Journal of Interpersonal Violence*, 33(14), 2197–2224. <https://doi.org/10.1177/0886260515624213>
- Shelley, T. O., Morabito, M. S., & Tobin-Gurley, J. (2011). Gendered institutions and gender roles: Understanding the experiences of women in policing. *Criminal Justice Studies*, 24(4), 351–367. <https://doi.org/10.1080/1478601X.2011.625698>
- Sobang, N. B. (2014). *Access to fishing grounds and adaptive strategies. The case of Chorkor and Nungua Fishing Communities of Greater Accra, Ghana* (Master's thesis, UiT The Arctic University of Norway).
- Songsore, J., McGranahan, G., & Kjellen, M. (2004). Tenure, housing and environmental management among families in the Greater Accra Metropolitan Area (GAMA) of Ghana. *Institute of African Studies Research Review*, 2004(sup-5), 69-83.

- Sparks, R. (1996) 'Penal "Austerity": The Doctrine of Less Eligibility Reborn?', in: R. Matthews and P. Francis (eds.) *Prisons 2000: An International Perspective on the Current State and Future of Imprisonment*, Basingstoke: Macmillan.
- Sparks, R., Bottoms, A. E., & Hay, W. (1996). *Prisons and the problem of order*. Clarendon Press.
- Steady, F. C. (1987). African feminism: A worldwide perspective. *Women in Africa and the African diaspora*, 3-24.
- Stepnisky, J., & George Ritzer. (2018). Sociological Theory. In J. M. Ryan (Ed.), *Core Concepts in Sociology* (1st ed., pp. 295–301). Wiley.
<https://doi.org/10.1002/9781394260331.ch81>
- Swain, J., & King, B. (2022). Using Informal Conversations in Qualitative Research. *International Journal of Qualitative Methods*, 21, 160940692210850. <https://doi.org/10.1177/16094069221085056>
- Swett, C. (1975). Outpatient phenothiazine use and bone marrow depression. A report from the drug epidemiology unit and the Boston collaborative drug surveillance program. *Archives of General Psychiatry*, 32(11), 1416–1418. <https://doi.org/10.1001/archpsyc.1975.01760290084010>
- Takyi, B. K., & Doodoo, F. N.-A. (2005). Gender, lineage, and fertility-related outcomes in Ghana. *Journal of Marriage and Family*, 67, 251-257.
- Taylor SJ, Bogdan R. Working with data. Data analysis in qualitative research.
- Tenkorang, Forde, & Nyarko-Sampson. (2020). Academic and Personal-Social Adjustment Challenges of University of Cape Coast Freshmen. *Journal of Education and Practice*. <https://doi.org/10.7176/JEP/11-18-07>

- Tetteh, A. S. (2007). *Women's activities in the Ghanaian fishery; The role of social capital* (Master's thesis, Universitetet i Tromsø).
- Tight, M. (2010). The curious case of case study: A viewpoint. *International Journal of Social Research Methodology*, 13(4), 329–339. <https://doi.org/10.1080/13645570903187181>
- Tolich, M. (2016). *Qualitative ethics in practice*. Routledge.
- Torell, E., Bilecki, D., Owusu, A., Crawford, B., Beran, K., & Kent, K. (2019). Assessing the Impacts of Gender Integration in Ghana's Fisheries Sector. *Coastal Management*, 47(6), 507–526. <https://doi.org/10.1080/08920753.2019.1669098>
- Tuffour, I. (2017). A Critical Overview of Interpretative Phenomenological Analysis: A Contemporary Qualitative Research Approach. *Journal of Healthcare Communications*, 02(04). <https://doi.org/10.4172/2472-1654.100093>
- Udofia, E. A., Yawson, A. E., Aduful, K. A., & Bwambale, F. M. (2014). Residential characteristics as correlates of occupants' health in the greater Accra region, Ghana. *BMC Public Health*, 14(1), 244. <https://doi.org/10.1186/1471-2458-14-244>
- Underman, K., & Hirshfield, L. E. (2016). Detached concern?: Emotional socialization in twenty-first century medical education. *Social Science & Medicine*, 160, 94–101. <https://doi.org/10.1016/j.socscimed.2016.05.027>
- Uzun, K., & Aydin, C. H. (2012). The Use of Virtual Ethnography in Distance Education Research. *Turkish Online Journal of Distance Education*, 13(2), 212-225.

- Walker, B. L. E. (2001). Sisterhood and Seine-Nets: Engendering Development and Conservation in Ghana's Marine Fishery. *The Professional Geographer*, 53(2), 160–177. <https://doi.org/10.1111/0033-0124.00277>
- Walker, B. L. E. (2002). Engendering Ghana's Seascape: Fanti Fishtraders and Marine Property in Colonial History. *Society & Natural Resources*, 15(5), 389–407. <https://doi.org/10.1080/08941920252866765>
- Weeratunge, N., Snyder, K. A., & Sze, C. P. (2010). Gleaner, fisher, trader, processor: Understanding gendered employment in fisheries and aquaculture. *Fish and Fisheries*, 11(4), 405–420. <https://doi.org/10.1111/j.1467-2979.2010.00368.x>
- Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed). Sage Publications.
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (Sixth edition). SAGE.
- Zhao, M., Tyzack, M., Anderson, R., & Onoakpovike, E. (2013). Women as visible and invisible workers in fisheries: A case study of Northern England. *Marine Policy*, 37, 69–76. <https://doi.org/10.1016/j.marpol.2012.04.013>

APPENDICES

APPENDIX I

UNIVERSITY OF CAPE COAST

COLLEGE OF HUMANITIES AND LEGAL STUDIES

FACULTY OF SOCIAL SCIENCES

DEPARTMENT OF SOCIOLOGY AND ANTHROPOLOGY

M.Phil. SOCIOLOGY

INTERVIEW GUIDE

Introduction

Good morning/afternoon/evening. I'm a 2nd year Sociology M.Phil. student of University of Cape Coast conducting a survey as part of my theses on the topic: *“Fish Mammies in Artisanal Fisheries in Coastal Ghana: Challenges and Prospects”*. I would greatly appreciate your help in responding to some questions for about an hour. I believe your answers will help provide useful insights on the experiences of fish mammies in coastal communities in terms of the challenges and the prospects they face in artisanal fisheries. I will do about 45 minutes to an hour interview that will be recorded both on paper and on phone. I assure you that any information given will be treated as strictly confidential and would be for academic purposes. Are you willing to participate?

SECTION A- Background Characteristics

1. Could you please tell me something about yourself? (Prompt: I would like to know your age, level of education, marital status, religion, ethnicity, occupation, place of birth).

SECTION B- Present Job and Fish Mammy Career

1. Could you describe for me your current work in the fisheries?

- Who is a fish mammy? For how long have women occupied this position in the fishing industry? (Probe: what type of prerequisite must a woman meet to be able to become a canoe/fishing net/outboard motor owner)
- Tell me a bit of your experiences growing up?
- How did your socialization prepare you for your current job (and position as a fish mummy)?
- Could you take me through your career in the fisheries, leading to your current job as a canoe owner/fishing net/outboard motor?
- How long have you been a canoe owner/fishing net/outboard motor?
- In what way(s) is the canoe ownership business profitable? (probe)
 - (i) Do you get a sense of achievement from your work?
 - (ii) Can you give me example(s) of what you have achieved?
- How has been a canoe owner shape you as a person? (probe)
 - (i) Can you draw a parallel with other women in the sector, in terms of your social status? (Probe: in what ways do you feel that you are treated differently)
 - (ii) How can you characterize women who own canoe/fishing net/outboard motor as an occupational group, if you were describing them to an outside body?

SECTION C- Activities of a Fish Mammy/ Gender Issues and Fish Mammies

1. What do you see as the main role of women in the artisanal fisheries?
 - How is this role helping the industry?
2. What do you see as the main role of a woman canoe/fishing net/outboard motor owner?
 - How does your community perceive women canoe owners (by men, by women, any policies or protection mechanism for such women)?
 - Is there any right way to be a woman canoe owner/fish mammy? (probe)
 - Between male and female canoe owners – who is preferred and why?
 - (i) Do you feel that gender expectations are different for you compared to male owners? In what ways? (Probe on how they assess their effectiveness as a canoe/fishing net/outboard motor owner)
 - (ii) In what ways do you feel you are treated differently by your peers and crew members of your canoe because of your gender?
 - (iii) How have your experiences as a canoe/fishing net/outboard motor owner changed the way you see and understand yourself as a woman? (Probe)
 - Do you feel your gender expectations are different now that you are canoe owner?

- Do you feel you have to meet or exceed the standards set by your male peers in terms of responsibilities?
- What are the most difficult things of being a female canoe/fishing net/outboard motor owner?
- How powerful are fishermen as a group? (Probe: in what instances do they oppose to something you wanted to do?)
 - (i) What about fishermen acceding to something you wanted to do? (Probe: the system you use to communicate with and briefing your fishermen about your views and beliefs?)

SECTION D- Challenges faced by Fish Mammies

1. What are some of the reasons that made you become a canoe/fishing net/outboard motor owner?
 - What problems have you faced as a canoe/fishing net/outboard motor owner? (Probe: which of the problems still recur? In what ways do you feel your gender pose a challenge to you?)
 - Have you thought seriously about quitting this work, at any time? If Yes: When and why?
 - In what ways have you personally addressed the challenges you have faced?
 - Who provides support for you in your work? (Probe: Inside/outside of work)
 - Do you see increase in number of your female peers becoming a canoe/fishing net/outboard motor owner? (Probe: on the conditions and how it will change the male discourse in the sector)
 - Suggestions for fish mammies and how to get more women into this fold.

APPENDIX II

Socio-Demographic Characteristics of Informal Conversant

P#	Pseudonym	Gender	Ethnicity	Occupation
1	Coach	Male	Fanti	Fisherman
2	Badu	Male	Fanti	Fisherman
3	Uncle Kwame	Male	Fanti	Canoe owner
4	TT	Male	Ga	Canoe owner
5	Lamptey	Male	Ga	Fisherman
6	Borketey	Male	Ga	Fisherman
7	Adotsoo	Female	Ga	Fish processor
8	Dede	Female	Ga	Fish processor
9	Efua	Female	Fanti	Fish processor
10	Aba	Female	Fanti	Fish processor

Source: Fieldwork, 2022.