



NATIONAL DEFENCE UNIVERSITY-KENYA

**STAKEHOLDER PARTICIPATION AND IMPLICATIONS ON
SUSTAINABLE BLUE ECONOMY DEVELOPMENT: CASE STUDY OF
SMALL-SCALE FISHERS IN THE COASTAL REGION OF KENYA**

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DECLARATION

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This Thesis is my original work and has not been presented for a degree award in any other University.

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DEDICATION

This work is dedicated to my family for their encouragement and patience during my long absence during my studies.

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LIST OF ABBREVIATIONS

BMUs	Beach Management Units
IUU	Illegal, Unreported and Unregulated Fishing
KI	Key Informant
MPA	Marine Protected Areas
NACOSTI	National Commission for Science, Technology and Innovation
NDC-K	National Defence College Kenya
NDU-K	National Defence University - Kenya
NGOs	Non-Governmental Organisations
NOAA	National Oceanic and Atmospheric Administration
SDS	Senior Directing Staff
SNT	Social Network Theory
SSF	Small-Scale Fishers

DEFINITION OF CONCEPTS

Beach Management Unit. Refers to designated zones or areas along a coastline that are managed and governed as distinct entities in sustaining and effectively managing resources in the beach (Smith, 2023). In this paper it refers to fisher organizations of fishing crews, boat owners, fish traders, fishing gears dealers and boat & net repairers established at the fish landing stations.

Challenges. Refers obstacles, constraints, and limitations that hinder effective stakeholder participation in marine resource management and sustainable Blue Economy development efforts (Beaumont *et al.*, 2021).

Ecological Effects. Refers to the effects of stakeholder actions and practices on the marine environment, including changes in biodiversity, habitat quality, and ecosystem resilience (Jones *et al.*, 2018).

Opportunities. Refers to favourable conditions, possibilities, and positive aspects that can be leveraged to enhance stakeholder participation in marine resource management and contribute to successful sustainable Blue Economy development initiatives (Bailey *et al.*, 2020).

Small-Scale Fishers. Refers to individuals or communities directly engaged in fishing activities along Kenya's coastal region. They are vital stakeholders depending on resources in the marine ecosystem for a living and significantly influence shaping sustainable use alongside conservation of these resources (Bene *et al.*, 2019).

Socio-Economic Effects. Refers to the consequences of stakeholder participation on the livelihoods, income generation, social networks, and overall well-being of Small-Scale Fishers and persons living in the coast (Campbell *et al.*, 2021).

Stakeholder Participation. Refers to the active engagement and involvement of individuals, local people living in a certain geographical area, government bodies, non-governmental organizations, and other relevant entities in decision-making processes, policy formulation, and practices related to marine resource management and sustainable Blue Economy development (Pomeroy & Douvere, 2008).

Sustainable Blue Economy Development. Refers to the holistic and balanced utilization of marine resources, focusing on economic growth, environmental conservation, and social well-being. It involves practices that ensure the long-term viability of marine ecosystems, equitable distribution of benefits, and the preservation of cultural and traditional values associated with coastal communities (World Bank, 2017).

ABSTRACT

The study sought to examine the role of Small-Scale Fishers' (SSF) participation in the Blue Economy development in the Coastal Region of Kenya. Blue Economy, a global framework for sustainable marine resource utilization, places coastal regions at the forefront of economic development and conservation. The specific objectives were to assess the extent of stakeholder engagement in Kenyan Blue Economy development, to analyse the socio-economic and ecological effects of stakeholder participation and to evaluate the challenges and opportunities for stakeholder participation with reference to SSF in the coastal region of Kenya. The study utilised the Institutionalism Theory by March and Olsen (1984), to explain stakeholder participation in marine resource management. The study used descriptive survey research design to examine stakeholder participation for sustainable Blue Economy development in Kenya's coastal region. A mix of qualitative and quantitative data collection approaches was adopted that had a sample size of 133. Data was analysed both qualitatively and quantitatively. The study rigorously adhered to ethical principles, including obtaining necessary approvals, securing informed consent, safeguarding participant confidentiality, and respecting cultural sensitivities to protect participant rights and well-being. The study findings revealed that, effective stakeholder engagement is necessary for sustainable development of the blue economy. While there have been efforts to involve local fishers in processes of decision-making and blue economy initiatives, there are still challenges to overcome, including limited resources, institutional barriers, and power imbalances. Inferential statistics revealed significant correlations between perception of sustainable Blue Economy development in Kenya and level of stakeholder engagement ($r=0.503$, $p<0.01$), socio-economic/ecological effects of stakeholder participation ($r=0.974$, $p<0.01$), and challenges/opportunities for effective involvement ($r=0.194$, $p<0.05$). Regression analysis confirmed these variables' strong predictive power ($R^2=0.951$). However, there are also opportunities to strengthen stakeholder participation through capacity-building, inclusive policies, and collaboration among diverse stakeholders. By addressing these challenges and harnessing opportunities, Kenya can promote a more inclusive and sustainable blue economy development that benefits SSF and preserves marine ecosystems for future generations. In this regard, the study recommends that, the need to establish community engagement platforms such as regular meetings, workshops, and forums where small-scale fishers can actively engage in public awareness processes related to blue economy development initiatives. The government should implement capacity-building programs tailored for specific needs of local fishers. The policy makers should ensure that policies and regulations governing the blue economy consider the interests and perspectives of SSF to enhance stakeholder participation and sustainable Blue Economy development, further the study recommends fostering collaboration between SSF and government, building SSF capacity, strengthening market linkages, and promoting community-based resource management.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

In this chapter, the following areas are covered: research background, research problem, objectives, study questions, research's significance, justification, assumptions, alongside research scope and limitation. The research focused on understanding stakeholder participation and its implication on Kenya's Blue Economy development, particularly among small-scale fishers through an assessment of stakeholder engagement, analysis of its socio-economic and ecological effects, and an evaluation of related challenges and opportunities.

1.1 Background to the Study

Blue Economy concept has emerged as a pivotal technique for harnessing marine resources sustainably, aligning economic growth with environmental conservation on a global scale. In the words of the World Bank (2017), Blue Economy encompasses "sustained utilization of ocean resources, with an aim to grow economically and enhance standards of living of the local people. In addition, it entails creating jobs and at the same time maintaining ecosystem health of the ocean". This holistic framework acknowledges the interconnectedness of economic activities with marine ecosystems state of health, emphasizing need for a balanced and responsible utilization of marine resources speaks to individual and environmental security.

Coastal regions, integral to this framework, require active engagement of local stakeholders to ensure effective and sustainable Blue Economy development. According to Ebarvia (2016) these fishers rely significantly on marine resources for their livelihoods, emphasizing the need to comprehend their perspectives, challenges, and requirements. This research probes the intricate interactions between these stakeholders, their engagement with regulatory

frameworks, and their contributions to sectors like fisheries, tourism and environmental conservations.

Sustainable Blue Economy development encompasses a holistic approach to harnessing marine resources for economic growth while ensuring environmental conservation and social well-being. With an emphasis on ecosystem health and equitable benefits, it integrates industries like fishing, tourism, shipping, and renewable energy, not forgetting the necessary conducive environment relating to safety and security. As such, 2030 blue-print for Sustainable Development (United Nations) charter, which seeks to leverage economic growth with marine ecosystems preservation, is in line with this idea. Blue Economy's potential is to promote new inventions, job growth, and food security, particularly for coastal communities (United Nations, 2017). However, in order to reduce potential ecological and social risks, effective governance, stakeholder involvement, and cross-sectoral cooperation are required (Voyer *et al.*, 2018). Due to the relevance of the Blue Economy, its development has gained traction the world over.

Numerous countries across the world have recognized the importance of stakeholder involvement in sustainable Blue Economy development and marine resource management. For America, initiatives such as the National Ocean Policy as well as Magnuson-Stevens Fishery Conservation and Management Act emphasize the significance of collaboration among government agencies, fishing communities, and environmental organizations to ensure sustainable fisheries and marine ecosystems while also fostering economic growth (Winder & Le Heron, 2017). In the Gulf of Mexico Schuurman *et al.* (2022) studied stakeholder participation and noted that it is a vital element in numerous environmental and natural resource management strategies, exemplified by ecosystem-based management approach.

Likewise, the United Kingdom has taken proactive measures in fostering sustainable Blue Economy growth through the creation of Marine Conservation Zones. According to Stephenson *et al.* (2019), these zones serve as designated areas where stakeholder engagement strategies are employed to ensure the responsible utilization of marine resources, safeguard vulnerable species, and maintain the overall health of marine environments, while considering economic implications.

In France, a distinct emphasis has been placed on incorporating participatory approaches within its marine spatial planning as part of the Blue Economy framework (Spalding, 2016). By doing so, France seeks to harmonize the often-competing interests connected with developing economically alongside conserving the environment. This approach acknowledges importance of involving stakeholders from various sectors in decision-making processes, thus leveraging between economic growth and maintaining marine ecosystems in the context of the Blue Economy.

The collective efforts undertaken by these nations exemplify a global movement towards acknowledging and prioritizing stakeholder involvement as a cornerstone of sustainable marine resource management and Blue Economy development. These strategies not only facilitate the alignment of diverse interests but also ensure marine ecosystem longevity together with the well-being of communities depending on them, while contributing to economic growth and prosperity (Roberts & Ali, 2016). As more countries recognize the value of collaboration, inclusivity, and the integration of economic considerations, the shared goal of achieving effective and sustainable Blue Economy development becomes an integral aspect of global marine resource management and economic planning.

In Southeast Asia, Indonesia has established community-based marine resource management systems, integrating traditional knowledge (indigenous wisdom) and modern science to

promote sustainable fishing practices within the context of Blue Economy development. Meanwhile, China's engagement with stakeholders in its coastal regions has evolved to address overfishing and habitat degradation, emphasizing collaborative governance to support both ecological and economic goals. On the other hand, Japan has implemented co-management systems involving local SSF and government agencies in looking after marine resources. This is in a manner which aligns in Blue Economy's principles (Stanford *et al.*, 2013). This amalgamation wishes to cultivate fishing methods which are sustainable, ensuring preservation of ecosystems in the marine environment. This is alongside enhancing the daily lives of local communities, thus contributing to sustainable Blue Economy development.

China, recognizing the urgency of addressing overfishing and habitat degradation, has embarked on a transformative journey of stakeholder engagement along its coastlines (Ding *et al.*, 2017). This evolving approach emphasizes collaborative governance, where diverse stakeholders are brought together to collectively devise strategies that safeguard marine resources while supporting both economic plus social interests, aligning with Blue Economy's principles.

In Japan, co-management systems have taken root, illustrating a proactive endeavour to balance resource utilization and conservation within the context of the Blue Economy development (Pauly, 2018). By actively involving both local SSF and governmental entities, Japan aims to harness a comprehensive spectrum of expertise and interests, ultimately contributing to the sustainable management of its marine resources.

These Southeast Asian nations exhibit a growing commitment to collaborative marine governance. This is within Blue Economy structure of development, showcasing multifaceted advantages of involving stakeholders across the spectrum (Keen & Wini-Simeon, 2018). By integrating traditional knowledge, modern scientific insights, and inclusive decision-making,

these countries endeavour to navigate the complex landscape of marine wealth management. This is while ascertaining viability in the long run of their marine ecosystems and the well-being of their communities.

Across the African continent, a growing realization of the pivotal role that stakeholder engagement plays in effective marine policies, economic planning, and resource management has taken root in nations such as Nigeria, Ghana, Namibia, and South Africa. This is all within Blue Economy development setting. These countries have made significant strides in acknowledging the multifaceted benefits of involving diverse stakeholders in shaping their marine strategies and practices to promote both ecological sustainability and economic growth. Nigeria, for instance, has enshrined stakeholder involvement at the core of its marine governance framework through the Fisheries Act (NIOMR, 2020). This legislative framework mandates the establishment of fisheries management organizations that deliberately incorporate local communities into decision-making processes, thus nurturing a collaborative approach to resource management that aligns with the principles of the Blue Economy development.

In a similar vein, Ghana's Fisheries Act (Amevenku, Asravor & Kuwornu, 2019) emphasizes the significance of community involvement through managing resource in the Blue Economy development setting. By actively involving local communities in decision-making, Ghana seeks to harmonize conservation objectives with the socio-economic aspirations of its coastal inhabitants.

Namibia stands as a testament to the integration of community-based natural resource management programs that encompass marine resources within the framework of the Blue Economy development. These initiatives signify an acknowledgement of the invaluable insights and stewardship that local communities can contribute to safeguarding the marine

environment and ensuring its sustainable use (Ngwawi, 2018). Meanwhile, South Africa has demonstrated a resolute commitment to stakeholder engagement through its Marine Living Resources Act. This legislation underscores the necessity of involving stakeholders to attain sustainable fisheries and economic growth, reflecting a comprehensive approach to marine resource management and the Blue Economy development.

Collectively, these African nations exemplify an emerging trend in marine governance and economic planning, one that is rooted in recognizing the indispensable role of stakeholders in shaping policies and practices within the context of the Blue Economy development. By embracing inclusive approaches that empower local communities and diverse interests, these countries endeavor to forge a path toward a harmonious coexistence between human activities, economic development, and marine ecosystems, promoting sustainability and economic prosperity for generations to come.

In the Eastern African region, the significance of stakeholder participation in marine resource management and economic planning has been acknowledged by Eritrea and Tanzania, signifying a shared commitment to sustainable practices within the framework of the Blue Economy development (Ngwawi, 2018). Eritrea's Fisheries Proclamation stands as a testament to this ethos, explicitly pointing out the vital duty that the grassroots communities and stakeholders play in responsible management of marine resources.

Similarly, Tanzania has demonstrated a proactive stance through the “enactment of Marine Parks and Reserves Act” (Masalu, 2000). This legislation highlights the crucial role of community engagement in conserving and utilizing in a sustainable manner of marine wealth, aligning with the objectives of Blue Economy development (Ngwawi, 2018). By actively engaging local individuals in processes of decision making concerning marine ecosystems,

Tanzania seeks to foster a sense of stewardship while ensuring the preservation of marine biodiversity and promoting economic growth.

The concerted efforts of Eritrea and Tanzania echo a broader trend in East Africa, where countries are harnessing the power of collaboration and inclusive governance to safeguard their marine environments and promote economic growth (Ngwawi, 2018). By recognizing the crucial role that stakeholders, including local communities, play in resource management and economic planning, these nations are paving the way for a harmonious coexistence between human activities, economic development, and the fragile marine ecosystems upon which they depend.

The Blue Economy, encompassing a vast array of economic activities related to oceans, seas, coasts, and marine resources, has emerged as a critical development frontier (World Bank, 2019). Central to its success is the effective participation of diverse stakeholders, including SSFs who are often at the heart of coastal communities. In Kenya, counties such as Tana River and Taita Taveta, heavily reliant on marine and coastal resources, offer valuable case studies to explore the nexus between stakeholder participation and sustainable Blue Economy development.

SSFs in these regions have traditionally played a pivotal role in food security, livelihoods, and cultural heritage. However, they have often been marginalized in decision-making processes related to resource management and policy formulation (Ochieng *et al.*, 2019). Consequently, their livelihoods have increasingly been threatened by overfishing, habitat degradation, and climate change. Recognizing the importance of their involvement, scholars and policymakers have emphasized the need for inclusive governance approaches that empower fishers to participate meaningfully in shaping the Blue Economy (FAO, 2018).

The Blue Economy, with its promise of sustainable economic growth and improved livelihoods, has garnered significant attention globally (World Bank, 2019). In the context of Kenya's coastal region, characterized by its rich biodiversity and economic potential, understanding the interplay between stakeholders is crucial for effective Blue Economy development and management. SSFs, as primary users of marine resources, are key stakeholders whose perspectives and needs must be integrated into policy and decision-making processes (Béné *et al.*, 2014). Their involvement is essential for ensuring that the Blue Economy benefits local communities while preserving marine ecosystems.

Security is an integral aspect of the Blue Economy, encompassing both human and environmental dimensions. Coastal communities are often vulnerable to various security threats, including illegal fishing, piracy, and climate-related hazards. Effective security management requires the collaboration of multiple stakeholders, including government agencies, law enforcement, and local communities (World Bank, 2019). By fostering partnerships and information sharing, these stakeholders can enhance their capacity to address security challenges and create a safe and secure environment for Blue Economy activities.

The complex nature of the Blue Economy necessitates a multi-stakeholder approach to governance and management. Government agencies play a crucial role in developing and implementing policies, regulations, and incentives to support sustainable Blue Economy development. However, achieving long-term success requires the active participation of a wide range of stakeholders, including the private sector, civil society organizations, and academic institutions (World Bank, 2019). By working together, these stakeholders can contribute to building a resilient and equitable Blue Economy that benefits both present and future generations.

1.2 Statement of the Problem

The coastal regions of Kenya are confronted with the dual challenge of harnessing marine resources for Blue Economy-based economic growth and job creation while ensuring their sustainable use and conservation according to the County Government of Mombasa (2017). Kenya's marine resources face unprecedented threats. Foreign vessels, particularly from China and Japan, are overfishing and depleting fish stocks at an alarming rate, leaving local fishermen with dwindling catches due to inadequate equipment. These large-scale operations not only disrupt fragile marine ecosystems but also pose significant safety risks to smaller, traditional fishing boats. Urgent and comprehensive measures are imperative to protect Kenya's marine resources, support local fishermen, and ensure the safety of those operating in coastal waters. In addition to the challenges posed by marine resource management and economic planning, the coastal region of Kenya faces increasing and complex security concerns. These concerns include the threat of terrorism by groups like Al-Shabaab, who exploit the vulnerability of unemployed youths in the area. For instance, with the persistent threat of piracy emanating from Somalia, perpetrated by groups like Al Shabaab, further jeopardizes the livelihoods of coastal communities and hinders economic development in the region. Moreover, maritime security issues such as piracy, illegal fishing, marine pollution, and over-exploitation of marine resources further complicate prospects for economic opportunities that could benefit vulnerable coastal communities. While regulatory frameworks and investments have been put in place to address these threats and leverage the potential of the Blue Economy, the benefits, especially for SSF, who are critical stakeholders, have not been fully realized. Despite the growing recognition of the importance of stakeholder participation in global marine resource management and Blue Economy development, there remains a notable gap in understanding the efficacy and suitability of these approaches within the specific context of Kenya's coastal region. The empirical gap underscored the need for an investigation into the dynamics of stakeholder participation in sustainable Blue Economy development in Kenya's coastal area,

particularly focusing on SSF. This study attempted to fill the gap by examining the specific effects, challenges, and best practices of stakeholder engagement among SSF in Kenya, shedding light on how such participation influences sustainable practices, livelihoods, economic growth, and ecosystem conservation in this unique setting. The study sought to not only address these challenges but also bridge the gap between existing global knowledge on stakeholder engagement for Blue Economy development and its local applicability within the socio-cultural, economic, and ecological context of Kenya's coastal region. By delving into the intricacies of stakeholder participation and its influence on sustainable Blue Economy development among SSF, this study provides valuable insights to inform policy formulation and practical implementation strategies for marine resource management and economic planning in Kenya's coastal region.

1.3 Research Objectives

1.3.1 Overall Objective

The main objective of the study was to examine stakeholder participation in sustainable Blue Economy development among Small-Scale Fishers in the coastal region of Kenya.

1.3.2 Specific Objectives

- a. To assess the extent of stakeholder engagement in Kenyan Blue Economy development.
- b. To analyze the socio-economic and ecological effects of stakeholder participation.
- c. To evaluate the challenges and opportunities for stakeholder participation.

1.4 Research Questions

- a. How are stakeholders engaged in Kenyan Blue Economy development?
- b. Which are the socio-economic and ecological effects of stakeholder participation on the Kenyan Blue Economy?

c. What are the challenges and opportunities that influence the effectiveness of stakeholder participation in Kenyan Blue Economy development?

1.5 Research Hypothesis

Null Hypothesis H₀: There is no statistically significant relationship between stakeholder participation and sustainable Blue Economy development in Kenya.

Alternative Hypothesis H₁: There is a statistically significant relationship between stakeholder participation and sustainable Blue Economy development in Kenya.

1.6 Justification

1.6.1 Policy Justification

Research emphasized the importance of stakeholder participation for sustainable development of Kenya's coastal regions Blue Economy. The study findings aimed at informing policy makers to take actions which make involvement of stakeholders in the development process that ensure more inclusive and sustainable blue economy. Similarly, it highlighted the need for crafting policies that foster sustainable Blue Economy development in Kenya's coastal region, ensuring fragile equilibrium between economic prosperity, ecological integrity, and local communities' welfare.

1.6.2 Academic Justification

This research sought to contribute in academic discourse by closing empirical gap on stakeholder engagement's effect on Blue Economy development. It enriches existing literature by offering perceptions into the specific context of SSF in Kenya. Research advances knowledge on effective strategies for harmonizing stakeholder interests, facilitating informed decision-making, and fostering sustainability in marine resource management.

1.7 Significance of Study

Significance of the study is multifaceted and holds implications for various stakeholders, policy frameworks, and sustainable development goals. The study contributes empirical evidence and insights into stakeholders' role in participation in shaping Blue Economy development endeavours. By examining the perspectives, interests, and contributions of SSF and the rest of the interested parties, study provides a nuanced understanding of the factors influencing decision-making processes, resource management strategies, and policy outcomes in the coastal region of Kenya. This knowledge is critical for informing approach, enforcement, and evaluation of Blue Economy regulations and programs aimed at promoting sustainability, enhancing livelihoods, and conserving marine resources. Further, by identifying barriers, facilitators, and best practices for stakeholder participation, the study offers insights into how to foster inclusive decision-making processes, build social capital, and in addition bolster partnerships among government bodies, civil society organizations, grass-roots people, as well as private sector actors. Effective stakeholder engagement is essential for promoting transparency, accountability, and legitimacy in Blue Economy initiatives, as well as ensuring that diverse voices and perspectives are acknowledged in decision-making procedures.

The study findings can inform strategies and policies aimed at maximizing the positive effects of Blue Economy development, while minimizing negative externalities and ensuring the equitable distribution of benefits. By generating evidence-based recommendations and policy insights, the study will inform the development of Blue Economy policies, strategies, and investment priorities to include: sustainability, inclusivity, and resilience. This will also help to align Blue Economy development efforts with global efforts such as Sustainable Development Goals, the Paris Agreement on Climate Change, plus United Nations Decade of Ocean Science for Sustainable Development. In doing so, it will advance global efforts towards a more sustainable and equitable Blue Economy as well as help to catalyse positive change,

foster collaboration, and promote inclusive and resilient coastal communities in Kenya and beyond.

1.8 Research Assumptions

Research operated under the premise that responders provided accurate responses, representing their genuine perspectives. It presumed the selected target population, including SSF, community members, government agencies, non-governmental organizations (NGOs), and other stakeholders, adequately reflected the broader coastal context. The sampling technique was assumed to effectively capture diverse viewpoints. The study further assumed that insights gained will contribute meaningfully in informing policies for sustainable development in Kenya's Blue Economy.

1.9 Scope and Limitations of the Study

The study had a broad thematic scope, focusing on assessing stakeholder engagement in marine resource management practices, analyzing the socio-economic and ecological effects of participation, and evaluating challenges and opportunities for effective engagement. Methodologically, the study employed a descriptive survey research design integrating both qualitative and quantitative approaches, allowing for a comprehensive exploration of stakeholder experiences and effects. Geographically, the study was centred on the coastal region of Kenya, specifically targeting SSF as a key stakeholder group within this context.

Despite its comprehensive approach, the study faced several limitations. Firstly, the research design relied heavily on self-reported data from stakeholders, which introduced response bias and potential inaccuracies in reporting levels of engagement and effects. Additionally, the study's geographical scope was limited to the coastal region of Kenya, potentially limiting the generalizability of findings to other regions or contexts. Furthermore, the study primarily focused on SSF, potentially overlooking the perspectives and experiences of other stakeholders

crucial to blue economy development. Finally, the study's cross-sectional nature limits its ability to capture longitudinal changes in stakeholder engagement and effects over time. Despite these limitations, the study provided valuable insights into stakeholder dynamics and contributed to the growing body of literature on sustainable blue economy development.

1.10 Summary

In summary, the chapter outlines that the blue economy has emerged as a holistic approach to sustainably harnessing marine resources for economic growth and environmental conservation. It emphasizes the interconnectedness of economic activities and marine ecosystem health, requiring balanced resource utilization. Coastal communities, heavily reliant on marine resources, are central to this framework. Successful Blue Economy development hinges on active stakeholder engagement, as seen in various countries like the US, UK, France, Indonesia, China, Japan, African nations, and East African states. These nations have demonstrated the importance of stakeholder involvement in marine resource management and economic planning, showcasing diverse approaches to balancing economic growth with environmental preservation. This global trend underscores the necessity of collaborative governance and inclusive decision-making in achieving a sustainable Blue Economy. The next chapter focuses on the literature review.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

Key dimensions of stakeholder engagement in marine resource management, focusing on Kenya's coastal region are elaborated in this chapter thematically. It explored the extent of involvement among SSF, analysing socio-economic effects on sustainable Blue Economy development. Ecological effects are examined within the context of stakeholder participation. Additionally, the review identified challenges impeding effective engagement and propose strategies for mitigation. By addressing these facets, the review contributes insights crucial for shaping the study.

2.1 Empirical Review of Literature

2.1.1 Level of Stakeholder Engagement in the Blue Economy

The level of stakeholder participation in the Blue Economy sector has garnered significant attention from scholars and researchers in recent years. Research by Schewe *et al.* (2020) underscores its critical role in effective marine resource management. By incorporating diverse perspectives from government, industry, environmental groups, and local communities, decision-making becomes more informed and inclusive. This approach fosters a sense of ownership and buy-in, crucial for implementing and sustaining policies. Ultimately, robust stakeholder engagement is not merely a procedural requirement but a strategic imperative for achieving the Blue Economy's potential while safeguarding marine ecosystems.

Schroder *et al.* (2019) reviews a framework that provides a valuable lens through which to examine the spectrum of stakeholder involvement, ranging from superficial tokenism to deep-rooted partnership. While their study offers a robust foundation for understanding these levels, it falls short of delving into the specific nuances of stakeholder engagement within the Blue

Economy. Nevertheless, their findings underscore the critical importance of transitioning from mere tokenism towards genuine, collaborative partnerships. By doing so, Blue Economy initiatives can harness the full potential of diverse stakeholders, leading to more sustainable, equitable, and effective outcomes. The study thus serves as a pivotal starting point for exploring the complexities of stakeholder participation in this rapidly evolving sector.

Critical challenges hindering effective stakeholder participation in marine governance according to Zaucha and Kreiner (2021), including power imbalances, information disparities, and conflicting interests. While acknowledging the study's relevance, it's crucial to note that the research primarily focuses on developed nations with established stakeholders, potentially limiting its applicability to developing countries characterized by small-scale fisheries and marginalized communities. The dynamic and interconnected nature of marine ecosystems, coupled with the unique vulnerabilities of these contexts, necessitates a nuanced understanding of stakeholder participation beyond the framework provided by (Zaucha & Kreiner, 2019). To address the complexities of marine governance effectively, future research should delve deeper into the specific challenges faced by diverse stakeholder groups, particularly in developing countries, to inform equitable and sustainable management strategies.

Stakeholder participation, particularly within the fisheries sector of the Blue Economy offer valuable insights according to Winther *et al.* (2020). Their exploration of co-management arrangements involving indigenous communities and government agencies in Canada provides a compelling case study for effective stakeholder engagement in resource management. By highlighting the potential for collaborative governance, the authors contribute significantly to the discourse on sustainable Blue Economy development. However, the study's focus on fisheries limits its scope, leaving a gap in understanding the broader spectrum of stakeholder participation across the entire Blue Economy sector. This oversight underscores the need for further research to comprehensively examine the diverse range of actors involved in ocean-

based activities and to develop inclusive governance frameworks that can effectively harness the potential of stakeholder collaboration for sustainable ocean management.

The interplay of policy and governance in fostering stakeholder engagement in the Blue Economy is a significant contribution as emphasized by the study by Guerreiro (2021). By highlighting the pivotal role of secure tenure, traditional knowledge recognition, and inclusive decision-making, the study underscores the potential of well-crafted policies to enhance stakeholder participation. However, the research's limitation in isolating policy and governance from broader economic, cultural, and ecological factors hinders a comprehensive understanding of stakeholder engagement. To fully grasp the complexities of this issue, future research should adopt a more holistic approach that integrates these multifaceted influences.

Carrillo et al. (2019) have convincingly argued the pivotal role of stakeholder engagement in marine spatial planning. Their research elucidates how inclusive processes yield plans of superior quality, characterized by a broader spectrum of perspectives and innovative solutions. By fostering dialogue and compromise, stakeholder involvement effectively mitigates conflicts and cultivates a shared sense of ownership. This, in turn, translates to heightened support for plan implementation, ensuring that the resulting strategies are both effective and sustainable. While these findings underscore the global significance of stakeholder participation, a critical gap exists in the context of Kenya, particularly regarding the extent of involvement by SSFs. Addressing this knowledge deficit is paramount for optimizing marine spatial planning outcomes in the country and ensuring that the voices of those most directly affected by these plans are adequately represented.

Hadjimichael (2018) has underscored the pivotal role of co-management in balancing ecological health and economic prosperity within fisheries. By fostering collaboration between local communities and government agencies, this approach offers a promising pathway to

sustainable fisheries management. However, a critical knowledge gap persists regarding the specific impact of stakeholder engagement on SSF in Western contexts, particularly within the burgeoning Blue Economy framework. While research from Western Africa illuminates the importance of stakeholder involvement in marine resource governance and Blue Economy policy, there is a compelling need to translate these insights to Western environments. Such research would provide invaluable evidence to advocate for more inclusive and effective fisheries management strategies that prioritize both environmental sustainability and the livelihoods of coastal communities.

Blench's assertion of local communities as pivotal stewards of marine resources in Nigeria aligns with the Ghanaian Fisheries Act's emphasis on community involvement, a cornerstone of Blue Economy principles (Hadjimichael, 2018). While these works underscore the theoretical importance of community participation, a critical research gap persists. A comprehensive examination of Small-Scale Fisheries (SSF) engagement in stakeholder processes and its subsequent impact on sustainable Blue Economy development is conspicuously absent. This oversight hinders our understanding of the extent to which policy frameworks translate into effective community action and the resulting implications for marine resource management and economic growth. Addressing this gap is imperative to inform evidence-based policies and strategies that truly empower coastal communities and ensure the long-term sustainability of marine ecosystems.

East African nations of Eritrea and Tanzania offer instructive case studies in stakeholder participation within the Blue Economy, despite existing knowledge gaps. The Eritrean Fisheries Proclamation of 2001 explicitly acknowledges the pivotal role of local communities in maritime resource management, aligning with the broader concept of the Blue Economy. Tanzania's Marine Parks and Reserves Act similarly underscores the importance of community engagement in marine resource management and economic planning, as emphasized by

Okafor-Yarwood *et al.* (2020). While these legal frameworks provide a strong foundation, a critical knowledge gap persists concerning the specific contributions of SSF to these contexts and their role in fostering sustainable Blue Economy development. This oversight hinders a comprehensive understanding of stakeholder participation and its impact on marine resource governance and economic growth in the region.

Stakeholder involvement is paramount in the South African Marine Living Resources Act, aligning with the Blue Economy's principles as Hadjimichael (2018) underscores. While this recognition is crucial, existing research has notably overlooked the direct engagement of SSF and the tangible impacts of their participation in shaping maritime policies and practices within the Blue Economy context. This gap is significant as SSF are key stakeholders, deeply intertwined with marine resources. Their inclusion is not merely a matter of equity but a strategic imperative for sustainable and effective ocean governance. By centering SSF voices, policymakers can harness invaluable local knowledge, enhance policy relevance, and foster a more equitable Blue Economy that truly benefits coastal communities. This necessitates a shift in research focus to illuminate the experiences, challenges, and opportunities of SSF engagement, ultimately informing strategies for more inclusive and resilient ocean management.

Kenya's coastal region has witnessed a burgeoning recognition of stakeholder participation in recent times, especially within the Blue Economy paradigm. Mwangi *et al.* (2014) underscore the indispensable role of local communities in marine conservation efforts, a sentiment echoed by Odhiambo, Wakibia, and Sakwa (2020) who posit that such involvement is crucial for realizing the Blue Economy's holistic objectives. While these studies provide valuable insights, a comprehensive understanding of the SSF sector's specific role, level of engagement, and impact on sustainable Blue Economy development remains elusive. This oversight is a critical

gap in the existing literature, necessitating further research to illuminate the SSF sector's contribution to this complex and dynamic ecosystem.

Existing research unequivocally underscores the pivotal role of stakeholder engagement in realizing sustainable Blue Economy development. Hadjimichael (2018) emphasizes this point, highlighting the necessity of robust stakeholder participation in marine resource management. While scholars have acknowledged the importance of stakeholder involvement across diverse geographical contexts, a critical knowledge gap persists regarding the specific mechanisms through which SSF contribute to broader Blue Economy goals. Understanding how SSF actively engage in these processes is imperative for crafting effective policies and practices that harmonize ecological preservation with economic growth within the Blue Economy framework. By addressing this research gap, policymakers and practitioners can foster a more inclusive and equitable approach to marine resource management, ultimately enhancing the sustainability and resilience of coastal communities.

2.1.2 Socio-Economic and Ecological Effects of Stakeholder Participation on Sustainable Blue Economy Development

Stakeholder participation is pivotal to the success of sustainable Blue Economy initiatives, as evidenced by its tangible socio-economic and ecological impacts in the United States. Research from Alaskan fisheries (NOAA, 2020) underscores the positive correlation between stakeholder involvement and the preservation of indigenous livelihoods, coupled with the implementation of sustainable fishing practices. Similarly, the Florida Keys National Marine Sanctuary (2022) showcases the ecological benefits of collaborative efforts among diverse stakeholders in safeguarding marine biodiversity and ecosystem health. These case studies illuminate the potential of stakeholder engagement to drive sustainable Blue Economy development. By extension, a similar approach in Kenya's SSF sector could yield substantial socio-economic and environmental dividends. However, it is crucial to acknowledge the unique

context of Kenya's coastal communities and tailor stakeholder participation strategies accordingly to maximize positive outcomes.

The pivotal role of SSF in fostering ownership has been highlighted by Obura *et al.* (2017), through regulatory adherence, and sustainable resource management. While these benefits are acknowledged, a comprehensive understanding of the socio-economic and ecological impacts of SSF involvement in decision-making within Western Blue Economy contexts remains elusive. This study proposes a comparative analysis across Western nations, West Africa, East Africa, and South Africa, with a particular focus on Kenya's coastal region. By examining methodologies, outcomes, and research gaps, this investigation aims to elucidate the ecological implications of stakeholder participation among SSF, ultimately contributing to a more robust framework for sustainable Blue Economy development. This approach recognizes the intrinsic connection between stakeholder engagement and the health of marine ecosystems, a relationship that requires in-depth exploration.

Stakeholder engagement emerges as a cornerstone for sustainable development in West Africa, as evidenced by its transformative impact on socio-economic and ecological conditions. Adewumi (2020) underscores this assertion through a Nigerian case study, where community-based management strategies have not only boosted the economic fortunes of small-scale fisheries but also revitalized marine ecosystems. These findings align with broader trends in the region, such as Ghana's successful mangrove restoration efforts, attributable to robust stakeholder participation. By fostering a sense of ownership and shared responsibility, these initiatives have demonstrated the potential to reconcile human needs with environmental conservation, offering a compelling argument for the integration of local communities into decision-making processes across West Africa.

East Africa's coastal regions present a complex interplay of ecological conservation and socio-economic development. Eritrea's exemplary ocean conservation efforts, as highlighted by Mensah (2019), have yielded tangible benefits in terms of coral reef health and marine biodiversity. Tanzania's model of stakeholder involvement, also referenced by Mensah, underscores the potential for community-driven conservation to protect endangered species and marine ecosystems. While these initiatives hold promise for enhancing the livelihoods of SSF through increased income and social cohesion, as suggested by Mensah, a more nuanced understanding is necessary. Fabinyi, Dressler, and Pido (2019) emphasize the need for in-depth research to elucidate the direct socio-economic and ecological impacts of stakeholder engagement, particularly within the Kenyan context. This knowledge gap underscores the importance of context-specific studies to inform effective marine management strategies and ensure that conservation efforts deliver equitable benefits to coastal communities.

The South African Marine Living Resources Act stands out as a testament to the efficacy of stakeholder participation in marine management. By mandating the involvement of SSF and other key actors, the legislation has not only contributed to ecological restoration, as evidenced by the recovery of fish stocks and preserved ecosystems, but has also yielded significant socio-economic dividends. Smed (2016) underscores the alignment of this approach with the broader Blue Economy framework. Research by Coelho (2018) further reinforces these findings, demonstrating that participatory engagement in Tanzania has led to diversified income sources and improved community well-being. These outcomes collectively suggest that inclusive governance of marine resources, as exemplified by South Africa, can serve as a model for other East African coastal nations, such as Eritrea, to uplift their communities and achieve ecological sustainability. The evidence converges on a compelling argument: stakeholder participation is indispensable for both environmental health and human prosperity in marine contexts.

Stakeholder participation in Kenya's coastal region is increasingly recognized as a cornerstone for sustainable marine resource management. Research by Muigua (2018) and Siringi and Chepkemboi (2019) underscores the multifaceted benefits of integrating SSF into this framework. Empirical evidence suggests that stakeholder involvement not only boosts the socio-economic well-being of coastal communities through income diversification and market access but also significantly contributes to ecological sustainability by enhancing coral reef health and preserving marine biodiversity. These findings align with the broader Blue Economy concept, emphasizing the synergy between economic growth and environmental protection. In essence, the studies highlight the imperative of participatory approaches in balancing competing demands on marine resources, thereby promoting both human well-being and ecosystem resilience.

The pursuit of a sustainable Blue Economy necessitates a nuanced comprehension of the intricate interplay between socio-economic factors and ecological health, as mediated through stakeholder participation in marine resource management. As Morrissey (2017) underscores, integrating these dimensions is crucial for balancing economic growth with environmental preservation. While studies across diverse regions, from the United States to East Africa, consistently advocate for the inclusion of SSF and local communities in decision-making, the specific ecological implications of their involvement remain under-explored. This research aims to bridge this gap by examining the unique ecological contributions and challenges faced by SSF within the broader Blue Economy framework. By elucidating these dynamics, we can develop more precise strategies to optimize both ecological resilience and socio-economic benefits within coastal communities.

2.1.3 Challenges and Opportunities for Stakeholder Participation in the Coastal Region's Blue Economy Development Initiatives

Effective stakeholder participation is paramount for successful marine resource management and Blue Economy growth. Caswell *et al.* (2020) underscore the critical role of power imbalances as a key barrier to meaningful engagement. Disproportionate influence held by government agencies and corporations often eclipses the voices of local communities and civil society, hindering equitable decision-making. While acknowledging these challenges, Caswell *et al.* (2020) focus on a single case, limiting the breadth of their analysis. The complexities of stakeholder engagement are evident in Western contexts, where regulatory burdens and limited representation impede optimal outcomes. To address these issues, Lloret *et al.* (2016) advocate for multi-stakeholder platforms as essential mechanisms for fostering dialogue, collaboration, and alignment with Blue Economy principles. These platforms can mitigate power imbalances and ensure that the voices of all stakeholders are heard, contributing to more just and sustainable marine resource management.

Insufficient capacity and resources significantly impede meaningful stakeholder engagement. As highlighted by Niner *et al.* (2022), marginalized groups often lack the financial, technical, and organizational prowess required for effective participation, exacerbating exclusion. Legal and institutional frameworks can either empower or obstruct stakeholder involvement; restrictive regulatory environments pose significant barriers. While Niner *et al.* (2022) emphasize capacity challenges, institutional mechanisms, and legal frameworks, empirical studies from West Africa reveal additional complexities. In Nigeria, for instance, despite policy commitments to community participation, capacity gaps and knowledge deficits persist. To address these issues, Ababouch and Carolu (2015) underscore the importance of capacity building through knowledge sharing for sustainable Blue Economy development. These

findings converge to illuminate the critical role of resource allocation and capacity development in fostering inclusive decision-making processes.

Conflicting interests among stakeholders pose a formidable barrier to sustainable development, as highlighted by Van den Burg *et al.* (2020). These authors underscore the divergence in economic, social, and environmental objectives among different stakeholder groups. While their study focused on the maritime sector, its core principle the challenge of balancing competing interests is equally relevant to SSF. The SSF context presents a unique microcosm of this challenge, with fishers prioritizing livelihoods, consumers demanding affordable seafood, and policymakers balancing food security with ecosystem preservation. Resolving these tensions requires innovative approaches that prioritize stakeholder engagement and seek win-win solutions, rather than zero-sum compromises.

South Africa's pursuit of a Blue Economy is hindered by deep-seated mistrust and regulatory uncertainty, echoing concerns raised by Lloret *et al.* (2016) about the complexities of stakeholder coordination. The cited work underscores the critical role of trust in fostering successful collaborative initiatives. To overcome these challenges, South Africa must prioritize open dialogue and shared governance, aligning with the Blue Economy's core principles. By establishing transparent communication channels and empowering all stakeholders in decision-making, the nation can cultivate a collaborative environment essential for unlocking the ocean's potential. This approach is paramount to realizing the full benefits of the Blue Economy and ensuring its sustainability.

East African nations grapple with imbalanced power dynamics and communication breakdowns, hindering effective community participation in development initiatives. As highlighted by Ababouch and Carolu (2015), Tanzania epitomizes this challenge with a significant portion of its population unaware of participation opportunities, thereby limiting

their ability to engage meaningfully in governance processes. This power asymmetry, exacerbated by inadequate communication channels, undermines the principles of the Blue Economy, which prioritizes inclusive and equitable development. To address these issues, comprehensive awareness campaigns and transparent communication platforms must be established to empower communities and foster genuine participation in decision-making, ensuring that the benefits of development are distributed equitably.

The Kenyan coastal region grapples with systemic issues that hinder the equitable development of SSF. Research by Ababouch and Carolu (2015) underscores the profound marginalization of specific coastal communities and the dearth of robust legal frameworks to facilitate meaningful participation in resource management. These challenges, coupled with information asymmetry and under-representation, impede SSF actors from effectively engaging in the Blue Economy. The authors' findings illuminate the imperative for inclusive policies, capacity building, and participatory training to empower marginalized groups and foster a more equitable coastal governance system. By incorporating the voices and needs of SSF communities, these strategies can contribute to the realization of a truly sustainable and inclusive Blue Economy.

The blue economy offers immense potential for coastal communities, yet its realization is hindered by significant security challenges. As Mbathi and Mbuthia (2020) highlight, regions heavily dependent on fisheries and tourism are particularly vulnerable to piracy, illegal fishing, and marine pollution, which undermine economic stability and livelihoods. To unlock the full potential of the blue economy, a robust security framework is imperative. Empirical research, employing mixed methodologies, underscores the necessity of collaborative efforts among coastal communities, governments, and international actors. Building trust, enhancing communication, and capacity development are crucial for addressing these security threats and maximizing the benefits of the blue economy. Ultimately, a holistic approach that includes all

stakeholders is essential to navigate the complex interplay between economic opportunities and security risks in coastal regions.

Challenges and potential benefits within the broader Blue Economy have been exemplified by Lloret *et al.* (2016). However, a critical gap persists in our understanding of how these dynamics specifically unfold in Kenya's coastal region, particularly concerning SSF. By delving into the unique hurdles confronting SSF operators, this research aims to bridge this knowledge chasm. Such targeted inquiry is imperative for developing contextually relevant strategies that can bolster the resilience and sustainability of SSF within the burgeoning Blue Economy. This approach recognizes that a one-size-fits-all solution is insufficient, and that tailored interventions are essential to address the specific challenges faced by this vital sector in Kenya's coastal environment.

In view of the review, Schewe *et al.* (2020) emerges as a pivotal contributor to the understanding of stakeholder engagement in the Blue Economy, emphasizing its critical role in informed and inclusive decision-making. By highlighting the importance of diverse perspectives, the study underscores the potential for achieving a balance between economic growth and environmental sustainability. In contrast, while Schroder *et al.* (2019) provide a valuable framework for analyzing stakeholder involvement levels, their limited focus on the Blue Economy context diminishes their overall contribution. Their work serves as a foundational stepping stone, but further exploration is necessary to fully grasp the intricacies of stakeholder engagement within this dynamic sector.

2.2 Theoretical Framework

2.2.1 Institutional Theory

The study adopted institutional theory conceptualized by March and Olsen (1984), which posits that organizations and individuals are influenced by the social, political, and cultural norms,

values, and structures prevalent in their environment. According to this theory, organizations and individuals conform to these institutional pressures to gain legitimacy and reduce uncertainty, thereby shaping their behaviour, decision-making processes, and organizational structures. Institutions, which include formal regulations, informal norms, and cognitive frameworks, serve as a guiding framework within which organizations operate, influencing their strategies, practices, and actions. March and Olsen (1984) argue that institutions create a sense of stability and predictability in organizations' environments, but they can also constrain innovation and adaptation.

In the context of the study, institutional theory holds significant relevance in understanding the dynamics of stakeholder engagement and decision-making processes. The study investigated the influence of institutional factors such as government policies, community norms, and organizational practices on stakeholder participation in Blue Economy development initiatives. By applying the institutional theory lens, the study analyzed how these institutional pressures shape stakeholders' behaviours, motivations, and actions regarding sustainable resource management practices and economic planning in the coastal region. Furthermore, the theory helped in identifying the formal and informal rules, norms, and values that guide stakeholder interactions and decision-making processes within the Blue Economy context, shedding light on the institutional mechanisms that facilitate or hinder effective stakeholder participation.

However, the institutional theory is not without criticism. One critique is that it tends to emphasize stability and conformity at the expense of understanding change and adaptation within organizations and institutions. Greenwood *et al* (2010) argue that the theory overlooks the role of agency and individual decision-making in shaping institutional change and innovation. Additionally, the theory has been criticized for its tendency to portray institutions as monolithic and deterministic, failing to account for the heterogeneity and complexity of institutional environments (Beckert & Whitley, 2019). Moreover, Clemens & Bourgeat (2018)

argue that the theory lacks a clear mechanism for explaining how institutions emerge, evolve, and interact with one another over time, limiting its explanatory power in dynamic and complex social settings. Despite these criticisms, the institutional theory remains a valuable framework for analyzing the influence of institutional factors on stakeholder participation and decision-making processes in the context of sustainable Blue Economy development in the coastal region of Kenya.

In the analysis of the Blue Economy in Kenya, Odongo *et al* (2022) highlight several critiques of institutional theory, including its emphasis on stability and conformity over understanding change and adaptation as noted by Greenwood *et al* (2010). Clemens & Bourgeat (2018) argue that the theory overlooks individual agency and decision-making in shaping institutional change and innovation. Additionally, the theory has been criticized for portraying institutions as monolithic and deterministic, failing to account for the complexity of institutional environments (Beckert & Whitley, 2019). Furthermore, Fligstein & McAdam (2012) argue that the theory lacks a clear mechanism for explaining institutional emergence, evolution, and interaction, potentially limiting its explanatory power in dynamic settings.

An alternative theory for this study could have been the Social Network Theory (SNT) by Wasserman & Faust (1994). While Institutional Theory offered valuable insights into how social structures influence stakeholder behaviour, it focused on broader institutional pressures and did not capture the nuances of individual interactions and influence within the network of stakeholders involved in the Blue Economy. SNT emphasizes the power of relationships and connections between individuals and organizations. It could have helped analyze how information, resources, and influence flow through the networks of stakeholders in the Blue Economy, enabling a deeper understanding of individual motivations, collaboration patterns, and how these networks can be leveraged to enhance stakeholder participation and cooperation. Additionally, this theory could have shed light on the potential challenges arising from network

structures, such as power imbalances, exclusion, and lack of trust, and how to address them for effective collaboration towards sustainable Blue Economy development.

The study opted not to utilize SNT despite its potential benefits in comprehending stakeholder dynamics within the Blue Economy due to several reasons. Firstly, the study prioritized examining the broader institutional context, focusing on factors like government policies and community norms, which are more effectively analyzed through Institutional Theory given its emphasis on decision-making processes and behavioural patterns across stakeholder groups. Secondly, the extensive data collection required for SNT, including network structures and communication patterns, was deemed impractical given the study's resources and methodology. Lastly, the study primarily sought to understand the "what" of stakeholder participation influences rather than the "how," thus rendering SNT less pertinent for its core objectives.

2.2.2 Conceptual Framework

This conceptual structure offered an integrated strategy for in-depth analysis, allowing for exploration of the interplay between stakeholder participation and sustainable blue economy development through the lens of Institutionalism Theory. The theory offers a profound exploration of the intricate relationship between stakeholders, communications channels, and policy frameworks, regulatory structures, in the ultimate pursuit of environmental, social and economic sustainability.

At the core of the conceptual framework is the independent variable, Stakeholder Participation, which is the linchpin that propels the transformative journey towards sustainable marine resource management. While the dependent variable, Sustainable Blue Economy development is the holistic vision that encapsulates the aspirations of inclusive growth, balancing environmental preservation and socio-economic progress.

2.3 Conceptual Framework

The conceptual framework posits stakeholder participation as a pivotal driver of a sustainable Blue Economy. It delineates levels, avenues, and barriers to this engagement, emphasizing its influence on sustainable fishing practices, economic benefits for fishers, social development, and equitable ocean governance. These outcomes collectively contribute to the dependent variable: a sustainable Blue Economy characterized by improved livelihoods, socio-economic outcomes, and environmental sustainability. Communication channels and policy frameworks are identified as intervening variables that can either enhance or hinder the relationship between stakeholder participation and the desired outcomes. The framework suggests that effective stakeholder involvement, facilitated by appropriate communication and supportive policies, can foster a Blue Economy that balances ecological health, social equity, and economic prosperity.

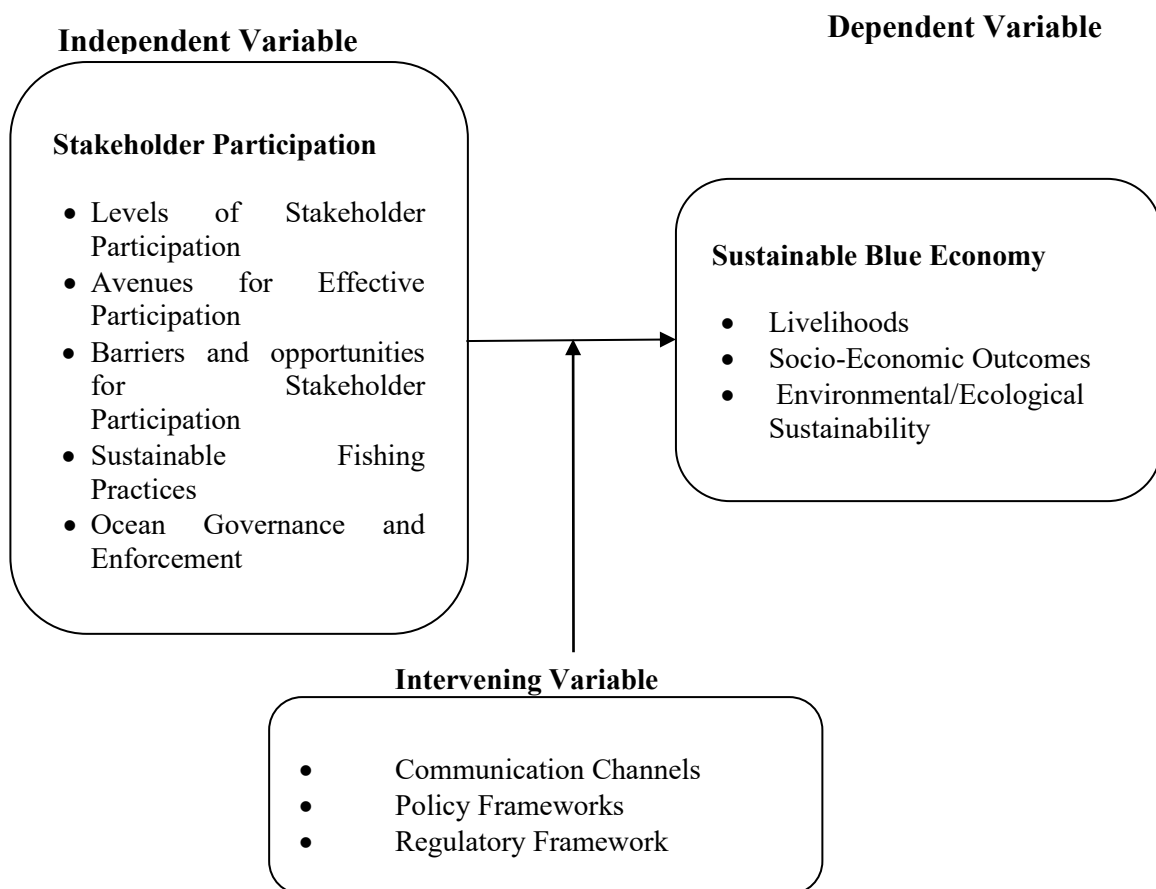


Figure 2.1: Conceptual Framework

Source: Researcher, 2024

2.4 Chapter Summary

In summary, this chapter delved into the critical role of stakeholder engagement in managing marine resources, particularly focusing on the involvement of SSF in Kenya's coastal region. It reviewed existing research regarding the level of participation in the Blue Economy, analysed the socio-economic and ecological effects of SSF involvement, identifies obstacles hindering effective engagement, and proposed strategies for overcoming them. While literature acknowledged the importance of stakeholder participation for sustainable development, a key gap remained in understanding the direct effects of SSF involvement on achieving the goals of the Blue Economy. The next chapter focuses on the methodology.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

The chapter covers the research methodology that was used in the study. The design of the research, target population, size of the sample, data collecting strategies, and analysis of data methodologies, sampling techniques, validity and reliability, ethical considerations used for this study are all covered in depth.

3.1 Research Design

The study employed a descriptive survey research design incorporating a mixed methods approach of both qualitative and quantitative methodologies to comprehensively achieve its objectives (Creswell, 2012). Surveys and structured interviews were utilized to assess the extent of stakeholder engagement in current marine resource management practices, with a particular focus on SSF. Surveys facilitated the collection of quantitative data on the frequency and degree of SSF and other stakeholder involvement in blue economy development initiatives. Conversely, interviews offered in-depth insights into stakeholders' motivations, challenges, and experiences, illuminating the contextual factors influencing their participation (Kvale & Brinkmann, 2009).

Moreover, the descriptive survey research design facilitated the analysis of the socio-economic and ecological effects of stakeholder participation on sustainable blue economy development, particularly with reference to SSF in the coastal region of Kenya. By integrating both qualitative and quantitative data collection methods, the study triangulated findings to gain a comprehensive understanding of the multifaceted effects of stakeholder engagement (Creswell, 2012). Quantitative data allowed for statistical analysis of socio-economic indicators such as income levels, employment opportunities, and ecological factors such as changes in fish stocks.

Concurrently, qualitative data provided rich narratives and contextual insights into the lived experiences of SSF, enabling a deeper exploration of the socio-economic and ecological dynamics at play (Kvale & Brinkmann, 2009). This combined approach strengthened the validity and robustness of the study's findings, informing evidence-based recommendations for enhancing stakeholder participation in blue economy development initiatives in the coastal region of Kenya.

3.2 Area of Study

The study area encompassed the counties of Kwale, Kilifi, Mombasa, and Lamu, situated within the coastal region of Kenya. These counties are characterized by their proximity to the Indian Ocean, rich marine biodiversity, and significant reliance on marine resources for livelihoods and economic activities, particularly within the small-scale fishing sector. Kwale County is known for its diverse coastal ecosystems, including mangrove forests and coral reefs, while Mombasa County is home to one of Kenya's major ports and has a vibrant fishing community. Lamu County, with its historic port town and cultural heritage, also relies heavily on marine resources for sustenance and economic development. By focusing on these specific counties, the study captured the nuances of stakeholder participation and the socio-economic and ecological effects of blue economy development within the diverse coastal landscape of Kenya. Including Kilifi County in the study on SSF enhanced its comprehensiveness and robustness according to Leedy and Ormrod (2019). By incorporating Kilifi, the research captured a broader spectrum of coastal ecosystems, fishing practices, and socioeconomic conditions, leading to more representative findings. This allowed for a deeper understanding of the challenges and opportunities faced by SSFs across the entire Kenyan coast, enabling more informed policy decisions and interventions to support this vital sector.

3.3 Target Population

Cooper and Schindler (2005) explain that the target population refers to entire groups of individuals from which researchers seek to make meaningful conclusions. Similarly, Zikmund (2003) defines a population as a comprehensive collection of entities sharing common characteristics. In this study, the target population included SSF affiliated with Beach Management Units (BMUs), community members, government agencies, NGOs, scholars, and other stakeholders engaged in marine resource management across the Coastal Region of Kenya drawn from a population of 60,000 according to a FAO (2020) report on the state of world fisheries and aquaculture. However, a sample frame will be purposively considered, to draw a representative size. These groups were selected as the focus of the research due to their substantial involvement in various aspects of the blue economy, such as governance, policy-making, artisanal fishing, aquaculture, and related coastal livelihoods. By concentrating on SSF, the study aimed to understand the specific challenges, needs, and opportunities encountered by this vulnerable yet vital segment of the population. Ultimately, the research sought to provide insights that could inform policies and initiatives aimed at promoting sustainable development and inclusive stakeholder engagement within Kenya's Blue Economy sector.

3.4 Sampling Techniques

In the study, a purposive sampling technique was utilized to meticulously select participants who could offer valuable insights into stakeholder participation in the blue economy development within the Coastal Region of Kenya. This method involved deliberately choosing individuals and groups affiliated with SSF associated with BMUs, community members, government agencies, NGOs, academicians, and other stakeholders engaged in marine resource management. The selection aimed to ensure a diverse representation of perspectives and experiences pertinent to the study objectives, as advocated by Russell and Gregory (2003).

By intentionally including individuals with significant involvement and expertise in various facets of blue economy activities such as governance, policy-making, artisanal fishing, and aquaculture, the study aimed to attain a comprehensive understanding of stakeholder dynamics. Through purposive sampling, the research gathered detailed and nuanced data crucial for informing effective policy-making and fostering initiatives towards sustainable blue economy development in the coastal region of Kenya.

3.5 Sample Size Determination

A study sample refers to a sub set of entities from which target population is defined by a given sampling criterion (Resnik, 2011). This representative subset is derived from the research population so as to generalize the responses on the entire research target population. Sample size is generally associated with reduced cost, logistical considerations and greater accuracy of the results.

The study sought a sample size that balanced logistics and accuracy while ensuring generalizability to the population from the target population of 60,000. Given a sample frame population size (N) of 200 stakeholders representatives in Kenya's coastal counties (Kwale, Kilifi, Lamu and Mombasa), the researcher employed purposive sampling, focusing on SSF, community members, NGOs, and government bodies. To achieve a high level of confidence (95%) and an acceptable margin of error (5%), the study aimed to determine the appropriate sample size using this information.

By taking these factors into account, 133 respondents were chosen as the sample for the study arrived at from Yamane's formula (Yamane, 1967). This formula is commonly employed in research when dealing with a finite population, as is the case in this study.

$$n = \frac{N}{1 + Ne^2}$$

n - Required sample size.

N - The Population Size.

e - 5 percentage points of working error.

$$N = 200$$

$$1 + 200(0.05)^2$$

$$N = 200/1.5$$

$$n = 133 \text{ Participants}$$

Stratification was used to divide the sample across each stratum, ensuring proportional representation. The population of 200 was stratified by applying a reduction factor of 133/200, maintaining the proportionality across all strata.

Table 3.1: Sample Size

Strata		Target Population (N)	Calculation	Sample Size (n)
Small Scale Fishers		60	$(133/200)*60=39.9=40$	40
Community Members		50	$(133/200)*50=33.2=33$	33
NGOs Representatives		40	$(133/200)*40=26.6=27$	27
Government (Representatives)	Agencies	50	$(133/200)*50=33.2=36$	33
Total		200		133

Source: Field Data, 2024

Despite its appropriateness for the research scope, it's important to acknowledge the limitations of the chosen sample size. Firstly, the generalizability of the study findings to the entire coastal region of Kenya could be restricted due to the sample size. Despite efforts to ensure representativeness, unique subgroups or characteristics within the population might not be fully captured. Additionally, the accuracy of the research results hinges on respondents' willingness to participate and their honesty, which could be influenced by some individuals declining to participate or providing biased responses. The use of purposive sampling, while suitable, introduces subjectivity into the sample selection process, potentially introducing bias. Consequently, it is crucial to consider these limitations when interpreting the study results and to exercise caution in making broad claims or generalizations based solely on the sample data.

3.6 Instruments and Tools

The study employed a combination of structured interviews using interview guides and surveys using questionnaires as instruments to collect data as recommended by (Jain, 2021). Structured interviews were conducted with key stakeholders, including SSF, community members, government agencies, NGOs, and academicians. The interview questions in the interview guide tool were developed after a thorough examination of existing literature and the study's objectives, aiming to elicit detailed qualitative information on stakeholder perspectives, experiences, challenges, and opportunities related to blue economy development. These interviews followed a standardized protocol, ensuring uniformity in the presentation of questions to all participants and facilitating in-depth qualitative insights.

Surveys were another crucial instrument used in the study, designed to capture quantitative data. The surveys incorporated measuring scales and validated instruments whenever possible, with questions in the questionnaire tool carefully aligned with the research goals. Prior to the main data collection, a pilot test involving a small group of participants was conducted to refine and enhance the clarity and applicability of the survey questions. The surveys were

administered to a diverse group of participants, including SSF and other stakeholders, employing a tried-and-true sampling approach to ensure a representative sample. This quantitative instrument allowed for the systematic collection of data, facilitating statistical analysis and providing a quantifiable understanding of stakeholder engagement in the blue economy development initiatives in the coastal region of Kenya.

3.7 Validity and Reliability

The study placed significant emphasis on ensuring the validity and reliability of the research instruments as recommended by Mohajan (2017), which included structured interviews and questionnaires. To establish the validity of the structured interviews, questions were meticulously developed through an extensive review of existing literature and a clear understanding of the study's objectives. Pilot testing involving a small group of participants was conducted to identify any gaps or inconsistencies in the questions, allowing for refinement and improvement. The same approach was applied to surveys, where measuring scales and validated instruments were utilized whenever possible. The incorporation of a small number of respondents in advance for testing aimed to enhance question clarity and applicability, contributing to the overall validity of the research tools. Additionally, the study aligned the questions with the research goals and drew upon established measuring tools to further ensure the correctness of the data gathered.

Reliability was rigorously maintained through consistent application and measured consistency in the research instruments. For structured interviews, uniform questions were presented to all participants in a consistent order, ensuring standardization of the process. Inter-rated reliability was established by having multiple researchers conduct interviews and comparing their findings for agreement. In the case of surveys, a tried-and-true sampling approach was employed to obtain data that truly reflected the broader population. The application of test-retest reliability, involving the administration of surveys to a group of participants at different

times, was utilized to assess the consistency of their responses over time. The study took comprehensive measures, including standardized protocols, involvement of multiple researchers, and test-retest techniques, to enhance the dependability and reproducibility of the data collected, thereby reinforcing the reliability of the research instruments.

3.8 Data Collection Procedures

The data collection procedures in the study involved a combination of structured interviews and surveys to gather comprehensive insights into stakeholder participation in the blue economy development of the coastal region of Kenya. Structured interviews were conducted with key stakeholders, including SSF, community members, government agencies, NGOs, academicians, and other relevant entities involved in marine resource management. Prior to the interviews, questions were carefully developed based on a thorough review of existing literature and the study's objectives.

Pilot testing was conducted with a small group of participants to refine and improve the clarity and coherence of the questions. The structured interviews followed a standardized protocol to ensure consistency across all interviews, with uniform questions presented to all participants in a consistent order. This approach facilitated the collection of in-depth qualitative data, allowing for a nuanced exploration of stakeholder perspectives, experiences, challenges, and opportunities related to blue economy development.

In addition to structured interviews, surveys were utilized to gather quantitative data on stakeholder engagement and its socio-economic and ecological effects. The surveys were designed using measuring scales and validated instruments whenever possible, with questions aligned with the research goals. Prior to the main data collection, a small number of respondents were engaged in pre-testing to assess the clarity and applicability of the survey questions, allowing for adjustments as needed. A tried-and-true sampling approach was employed to

ensure that the survey respondents represented the broader population accurately. The surveys were administered to participants at different times to assess test-retest reliability, examining the consistency of their responses over time. Overall, the research was carefully planned and implemented to gather robust and reliable data, aiming to inform the study's objectives and deepen the understanding of stakeholder participation in Kenya's coastal region blue economy development.

3.9 Data Processing and Analysis

Data obtained from the questionnaire and interviews in the study underwent a systematic process of processing and analysis to derive meaningful insights relevant to the research objectives. Firstly, responses from the questionnaires were entered into a database or spreadsheet software for organization and management. This step involved coding the responses to facilitate quantitative analysis, such as calculating frequencies, percentages, and averages to quantify the extent of stakeholder engagement and assess socio-economic and ecological effects. Moreover, qualitative data from interviews were transcribed verbatim and organized thematically to identify recurring patterns, themes, and narratives related to stakeholder experiences, challenges, and opportunities. These themes were then coded and categorized using qualitative analysis software or manual coding techniques, allowing for the exploration of nuanced perspectives and the identification of underlying factors influencing stakeholder participation in blue economy development initiatives.

Subsequently, a mixed-methods approach was employed to integrate findings from both quantitative and qualitative data sources, enabling a comprehensive understanding of stakeholder dynamics in the coastal region of Kenya. Descriptive and inferential statistics were used to provide statistical evidence and numerical support for patterns identified in the content analysis of qualitative data, enhancing the validity and reliability of the findings. The qualitative data, provided rich contextual insights and narratives that complemented the

quantitative results, offering a deeper understanding of the socio-economic and ecological effects of stakeholder participation. By triangulating findings from multiple data sources, the study was able to develop a comprehensive interpretation of the data. This approach facilitated drawing meaningful conclusions concerning stakeholder engagement, as well as identifying challenges and opportunities for sustainable blue economy development in the coastal region of Kenya.

3.10 Ethical Considerations

The study meticulously addressed a range of ethical considerations to uphold the rights and well-being of participants. Firstly, research authorization was sought from the National Defence University – Kenya and a research permit from the National Commission for Science, Technology and Innovation (NACOSTI). Further, informed consent was prioritized, ensuring that all individuals involved in the research fully understood the purpose, procedures, and potential risks and benefits of their participation. Participants were provided with clear and comprehensive information about the study, including their right to withdraw at any point without repercussion. Additionally, consent forms were written in a language that was easily understandable to participants, considering potential language barriers within the diverse coastal communities of Kenya. This ensured that participants could make informed decisions about their involvement in the study, thus respecting their autonomy and their right rights.

Confidentiality and privacy were also central ethical considerations in the study. Measures were implemented to safeguard the confidentiality of participants' personal information and responses, ensuring that their identities remained protected throughout the research process. Data collected from participants were anonymized and stored securely to prevent unauthorized access or disclosure. Moreover, the researcher respected the cultural norms and practices within the study area, seeking permission from local authorities and community leaders before initiating data collection activities. This approach fostered trust and collaboration with the local

communities and ensured that the research process was conducted in a culturally sensitive and respectful manner. By addressing these ethical considerations, the study maintained the integrity of the research process while prioritizing the rights and well-being of participants.

3.11 Chapter Summary

In summary, the Research Methodology chapter details the approach used in the study, encompassing research design, target population, sampling techniques, and data collection and analysis methods. The study employed a descriptive survey research design with a mixed methods approach, using both qualitative and quantitative methodologies to explore stakeholder engagement in marine resource management in Kenya's coastal region. Data was collected through surveys and structured interviews, focusing on SSF and other stakeholders. The study area included Kwale, Kilifi, Mombasa, and Lamu counties, chosen for their significant reliance on marine resources. The target population consisted of SSF, community members, government agencies, NGOs, and scholars, with a sample size of 133 determined using Yamane's formula. Purposive sampling ensured diverse perspectives, and data was gathered using structured interviews and surveys, followed by rigorous validity and reliability checks. The data was processed and analyzed through thematic coding and statistical analysis to derive meaningful insights. Ethical considerations were meticulously addressed, including informed consent, confidentiality, and cultural sensitivity. This comprehensive methodology facilitated a robust examination of stakeholder participation in blue economy development initiatives. The next chapter focuses on data presentation and analysis.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.0 Introduction

The chapter discussed presentation of data, analysis and discussion of the study outcomes. The data was analysed and presented in form of tables and graphs. This was done in line with the study objectives. These representations were meticulously aligned with the study's objectives to facilitate clear comprehension and interpretation of findings.

4.1 Response Rate

The study sampled 133 respondents who consisted of 40 SSF, 33 community members, 27 NGOs representatives and, 33 government officials. Out of these, 36 SSF (88.9 %), 33 community members (100%), 22 NGOs representatives (80%) and 31 government officials (91.7%) responded as indicated in Table 4.1. These findings show that the various categories of study participants adequately responded to the study which was deemed sufficient for analysis.

Table 4.1: Response Rate

Target Group	Sample	Respondents	Response Rate (%)
Small Scale Fishers	40	36	88.9
Community Members	33	33	100
NGOs Representatives	27	22	80.0
Government Agencies	33	31	91.4
Total	133	122	91.7

Source: Field Data, 2024

The study achieved a substantial response rate across all participant groups. While the sample comprised SSF, community members, NGO representatives, and government officials, the

highest response rate was observed among community members, with nearly all participating. The SSF and government official groups also demonstrated strong engagement, with a significant majority providing responses. Although the NGO representative group had a slightly lower response rate, the overall participation was commendable, contributing to the robustness of the study's findings.

The study attained a high response rate due to the relevance of the research topic to participants' interests or livelihoods, effective communication of the study's purpose and benefits, and the use of appropriate data collection methods. Additionally, the establishment of trust and rapport with participants, along with incentives or rewards, could have influenced response rates. The specific context of the study, including geographical location, target population characteristics, and data collection strategies, would provide more concrete insights into the underlying reasons for the high response rate.

SSFs play a significant role in Kenya's blue economy, contributing substantially to the country's fish production and employment. In Kenya, SSFs account for approximately 80% of the total fish production, employing over 60,000 people directly and indirectly supporting the livelihoods of around 2 million individuals through related activities such as processing, marketing, and transportation. This sector provides an essential source of income and food security, particularly in coastal and inland communities. Despite their substantial contribution, SSFs often face challenges such as inadequate infrastructure, limited access to markets, and the impacts of climate change, which hinder their full potential in the blue economy.

4.2 Demographic Features of Respondents

Demographic data about participants that were assessed in research included gender, age, and education level.

4.2.1 Gender of Respondents

Research sought to determine respondents' gender. Outcomes are presented in Figure 4.1.

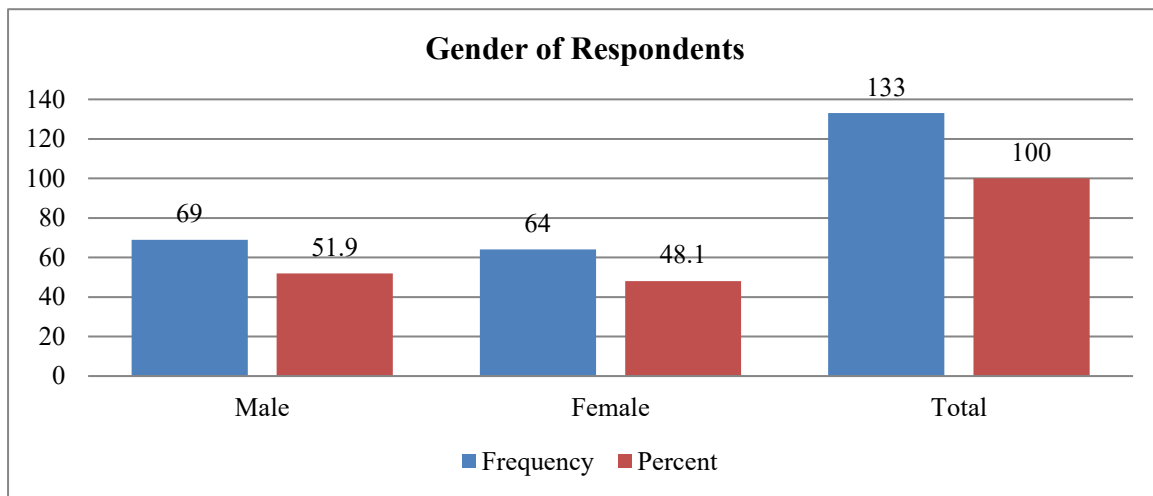


Figure 4.1: Gender of Respondents

Source: Field Data, 2024

As depicted in Figure 4.1 above, 51.9 % of the responders were male while, 48.1 % were female. This shows that more males took part in the study as opposed to females. Nevertheless, both genders were well represented in the study which could avert gender bias. The gender distribution among respondents indicates a slight male predominance, with men constituting 51.9% of the sample compared to 48.1% for women. While this disparity exists, the relatively close proportions of male and female participants suggest a reasonable balance in gender representation. This balance is crucial for mitigating potential gender bias in the study findings and ensuring that the results are not skewed towards the experiences or perspectives of one gender.

4.2.2 Age of Respondents

Participants were asked to indicate their ages. Outcomes are illustrated in Figure 4.2.

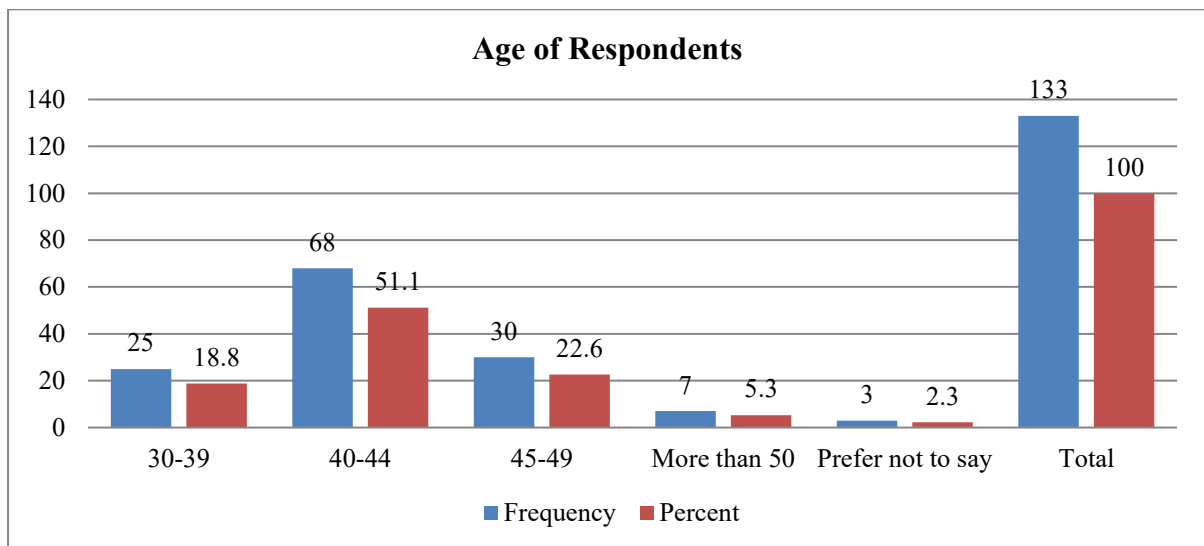


Figure 4.2: Age of Respondents

Source: Field Data, 2024

The majority (51.1 %) of participants were aged between 40- 44 years. This was followed by those aged 45-49 at 22.6 % while 18.8% were aged between 30-39 years. At the same time, those aged above 50 years were 5.3 % while 2.3% preferred not to say. The findings show that the respondents had diverse ages. This could reduce age bias in the findings obtained. The study population primarily comprised middle-aged individuals, with the 40-44 age group constituting the largest demographic. A substantial portion of participants also fell within the 45-49 and 30-39 age brackets, indicating a relatively mature respondent base. While there was a smaller representation of older participants and a very small percentage who declined to disclose their age, the overall age distribution suggests a diverse sample. This diversity is crucial in mitigating potential age-related biases and enhancing the generalizability of the study findings.

4.2.3 Level of Education of Respondents

The participants were asked to indicate their levels of education. The findings are shown in Figure 4.3.

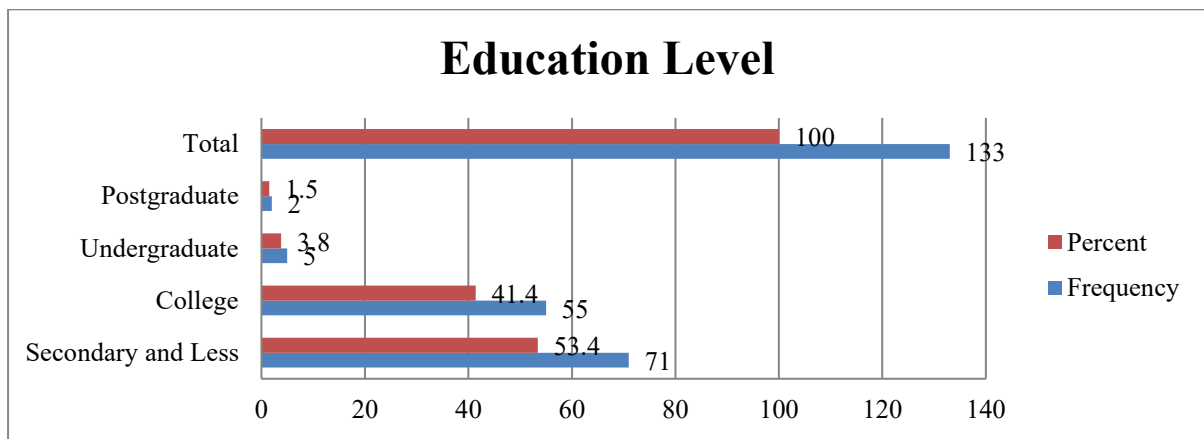


Figure 4.3: Level of Education of Respondents

Source: Field Data, 2024

The findings indicate that 3.8 % had attained degree level education, 1.5 % had attained post graduate level education, 41.4 % had attained college level education, and 53.4 % had attained secondary level education and less. This illustrates that the respondents had basic education and thus understood the research questions quite well.

The analysis of the educational background of the research participants reveals that the dominant education levels are college and secondary or less. This suggests that the research questions were accessible to a majority of the participants. However, it is important to consider potential limitations, such as the possibility that individuals with lower education levels may have faced challenges in comprehending certain aspects of the research. The educational background of the research participants suggests that the research questions were accessible to most participants. However, it is important to consider potential limitations due to variations in education levels.

The study examined participant demographics to understand the sample population. Gender analysis revealed a relatively balanced representation of both males and females. Age-wise, the majority of participants fell within the 40-49 age bracket, with a good spread across other age groups. Regarding education, a significant portion of respondents had attained secondary

education or below, while a smaller proportion held college or university degrees. This diverse demographic profile contributes to the study's generalizability and helps to mitigate potential biases.

4.3 Level of Stakeholder Engagement in the Blue Economy

The first objective of the study was to examine the level of stakeholder engagement in the blue economy. The involvement of SSF in Kenya's Blue Economy remains largely peripheral. Despite being the backbone of the coastal economy, their participation in decision-making and benefit-sharing is often limited. Although initiatives like BMUs have created avenues for their input, systemic challenges such as lack of access to finance, technology, and market opportunities continue to hinder their full potential. Consequently, SSF often bear the brunt of overfishing, climate change, and pollution, while reaping minimal rewards from the growing Blue Economy. To this end, the study required the respondents to rate their level of agreement with the statements on a scale of: 1 = Strongly Agree, 2 = Agree, 3 = Neutral, 4 = Disagree, 5=Strongly Disagree. The results are presented in Table 4.2.

Table 4.2: Level of Stakeholder Engagement in the Blue Economy

Statements	1=SA	2=A	3=N	4=D	5=SD	Total
Stakeholder involvement vital for effective marine resource management in the Blue Economy.	73 (54.9%)	26 (19.5%)	13 (9.8%)	13 (9.8%)	8 (6.0%)	133 (100.0%)
Diverse stakeholders improve decision-making in the Blue Economy sector.	72 (54.1%)	18 (13.5%)	10 (7.5%)	10 (7.5%)	23 (17.3%)	133 (100.0%)
Genuine, collaborative engagement enhances Blue Economy stakeholder participation.	79 (59.4%)	18 (13.5%)	16 (12.0%)	10 (7.5%)	10 (7.5%)	133 (100.0%)
Power imbalances and conflicting interests complicate stakeholder engagement.	67 (50.4%)	16 (12.0%)	13 (9.8%)	16 (12.0%)	21 (15.8%)	133 (100.0%)
Policies recognizing traditional knowledge and promoting inclusivity are crucial.	76 (57.1%)	18 (13.5%)	13 (9.8%)	13 (9.8%)	13 (9.8%)	133 (100.0%)
Local communities and small-scale fishers are pivotal for sustainable development.	73 (54.9%)	21 (15.8%)	10 (7.5%)	13 (9.8%)	16 (12.0%)	133 (100.0%)
Understanding small-scale fishers' engagement in Blue Economy processes is lacking.	81 (60.9%)	16 (12.0%)	10 (7.5%)	13 (9.8%)	13 (9.8%)	133 (100.0%)

Source: Field Data, 2024

According to Table 4.2 the majority of respondents (54.9%) strongly agreed that stakeholder participation is essential for effective marine resource management in the Blue Economy sector. This suggests a widespread recognition among stakeholders of the significance of active involvement in decision-making processes related to marine resources.

Similarly, a substantial proportion of respondents (54.1%) strongly agreed that involving diverse stakeholders, including government agencies, industry players, environmental organizations, and local communities, leads to better decision-making in the Blue Economy. This underscores the importance of inclusivity and collaboration among various stakeholders for effective governance and management in the blue economy.

The majority of respondents (59.4%) also strongly agreed that the level of stakeholder participation in the Blue Economy should move towards more genuine and collaborative forms of engagement. This indicates a desire for deeper and more meaningful involvement of stakeholders in decision-making processes, rather than tokenism or superficial engagement.

On the other hand, respondents highlighted challenges such as power imbalances and conflicting interests among stakeholders, with a significant proportion (50.4%) strongly agreeing that these factors make effective participation in the Blue Economy more complex. This underscores the need to address structural barriers and power dynamics to ensure equitable participation and decision-making processes.

The majority of respondents (57.1%) strongly agreed that policies ensuring the recognition of traditional knowledge, and promoting inclusive decision-making were essential for enhancing stakeholder engagement in the Blue Economy. This emphasizes the role of supportive policy frameworks in facilitating meaningful engagement and sustainable development in the blue economy.

Respondents acknowledged the importance of incorporating local communities and SSF in marine resource management, with a majority (54.9%) strongly agreeing that this is pivotal for sustainable Blue Economy development. This highlights the recognition of the valuable contributions and knowledge of local communities and SSF in promoting sustainable practices and conservation efforts.

Finally, respondents expressed a critical gap in understanding how SSF directly engage in stakeholder processes and contribute to the broader goals of the Blue Economy, with a majority (60.9%) strongly agreeing. This points to the need for further research and initiatives focused on understanding and enhancing the participation of SSF in blue economy activities.

The strong consensus on the importance of stakeholder involvement presents significant opportunities for enhancing the Blue Economy. By fostering inclusive and collaborative platforms, policymakers and practitioners can harness the collective wisdom and expertise of diverse stakeholders. This can lead to innovative solutions, increased legitimacy, and improved outcomes. Moreover, recognizing the value of traditional knowledge offers a chance to integrate time-tested practices with modern approaches, promoting sustainability and resilience. Addressing the knowledge gap regarding SSF can open doors to targeted interventions, capacity building, and empowerment of this crucial sector.

Despite the identified opportunities, several challenges must be overcome. Overcoming power imbalances and resolving conflicting interests requires deliberate strategies and strong institutional frameworks. Building trust and fostering genuine collaboration among diverse stakeholders can be time-consuming and resource-intensive. Additionally, translating the recognition of the importance of traditional knowledge into concrete policies and practices can be complex, requiring careful consideration of cultural sensitivities and legal frameworks. Finally, addressing the lack of understanding about small-scale fishers necessitates investment in research, data collection, and capacity building initiatives.

The findings underscore a consensus among stakeholders regarding the significance of stakeholder participation in the Blue Economy sector. They emphasize the necessity for inclusive, collaborative approaches, and supportive policies to address challenges and ensure sustainable development. These findings are in agreement with the findings by Schewe *et al* (2020), who argue that involving diverse stakeholders, including government agencies, industry players, environmental organisation, and local communities is essential for effective marine resource management. Participation can lead to better decision-making, increased social acceptance of policies (Buy-in or ownership) and ultimately more sustainable outcomes.

However, Zaucha & Kreiner (2021) have identified challenges to stakeholder participation in the context of marine governance. These challenges include power imbalances, information asymmetry and conflicting interest among stakeholders. With the dynamic and interconnected nature of marine ecosystem, there are unique challenges which make effective participation more complex. The dynamic and interconnected nature of marine ecosystems further amplifies these challenges, emphasizing the need for comprehensive strategies that account for the diverse range of stakeholders and their interdependencies as established in the study.

The findings align with the findings by Röckmann *et al* (2017), emphasizing the importance of stakeholder participation for effective marine resource management. The moderate agreement on diverse stakeholder involvement, addressing power imbalances, and promoting inclusive decision-making resonates with the theory's focus on formal and informal norms influencing behaviour in the Blue Economy. The variability in responses also reflects the theory's recognition of dynamic interactions within institutions.

The study also found that SSF play a crucial role in coastal communities, contributing significantly to local economies and livelihoods. In many cases, their involvement in decision-making processes related to marine resource management is considered essential. Recognizing their traditional knowledge and integrating it into management strategies is often seen as beneficial. To this end, in an interview a Key Informant (KI) stated that:

The extent of stakeholder engagement in marine resource management practices within the coastal region of Kenya varies based on collaborative initiatives, co-management approaches, and community-based management strategies. Ideally, effective engagement includes diverse stakeholders participating in decision-making processes, such as consultations, workshops, and joint initiatives.

(KI 1, 23rd November, 2023).

The verbatim underscores the importance of stakeholder participation in the Blue Economy. For example, within the fisheries context, their exploration of co-management arrangements involving indigenous communities and government agencies showcases the potential for

effective stakeholder engagement in resource management. The current level of SSF involvement in fisheries management remains largely minimal, despite some progress. While the introduction of BMUs has marked a departure from tokenistic participation, the extent of meaningful engagement is still limited.

BMUs have provided a platform for fishers to have a voice, challenges such as capacity constraints, resource limitations, and power imbalances continue to hinder their effective involvement in decision-making processes. As a result, small-scale fishers often remain marginalized in fisheries governance, with their knowledge and perspectives underutilized in shaping policies and practices that directly impact their livelihoods. As a result, effective policies that ensure secure tenure, recognize traditional knowledge, and promote inclusive decision-making are essential for enhancing stakeholder engagement (Guerreiro, 2021).

Carrillo-Durán and Garcia Garcia (2020) highlights that actively engaging stakeholders brings diverse perspectives, expertise, and insights to the table, enriching the decision-making process. Furthermore, such inclusive approaches tend to mitigate conflicts, as they allow stakeholders to voice concerns and negotiate solutions, fostering a collaborative atmosphere. This collective approach not only leads to better-informed and more harmonious management, but also increases the chances of effective plan execution, ultimately benefiting both the stakeholders and the broader community or organization.

The study underscores the unanimous consensus among stakeholders regarding the imperative of heightened and collaborative involvement for the sustainable advancement of the Blue Economy. Key insights emphasize a pressing need for enhanced stakeholder engagement in decision-making processes, acknowledging the existence of challenges such as power differentials and conflicting interests that must be navigated to ensure effective participation. The study underscores the indispensability of supportive policies to facilitate meaningful

engagement and promote sustainable development. Furthermore, it underscores the critical importance of incorporating local communities and SSF, recognizing them as pivotal actors in the Blue Economy landscape, while also highlighting the necessity for further research to comprehend their engagement dynamics. These findings resonate with existing research emphasizing the crucial role of stakeholder participation in marine resource management, thus emphasizing the imperative of inclusive and collaborative approaches in shaping the future of the Blue Economy.

4.4 Socio-Economic and Ecological Effects of Stakeholder Participation on Sustainable Blue Economy Development with Reference to Small-Scale Fishers in the Coastal Regions

The second objective of the study was to explore the socio-economic and ecological effects of stakeholder participation on sustainable blue economy development with reference to SSF in the coastal regions. To this end, the study required the respondents to rate their level of agreement with the statements on a scale of: 1 = Strongly Agree, 2 = Agree, 3 = Neutral, 4 = Disagree, 5=Strongly Disagree. The results are presented in Table 4.3.

Table 4.3: Socio-Economic and Ecological effects of Stakeholder Participation on Sustainable Blue Economic Development

Statements	1= SA	2 = A	3 = N	4 = D	5 = SD	Total
Stakeholder involvement, including small-scale fishers, boosts responsibility in Blue Economy resource use.	124 (93.2%)	3 (2.3%)	0 (0.0%)	3 (2.3%)	3 (2.3%)	133 (100.0%)
Small-scale fishers' participation crucial for biodiversity protection and socio-economic wellbeing.	107 (80.5%)	13 (9.8%)	10 (7.5%)	0 (0.0%)	3 (2.3%)	133 (100.0%)
Community-based management improves coastal fish populations, coral reefs, income, and social networks.	122 (91.7%)	5 (3.8%)	0 (0.0%)	3 (2.3%)	3 (2.3%)	133 (100.0%)
Engaging small-scale fishers in conservation can diversify income and improve wellbeing.	124 (93.2%)	3 (2.3%)	3 (2.3%)	0 (0.0%)	3 (2.3%)	133 (100.0%)
Involving small-scale fishers aids fish stock recovery and livelihood preservation.	117 (88.0%)	8 (6.0%)	5 (3.8%)	0 (0.0%)	3 (2.3%)	133 (100.0%)
Holistic approach needed for ecological sustainability and economic prosperity in the Blue Economy.	111 (83.5%)	13 (9.8%)	3 (2.3%)	3 (2.3%)	3 (2.3%)	133 (100.0%)

Source: Field Data, 2024

Table 4.3 illustrates the perceptions of stakeholders regarding the socio-economic and ecological effects of their participation in sustainable blue economic development. A vast majority of respondents (93.2%) strongly agreed that stakeholder participation, including SSF, enhances the sense of ownership and responsibility for sustainable resource utilization in the Blue Economy. This indicates a high level of recognition among stakeholders regarding the importance of inclusive participation for fostering a sense of stewardship.

Similarly, a significant percentage of respondents (80.5%) strongly agreed that stakeholder participation, including SSF, is crucial for enhancing biodiversity protection and the socio-economic well-being of the Blue Economy. This underscores the multifaceted benefits

associated with stakeholder involvement in promoting ecological sustainability and socio-economic development.

The majority of respondents (91.7%) strongly agreed that community-based management measures, involving stakeholders, have a positive effects on fish populations and coral reef quality in coastal regions, leading to higher income levels and stronger social networks. This highlights the effectiveness of collaborative approaches in achieving ecological and socio-economic objectives. A substantial proportion of respondents (93.2%) strongly agreed that incorporating SSF in marine conservation programs can result in diversified income streams and improved overall well-being. This suggests the potential of stakeholder participation in promoting economic resilience and poverty alleviation among coastal communities.

The involvement of SSF and various stakeholders in marine resource management was strongly supported by a majority of respondents (88.0%), who agreed that it leads to the recovery of fish stocks and the preservation of livelihoods. This emphasizes the importance of collaborative management strategies in achieving sustainable fisheries and livelihoods.

Finally, respondents recognized the importance of holistic approaches integrating ecological considerations with socio-economic effects, with 83.5% strongly agreeing. This underscored the necessity of considering the interconnectedness of ecological and socio-economic factors in promoting sustainable development within the Blue Economy. While stakeholder participation was noted to be crucial for a sustainable blue economy, it cannot be fully realized without addressing the significant security challenges faced by coastal communities. These regions, heavily reliant on the blue economy through sectors like SSF and tourism, are particularly vulnerable to piracy, illegal, unreported, and unregulated (IUU) fishing, and maritime pollution (Mbathi & Mbuthia, 2020). These threats disrupt economic activity, harm livelihoods, and disincentives participation in sustainable blue economy initiatives. For

instance, piracy creates an environment of fear and uncertainty, deterring tourism and investment. Additionally, illegal fishing and mangrove habitat destruction depletes fish stocks and destroy their breeding grounds, jeopardizing the long-term sustainability of the fisheries sector and the income of small-scale fishers. Therefore, addressing these security challenges through robust maritime security measures, collaborative efforts between stakeholders, and community-driven solutions is crucial for ensuring the success of a sustainable blue economy in Kenya's coastal regions.

The findings highlight the consensus among stakeholders on the importance of stakeholder participation, particularly involving SSF, and collaborative approaches in promoting sustainability and prosperity within the Blue Economy. These findings align with the findings by Adewumi (2020) who found that community-based management measures have proven to be instrumental in improving the economic well-being of SSF, resulting in higher income levels and stronger social networks. This has also led to the augmentation of fish populations and the enhancement of coral reef quality. Similarly, Ghana's emphasis on stakeholder engagement has contributed to the restoration of mangrove ecosystems in their waters. This aligns with the principles of the Blue Economy and ecological sustainability (Bennett *et al.*, 2018). The participation of SSF in this context has been associated with increased income generation and enhanced community cohesion. Additionally, the prudent management of marine resources has the potential to uplift the socio-economic status of coastal communities.

Evidently, the pursuit of sustainable Blue Economy development demands a comprehensive understanding of the intertwined socio-economic and ecological consequences associated with stakeholder participation in marine resource management. A key informant number 2 (KI 2) during an interview stated that:

Active involvement of SSF in stakeholder processes often leads to diversified income streams. Through sustainable fishing practices and participation in eco-friendly

initiatives, SSF may access alternative economic opportunities, such as eco-tourism ventures or value-added processing of seafood products.

(KI 2, 25th November, 2023).

Stakeholder participation contributes to the overall improvement of livelihoods among coastal communities, which can go a long way in addressing the question of engagement in illegal activities such as joining Al-Shabab terror group. With a stake in decision-making processes, SSF can benefit from sustainable resource management, leading to increased fish stocks and reliable incomes, thereby enhancing their overall well-being. This finding came out by observation of Key Informant (KI 3) who noted that:

Inclusive stakeholder participation empowers local communities, including SSF, by providing them with a voice in decisions affecting their lives. This empowerment can foster a sense of ownership and responsibility, creating a more resilient and self-sufficient community.

(KI 3, 25th November, 2023).

The active involvement of SSF in stakeholder initiatives often contributes to better biodiversity protection. By adopting sustainable fishing practices and participating in conservation efforts, these stakeholders play a crucial role in preserving marine ecosystems and preventing over-exploitation of resources as noted by Key informant number 4 (KI 4):

Stakeholder engagement can lead to the implementation of responsible and science-based fisheries management practices. This, in turn, contributes to the recovery and maintenance of fish stocks, ensuring the long-term health of the marine ecosystem and sustaining fisheries for future generations.

(KI 4, 25th November, 2023)

By integrating ecological considerations with socio-economic effects, holistic and effective strategies can be devised to achieve both ecological sustainability and enhanced economic prosperity within the context of the Blue Economy (Garland *et al.*, 2019). The integration of ecological considerations with socio-economic effects aligns with the broader perspective of the Institutional Theory (March and Olsen, 1984), emphasizing the importance of understanding formal regulations, informal traditions, and historical dynamics in marine

resource management. Both stress the need for comprehensive approaches to achieve sustainable Blue Economy growth by addressing ecological and socio-economic dimensions.

Ministry reports often depict a promising future for the Blue Economy in Kenya's fisheries sector, highlighting anticipated benefits such as increased economic activity, job creation, and improved livelihoods (Ochiewo *et al.*, 2020). However, the actual realization of these benefits may not align with this optimistic portrayal, particularly for SSFs who often struggle to access the promised advantages. Despite government initiatives to promote the Blue Economy, concerns persist regarding the equitable distribution of benefits, with SSFs being disproportionately affected by marginalization and exclusion from decision-making processes as noted by Ochiewo *et al.* (2020).

Addressing the gap between the potential and reality of the Blue Economy in Kenya's fisheries sector requires greater involvement of SSFs in the policymaking and implementation processes (Hastings *et al.*, 2019). SSFs possess valuable local knowledge and experience in fishing practices and ecosystem dynamics, making their inclusion in decision-making crucial for more sustainable resource management (Hastings *et al.*, 2019). Furthermore, enhancing SSFs' participation in formal market value chains can improve their economic prospects by providing better access to fair prices and market opportunities, thereby contributing to the overall economic growth of the Blue Economy (Hastings *et al.*, 2019). Additionally, empowering SSFs through increased involvement in policy formulation fosters a sense of ownership and accountability, leading to a more equitable distribution of benefits within the Blue Economy (Hastings *et al.*, 2019).

4.5 Challenges and Opportunities for Effective Stakeholder Participation in the Coastal Region's Blue Economy Development Initiatives

The third objective of the study was to examine the challenges and opportunities for effective stakeholder participation in the coastal region's blue economy development initiatives. To this end, the study required the respondents to rate their level of agreement with the statements on a scale of: 1 = Strongly Agree, 2 = Agree, 3 = Neutral, 4 = Disagree, 5=Strongly Disagree. The results are presented in Table 4.4.

Table 4.4: Challenges and Opportunities for Effective Stakeholder Participation in the Coastal Region's Blue Economy Development Initiatives

Statements	1 = SA	2 = A	3 = N	4 = D	5 = SD	Total
Power imbalances challenge stakeholder participation in the Blue Economy.	92 (69.2%)	8 (6.0%)	5 (3.8%)	10 (7.5%)	18 (13.5%)	133 (100.0%)
Limited resources hinder effective stakeholder engagement in Blue Economy decisions.	81 (60.9%)	16 (12.0%)	10 (7.5%)	10 (7.5%)	16 (12.0%)	133 (100.0%)
Legal structures affect stakeholder participation in the Blue Economy.	75 (56.4%)	16 (12.0%)	5 (3.8%)	37 (27.8%)	0 (0.0%)	133 (100.0%)
Conflicting interests hinder stakeholder engagement in balancing development and conservation.	71 (53.4%)	18 (13.5%)	5 (3.8%)	16 (12.0%)	23 (17.3%)	133 (100.0%)
Transparent communication and collective decision-making can overcome mistrust among stakeholders.	73 (54.9%)	18 (13.5%)	8 (6.0%)	8 (6.0%)	26 (19.5%)	133 (100.0%)
Awareness campaigns and clear communication foster transparency and collaboration in stakeholder engagement.	79 (59.4%)	10 (7.5%)	5 (3.8%)	39 (29.3%)	0 (0.0%)	133 (100.0%)

Source: Field Data, 2024

Table 4.4 shows the stakeholder responses on the challenges and opportunities that are associated with stakeholder participation in the Blue Economy. A significant majority of

respondents (69.2%) strongly agreed that power imbalances pose a significant challenge to meaningful stakeholder participation in the Blue Economy. This suggests recognition of the need to address unequal power dynamics to foster more inclusive decision-making processes.

A majority of respondents (60.9%) agreed that inadequate capacity and resources can limit stakeholders' ability to engage effectively in decision-making processes related to the Blue Economy. This highlights the importance of addressing resource constraints to facilitate meaningful participation.

Respondents recognized the role of legal and institutional structures, with 56.4% agreeing that they play a crucial role in either facilitating or hindering stakeholder participation in sustainable Blue Economy development. This underscores the importance of supportive regulatory frameworks for promoting inclusive governance.

Respondents identified conflicting interests among stakeholders as a significant barrier to successful participation, with 53.4% agreeing. This emphasizes the importance of reconciling divergent interests to promote collaborative decision-making and consensus-building.

The majority of respondents (54.9%) recognized the opportunity presented by transparent communication and collective decision-making in overcoming barriers related to mistrust and regulatory ambiguities among stakeholders. This underscores the importance of fostering open communication channels to build trust and facilitate collaboration.

A substantial majority of respondents (59.4%) identified comprehensive awareness campaigns and clear communication channels as opportunities for addressing challenges related to imbalanced power dynamics and inadequate communication conduits. This highlights the potential of proactive communication strategies in promoting stakeholder engagement and participation.

Respondents also identified inclusive policies, capacity-building efforts, and participatory training as significant opportunities for unlocking the full potential of sustainable development and economic prosperity, with 53.4% agreeing. This emphasizes the importance of supportive policies and capacity-building initiatives in empowering stakeholders to contribute effectively to Blue Economy initiatives.

These findings collectively reveal an understanding of the challenges surrounding stakeholder participation in the Blue Economy. Effective stakeholder participation stands as a linchpin for realizing successful marine resource management and advancing sustainable Blue Economy development. Caswell *et al* (2020) has emphasized the significance of power imbalances as a major challenge to stakeholder participation. Power structures can disproportionately favour certain stakeholders, such as government agencies or large corporations, limiting the influence of smaller actors, including local communities and civil society groups. This imbalance can impede meaningful participation and equitable decision-making. Goodwin (2019) however, emphasize on one case as a challenge.

Across Western countries, navigating stakeholder engagement encounters hurdles such as conflicting interests and power dynamics. In the United States, the intricacies of regulations coupled with limited representation hinder optimal engagement outcomes. Mitigation strategies encompass the establishment of multi-stakeholder platforms as conduits for nurturing constructive dialogue and fostering collaboration, thereby aligning with the principles of the Blue Economy (Lloret *et al.*, 2016).

Furthermore, the findings show other challenges faced by SSF in participating in Blue Economy initiatives, include financial constraints which emerge as a significant hurdle, limiting their ability to invest in modern fishing technologies, safety equipment, and sustainable practices. Technical expertise also poses a challenge, as many SSF may lack access

to training programs or information on best practices in the rapidly evolving field of marine resource management. Organizational capacity is another concern, with small-scale fishing communities often lacking cohesive structures to effectively engage in decision-making processes and negotiations.

Despite these challenges, there are promising opportunities to facilitate and enhance stakeholder participation in sustainable Blue Economy development initiatives along the coastal region of Kenya, highlighted by Key Informant 5 (KI 5) who said:

Financial support and targeted funding programs can alleviate the economic burden on SSF, enabling them to adopt more sustainable practices and invest in essential equipment.

(KI 5, 26th November, 2023).

Key Informant 6 opined that:

Capacity-building initiatives, including training programs and workshops, can empower fishers with the necessary knowledge and skills to navigate regulatory frameworks, employ sustainable fishing methods, and engage effectively in decision-making processes.

(KI 6, 26th November, 2023).

Insufficient capacity and resources can limit the ability of stakeholders to engage meaningfully. Flannery *et al* (2018) discusses how marginalized or vulnerable groups may lack the financial resources, technical expertise, or organizational capacity needed for effective participation, potentially excluding them from decision-making processes. Legal and institutional structures can either facilitate or hinder stakeholder participation. Niner *et al* (2022) point out those regulatory environments that fail to recognize the rights and roles of different stakeholders may create barriers to their involvement.

Additionally, fostering partnerships between governmental bodies, NGOs, and the private sector can create collaborative platforms that leverage resources and expertise for the benefit of small-scale fishing communities. Finally, establishing transparent communication channels

and inclusive policies that recognize the unique challenges and contributions of SSF can further enhance their active involvement in shaping and benefiting from sustainable Blue Economy initiatives.

The findings align with the Institutional Theory (March and Olsen, 1984), particularly its emphasis on formal regulations and informal traditions influencing stakeholder participation. Flannery *et al* (2018)'s discussion on limited resources resonates with the theory's consideration of how institutions affect behaviour, while Niner *et al* (2022) insights on legal structures hindering involvement align with the theory's exploration of institutional effects. The emphasis on partnerships and inclusive policies echoes the theory's view of institutions shaping socio-cultural contexts and behaviours. Overall, the Institutional Theory provides a framework for understanding the observed dynamics in stakeholder engagement for sustainable Blue Economy growth.

The effective participation of various stakeholders in the Blue Economy's development initiatives faces challenges like power imbalances, limited resources, and conflicting interests. Yet, opportunities exist to overcome these through transparent communication, capacity building, and inclusive policies. Recognizing the crucial role of stakeholders, including those facing financial and technical limitations, is key to fostering collaboration and achieving sustainable marine resource management for long-term success.

4.6 Perception of Sustainable Blue Economy

The study sought to explore perception of stakeholder participation on sustainable Blue Economy. To this end, the study required the respondents to rate their level of agreement with the statements on a scale of: 1 = Strongly Agree, 2 = Agree, 3 = Neutral, 4 = Disagree, 5=Strongly Disagree. The results are presented in Table 4.5.

Table 4.5: Perception of Sustainable Blue Economy

Statements	1 = SA	2 = A	3 = N	4 = D	5 = SD	Total
Stakeholder participation addresses power imbalances in Kenya's Blue Economy.	76 (57.1%)	18 (13.5%)	13 (9.8%)	23 (17.3%)	3 (2.3%)	133 (100.0%)
Small-scale fishers in Kenya lack resources for meaningful Blue Economy engagement.	73 (54.9%)	21 (15.8%)	10 (7.5%)	16 (12.0%)	13 (9.8%)	133 (100.0%)
Kenya's regulations facilitate stakeholder involvement in the Blue Economy.	83 (62.4%)	5 (3.8%)	5 (3.8%)	37 (27.8%)	3 (2.3%)	133 (100.0%)
Balancing economic and environmental interests poses challenges in Kenya's Blue Economy.	63 (47.4%)	13 (9.8%)	10 (7.5%)	39 (29.3%)	8 (6.0%)	133 (100.0%)
Transparent communication fosters trust among stakeholders in Kenya's Blue Economy.	57 (42.9%)	21 (15.8%)	13 (9.8%)	13 (9.8%)	29 (21.8%)	133 (100.0%)
Awareness campaigns improve stakeholder engagement in Kenya's coastal region.	76 (57.1%)	13 (9.8%)	13 (9.8%)	21 (15.8%)	10 (7.5%)	133 (100.0%)
Inclusive policies and capacity-building enhance stakeholder engagement, especially for small-scale fishers in Kenya.	62 (46.6%)	13 (9.8%)	13 (9.8%)	29 (21.8%)	16 (12.0%)	133 (100.0%)

Source: Field Data, 2024

From Table 4.5, a majority of respondents (57.1%) strongly agreed that stakeholder participation is effectively addressing power imbalances and promoting equitable decision-making in Kenya's Blue Economy. This suggests a positive perception of the current level of inclusivity in decision-making processes.

Respondents acknowledged the challenges faced by SSF in Kenya's coastal region, with a majority (54.9%) agreeing that they face significant limitations in terms of financial resources,

technical expertise, and organizational capacity for meaningful engagement in the Blue Economy. This underscores the need for targeted support to address these limitations.

A substantial majority of respondents (62.4%) agreed that Kenya's regulatory environment recognizes the rights and roles of different stakeholders, facilitating their involvement in sustainable Blue Economy development. This indicates a perceived supportive regulatory framework for stakeholder engagement.

Respondents identified balancing conflicting interests among stakeholders as a challenge impeding sustainable Blue Economy development in Kenya, with 47.4% agreeing. This highlights the complexity of managing divergent interests and the importance of achieving a balance between economic development and environmental conservation.

A significant proportion of respondents (42.9%) agreed that transparent communication channels and collective decision-making are effectively fostering trust and collaboration among stakeholders, contributing to sustainable Blue Economy development in Kenya.

A majority of respondents (57.1%) agreed that comprehensive awareness campaigns and clear communication channels have improved stakeholder engagement, particularly addressing power imbalance dynamics and communication challenges in Kenya's coastal region.

Respondents recognized the role of inclusive policies, capacity-building efforts, and participatory training in enhancing stakeholder engagement and sustainable Blue Economy development in Kenya, particularly for SSF. This underscores the importance of supportive policies and capacity-building initiatives in promoting inclusive and participatory approaches to Blue Economy development.

Informants were also asked to share their perspectives on the sustainability of Blue Economy development in Kenya, particularly in the coastal region, along with factors influencing their perception and areas where improvements were needed. Informant 7 stated that:

The effectiveness and adequacy of existing regulations and policies governing Blue Economy practices play a crucial role. A robust regulatory framework ensures sustainable practices and equitable stakeholder engagement.

(KI 7, 27th November, 2023)

Key Informant 8 further buttressed this perception by stating that:

The level of engagement and participation of local communities, including SSF, in decision-making processes and the implementation of Blue Economy initiatives influence perceptions. Inclusive and participatory approaches contribute to sustainable development

(KI 8, 27th November, 2023).

These sentiments show that sustainable blue economy development encompasses a holistic approach to harnessing marine resources for economic growth while ensuring environmental conservation and social well-being. With an emphasis on ecosystem health and equitable benefits, it integrates industries like fishing, tourism, shipping, and renewable energy, not forgetting the necessary conducive environment relating to safety and security. The 2030 Agenda for Sustainable Development of the United Nations, which seeks to strike a balance between economic growth and the preservation of marine ecosystems, is in line with this idea. The potential of the Blue Economy is to promote innovation, job growth, and food security, particularly for coastal communities (United Nations, 2022). However, in order to reduce potential ecological and social risks, effective governance, stakeholder involvement, and cross-sectoral cooperation are required (Voyer *et al.*, 2018). Due to the relevance of the Blue Economy, its development has gained traction the world over.

This study is grounded in the Kenyan Constitution, which enshrines public participation as a fundamental principle of governance. The constitution vests sovereign power in the people

(Article 1) and mandates their involvement in decision-making processes (Article 10 (2) (a)). Further, the Fourth Schedule Part 2 (14) explicitly recognizes public participation as a function of county governments. By anchoring the study in these constitutional provisions, we underscore the legal and democratic imperative of involving the public in matters affecting their lives, particularly in the management of coastal resources.

4.7 Inferential Statistics

Pearson correlation and regression analyses were carried out to find out the level to which the independent variables were related or affected the dependent variable. The findings were presented in the following section.

4.7.1 Correlation Analysis

The findings as shown in Table 4.6 show that the dependent variable (Perception of Sustainable Blue Economy) had statistically significant correlation with level of stakeholder engagement in the blue economy ($r=0.503$, $p<0.01$); socio-economic and ecological effects of stakeholder participation on sustainable blue economic development ($r=0.974$, $p<0.01$) and challenges and opportunities for effective stakeholder participation in the coastal region's blue economy development initiatives ($r=0.194$, $p<0.05$). This shows that the independent variables were highly correlated with the dependent variable.

Table 4.6: Correlation Analysis

Correlations				
		Level of Stakeholder Engagement in the Blue Economy	Socio-Economic and Ecological effects of Stakeholder Participation on Sustainable Blue Economic Development	Challenges and Opportunities for Effective Stakeholder Participation in the Coastal Region's Blue Economy Development Initiatives
Perception of Sustainable Blue Economy	Pearson Correlation	.503**	.974**	.194*
	Sig. (2-tailed)	.000	.000	.025
	N	133	133	133

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Source: Field Data, 2024

4.7 Diagnostic Tests

Before regression analysis, diagnostic tests were carried to test assumptions for autocorrelation and heteroskedasticity.

The findings as shown in table 4.7 show that there was mild positive autocorrelation between the variables. Regression analysis could still be carried out since this value was not on the extremes of 0 or 4.

Table 4.7: Diagnostic Test

Model	Durbin-Watson
1	1.450

Source: Field Data, 2024

The assumption of lack of heteroskedasticity was tested using a scatter plot. As shown in Figure 4.4, there was no clear pattern in the scatter plot hence showing that there was no heteroskedasticity problem. Regression analysis could thus be carried out.

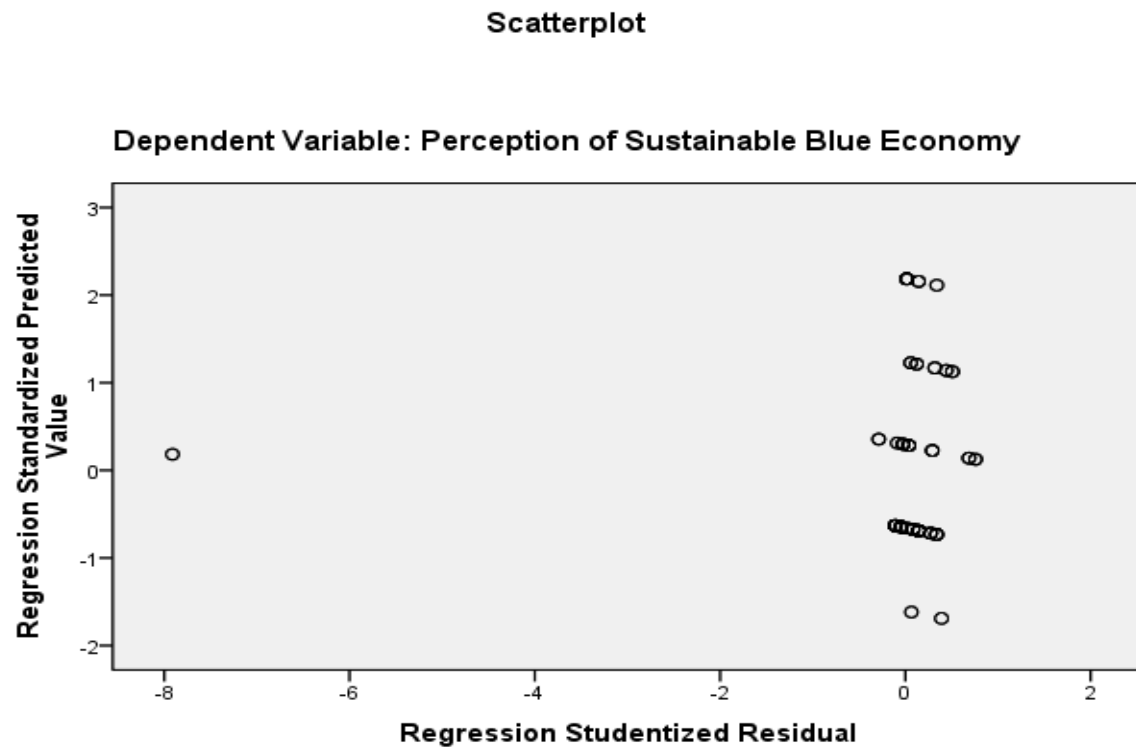


Figure 4.4: Scatter-plot
Source: Field Data, 2024

4.8 Regression Analysis

Regression analysis was carried out to find out the level to which the dependent variable could be predicted by the independent variables. In Table 4.8, an R^2 value of 0.951 means that approximately 95.1% of the variance in perception of sustainable blue economy could be explained by the combination of challenges and opportunities for effective stakeholder participation in the coastal region's blue economy development initiatives, socio-economic and ecological effects of stakeholder participation on sustainable blue economic development and, level of stakeholder engagement in the blue economy. The model was strong and had high predictive power.

Table 4.8: Model Summary

Model Summary^b				
Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	.975 ^a	.951	.950	.24174
a. Predictors: (Constant), Challenges and Opportunities for Effective Stakeholder Participation in the Coastal Region's Blue Economy Development Initiatives, Socio-Economic and Ecological effects of Stakeholder Participation on Sustainable Blue Economic Development, Level of Stakeholder Engagement in the Blue Economy.				
b. Dependent Variable: Perception of Sustainable Blue Economy				

Source: Field Data, 2024

Analysis of Variance (ANOVA) shows that the joint effect of the independent variables could statistically and significantly predict perception of sustainable blue economy ($F=837.506$, $p<0.05$). The model was also a good fit for the data.

The F-value (837.506) represents the ratio of the variability explained by the independent variables to the variability due to random chance. A high F-value suggests a stronger predictive power of the independent variables indicators on perceptions of sustainable blue economy. The low p-value (<0.05) indicates that the observed F-value is statistically significant, meaning the joint effect is unlikely to have occurred by chance.

Table 4.9: Analysis of Variance

ANOVA^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	146.823	3	48.941	837.506	.000 ^a
	Residual	7.538	129	.058		
	Total	154.361	132			

a. Predictors: (Constant), Challenges and Opportunities for Effective Stakeholder Participation in the Coastal Region's Blue Economy Development Initiatives, Socio-Economic and Ecological effects of Stakeholder Participation on Sustainable Blue Economic Development, Level of Stakeholder Engagement in the Blue Economy

b. Dependent Variable: Perception of Sustainable Blue Economy Development

Source: Field Data, 2024

All three indicators of the independent variable show statistically significant associations with the dependent variable, as indicated by their respective t-values and p-values ($t = 0.769$, $p < 0.05$; $t = 42.845$, $p < 0.05$; $t = 2.361$, $p < 0.05$) for Level of Stakeholder Engagement in the Blue Economy; Socio-Economic and Ecological effects of Stakeholder Participation on Sustainable Blue Economic Development and; Challenges and Opportunities for Effective Stakeholder Participation in the Coastal Region's Blue Economy Development Initiatives respectively. The statistically significant associations suggest that the level of stakeholder engagement, socio-economic and ecological effects of stakeholder participation, and the challenges and opportunities for effective stakeholder participation all play crucial roles in influencing perceptions of sustainability in the blue economy development in Kenya.

The standardized regression coefficients, provides insights into the relative importance of each indicator variable in contributing to perceptions sustainability of blue economy. The high coefficient (0.977) for socio-economic and ecological effects suggests that this variable has the

strongest influence on perceptions of sustainable blue economy development, followed by challenges and opportunities (0.048) and level of stakeholder engagement (0.018).

Based on this analysis it implies that policy-maker and stakeholders should prioritize enhancing stakeholder participation, maximize socio-economic and ecological effect, and address challenges while leveraging opportunities in the blue economy development initiatives. Therefore, strategies aimed at improving perceptions of sustainability in blue economy development should consider these key factors and tailor interventions accordingly.

Table 4.10: Regression Coefficients

Coefficients^a		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		Beta (β)	Std. Error	Beta (β)		
1	(Constant)	.051	.064		.784	.004
	Level of Stakeholder Engagement in the Blue Economy	.015	.020	.018	.769	.004
	Socio-Economic and Ecological effects of Stakeholder Participation on Sustainable Blue Economic Development	.995	.023	.977	42.845	.000
	Challenges and Opportunities for Effective Stakeholder Participation in the Coastal Region's Blue Economy Development Initiatives	.046	.019	.048	2.361	.020

a. Dependent Variable: Perception of Sustainable Blue Economy Development

Source: Field Data, 2024

The regression analysis aimed to discern factors influencing perceptions of sustainable Blue Economy development, considering the level of stakeholder engagement, socio-economic and ecological effects of stakeholder participation, and challenges and opportunities for effective stakeholder involvement in Blue Economy initiatives. The regression coefficient Beta (β) indicates the change in the dependent variable (Perception of sustainable blue economy) for a one unit change in the independent variable indicator (Level of stakeholder participation, socio-economic and ecological effects or challenges and opportunities). While t-value assess the significance of the regression coefficient.

Results indicated that the level of stakeholder engagement in the Blue Economy had a moderate positive significant effect on perceptions of sustainable blue economy development (β coefficient=0.015, t-value =0.769, $p < 0.004$). On the other hand the socio-economic and ecological effects of stakeholder participation demonstrated a highly significant positive relationship with these perceptions (β coefficient = 0.995, t-value = 42.845, $p < 0.001$). Additionally, challenges and opportunities for effective stakeholder participation were found to significantly influence perceptions (β coefficient = 0.046, t-value = 2.361, $p = 0.020$), suggesting that overcoming barriers and leveraging opportunities in stakeholder engagement can shape perceptions of Blue Economy sustainability.

Therefore, the study rejects the null hypothesis that there is no statistically significant relationship between stakeholder participation and sustainable Blue Economy development in Kenya and adopts the alternative hypothesis that there is statistically significant relationship between stakeholder participation and sustainable Blue Economy development in Kenya. The results indicate that this factor while not very strong had significant effect perceptions. The statistically significant coefficient underscores the importance of stakeholder engagement in influencing perceptions of sustainable blue economy. Thus policy-makers and stakeholders should prioritize initiatives aimed at increasing stakeholder engagement to foster more positive perceptions and promote sustainable blue economy practices. Strategies focussing on enhancing stakeholder participation, communication, and collaboration can contribute to improved stakeholder engagement and consequently more favourable perceptions of sustainable blue economy initiatives.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The chapter synthesizes the study's key findings, drawing conclusions based on the analyzed data. It presents an overview of stakeholder engagement in the Blue Economy, highlighting critical themes and patterns. Building on these insights, the chapter offers actionable policy recommendations aimed at enhancing stakeholder participation, addressing identified challenges, and maximizing the benefits of the Blue Economy. These recommendations are carefully aligned with the study's objectives and are designed to inform evidence-based decision-making for sustainable and equitable development in the coastal region.

5.2 Summary of the Findings

5.2.1 The Extent of Stakeholder Engagement in Current Marine Resource Management Practices within the Coastal Region of Kenya

The first objective of the study aimed to evaluate the level of stakeholder engagement in marine resource management practices within Kenya's coastal region, with a particular focus on the involvement of SSF. Findings from the study underscore the global recognition of stakeholder participation as crucial for sustainable Blue Economy development and marine resource management. Various countries, including Nigeria, Ghana, Namibia, and South Africa, have acknowledged the significance of stakeholder engagement in shaping marine policies and practices to promote ecological sustainability and economic growth. By adopting inclusive approaches that empower local communities and diverse interests, these nations strive to achieve a balance between human activities, economic development, and marine ecosystem preservation, aiming for long-term sustainability and prosperity.

Stakeholder participation is highlighted as a fundamental aspect of sustainable Blue Economy development and marine governance, as supported by the study respondents. Incorporating various stakeholders, including government agencies, industry players, environmental organizations, and local communities, is deemed essential for informed decision-making, social acceptance of policies, and achieving more sustainable outcomes. While stakeholder engagement enriches the decision-making process by bringing diverse perspectives and expertise to the table, challenges such as power imbalances, information asymmetry, and conflicting interests among stakeholders persist. Particularly, SSF in developing countries like Kenya face unique challenges due to lower bargaining power compared to those in developed nations, necessitating proactive measures to address these imbalances and ensure effective stakeholder participation in the coastal region's marine governance and Blue Economy development.

5.2.2 The Socio Economic and Ecological Effects of Stakeholder Participation on Sustainable Blue Economy Development Focusing on Small-Scale Fishers in Kenya's Coastal Region

The second objective of the study focused on analysing the socio-economic and ecological effects of stakeholder participation, particularly SSF, on sustainable Blue Economy development in the coastal region of Kenya. The findings indicated that involving SSF in decision-making processes led to a reduction in conflicts between SSF and other stakeholders, fostering ownership, enhancing regulatory compliance, and promoting responsible resource utilization. Community-based management measures were found to improve the economic well-being of SSF, resulting in higher income levels and stronger social networks. Similar positive effects were observed in other countries such as Ghana, South Africa, Eritrea, and Tanzania, where stakeholder participation contributed to the restoration of ecosystems, recovery of fish stocks, increased coral reef resilience, heightened marine biodiversity, and diversified income streams for fishing communities.

In the coastal region of Kenya, the study highlighted a growing awareness of the socio-economic and ecological implications of stakeholder participation, particularly in integrating SSF into marine resource management. This integration not only contributes to ecological sustainability but also brings substantial socio-economic benefits, including enhanced income diversification, improved market access, and the fostering of cohesive social communities. The study underscored the importance of stakeholder engagement in improving the livelihoods of local communities, thereby mitigating their involvement in crime and vulnerability to radicalization and recruitment into groups like Al-Shabaab. The participatory management of marine resources emerged as a catalyst for promoting coral reef health, preserving marine biodiversity, and exemplifying the harmonization of ecological and economic considerations within the Blue Economy framework. Integrating ecological considerations with socio-economic effects can lead to the development of holistic and effective strategies to achieve both ecological sustainability and enhanced economic prosperity within the context of the Blue Economy.

5.2.3 The Challenges and Opportunities for Effective Stakeholder Participation in the Coastal Region's Blue Economy Development Initiatives with Reference to Small-Scale Fishers in the Coastal Region of Kenya

The third objective of the study aimed to analyze the challenges and opportunities for effective stakeholder participation in the development of the Blue Economy in the coastal region of Kenya, with a specific focus on SSF. The findings emphasized that while effective stakeholder participation, particularly involving SSF, is crucial for sustainable and inclusive growth in the Blue Economy, various challenges and opportunities exist. One significant challenge identified was power imbalances, which disproportionately favour certain stakeholders such as government agencies or large corporations, thereby limiting the influence of smaller actors, including local communities and civil society groups. This imbalance can impede meaningful

participation and equitable decision-making, hindering the realization of sustainable development goals.

Additionally, the study highlighted the challenge of inadequate capacity and resources among stakeholders, particularly marginalized or vulnerable groups like SSF, which may lack the financial resources, technical expertise, or organizational capacity needed for effective participation. Legal and institutional structures were also identified as potential barriers to stakeholder participation, as regulatory environments that fail to recognize the rights and roles of different stakeholders may create hurdles to their involvement. Conflicting interests among stakeholders, including divergent economic, social, and environmental goals, further complicate the landscape, particularly when balancing economic development with environmental conservation. However, the study also identified opportunities for unlocking the full potential of sustainable development and economic prosperity, such as inclusive policies, capacity-building efforts, participatory training, and fostering partnerships between governmental bodies, NGOs, and the private sector. Transparent communication channels and policies recognizing the unique challenges and contributions of SSF were also highlighted as avenues to enhance their active involvement in shaping and benefiting from sustainable Blue Economy initiatives.

5.3 Conclusion

In conclusion, the study's findings reveal the global acknowledgement of the critical role of stakeholder participation, particularly among SSF, in achieving sustainable Blue Economy development and effective marine resource management. Countries such as Nigeria, Ghana, Namibia, and South Africa have recognized the importance of inclusive approaches, empowering local communities and diverse interests for long-term sustainability and prosperity. Stakeholder engagement is deemed fundamental for informed decision-making and social acceptance of policies, although challenges like power imbalances persist, especially for

SSF in developing countries like Kenya. Proactive measures are needed to address these imbalances and ensure effective stakeholder participation in the coastal region's marine governance and Blue Economy development.

Furthermore, the study highlights the positive socio-economic and ecological effects of stakeholder participation, particularly among SSF, on sustainable Blue Economy development in the coastal region of Kenya. Involving SSF in decision-making processes reduces conflicts, fosters ownership, enhances regulatory compliance, and promotes responsible resource utilization. Similar positive effects were observed in other countries, emphasizing the interconnectedness of ecological sustainability and economic prosperity within the Blue Economy framework. The integration of SSF into marine resource management not only contributes to ecological sustainability but also brings substantial socio-economic benefits, including enhanced income diversification and improved market access.

Lastly, the study addresses the challenges and opportunities for effective stakeholder participation in the Blue Economy development of Kenya's coastal region, specifically focusing on SSF. Power imbalances, inadequate capacity and resources, and conflicting interests among stakeholders are identified as significant challenges that may impede meaningful participation and equitable decision-making. However, opportunities such as inclusive policies, capacity-building efforts, participatory training, and partnerships between governmental bodies, NGOs, and the private sector are seen as avenues to unlock the full potential of sustainable development and economic prosperity. Transparent communication channels and policies recognizing the unique challenges and contributions of SSF are emphasized to enhance their active involvement in shaping and benefiting from sustainable Blue Economy initiatives.

5.4 Recommendations

5.4.1 Policy Recommendations

Based on the study findings, several policy recommendations are proposed to enhance stakeholder participation and sustainable Blue Economy development in the coastal region of Kenya, particularly focusing on SSF:

- a. The government, both at the national and county levels, should establish community engagement platforms such as regular meetings, workshops, and forums where SSF can actively participate in decision-making processes related to Blue Economy development initiatives. These platforms would provide opportunities for SSF to voice their concerns, share traditional knowledge, and contribute to the development of policies and strategies.
- b. There is need to foster partnerships between SSF, government agencies, NGOs, research institutions, and other relevant stakeholders. Collaborative partnerships will enhance information sharing, resource mobilization, and the implementation of inclusive Blue Economy projects that address the needs of fishers while promoting sustainability.
- c. There is need for capacity-building programs tailored to the specific needs of SSF. These programs can include training on sustainable fishing practices, marine resource management, entrepreneurship, financial literacy, and market access strategies. Building the capacity of SSF empowers them to actively engage in Blue Economy activities and enhances their resilience to socio-economic challenges.
- d. There is a need to strengthen market linkages for SSF to access domestic and international markets for their products. Supporting value addition initiatives such as fish processing, storage facilities, and quality certification will enhance the competitiveness of fisher produce and increase income opportunities along the value chain. Moreover, promoting community-based coastal resource management approaches that empower SSF to participate in conservation efforts and sustainable resource utilization is crucial. Engaging fisher

associations, community-based organizations, and local authorities in co-management arrangements can jointly address issues such as overfishing, habitat degradation, and climate change adaptation.

5.4.2 Recommendations for Further Research

This study recommends for further research:

- a. Evaluating the effectiveness of current policies, regulatory frameworks, institutional arrangements, and governance mechanisms in promoting inclusive stakeholder participation and sustainable resource management in Kenyan blue economy.
- b. Comprehensive investigation into the transformation of BMUs into economically viable entities. This research could offer practical recommendations to empower BMUs as effective contributors to local economies while ensuring sustainable coastal resource management.
- c. The effectiveness of community-based co-management models to enhance SSF' participation in decision-making and improve governance outcomes.

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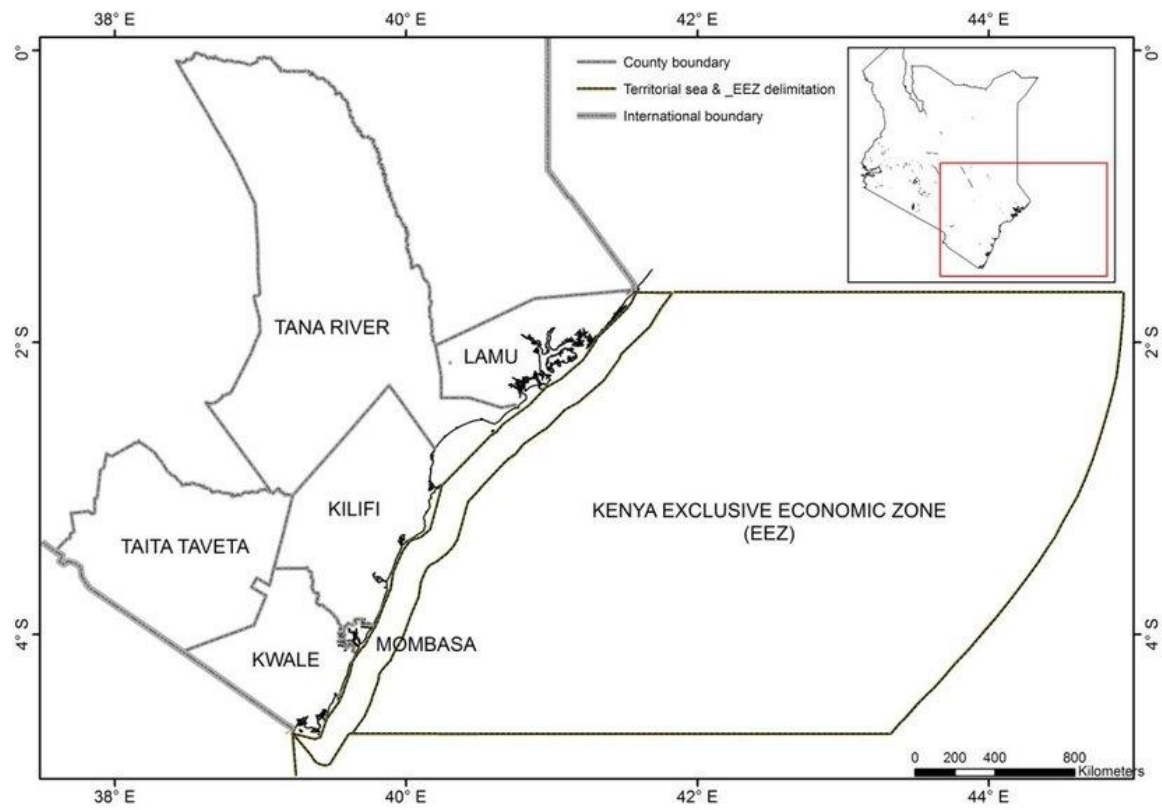
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APPENDICES

Appendix I: Map of the Study Area



Appendix II: Questionnaire

Welcome to our questionnaire on 'Stakeholder Participation for Sustainable Blue Economy Development in Kenya: A Case Study of Small-Scale Fishers in the Coastal Region.' Your valuable insights will help us understand the challenges and opportunities for Small-Scale Fishers in contributing to the sustainable growth of the Blue Economy in Kenya's coastal areas.

Section A: Demographic Information

1. Indicate your age

2. What is your Gender?

Male ☐ Female ☐ Prefer not to say ☐

3. What is your highest level of Education

Primary ☐ Secondary ☐ College Certificate ☐ Diploma ☐ Degree ☐ Masters ☐ PhD
☐ Other (Specify).....

4. Name your Profession/Occupation

Small-Scale Fishers ☐ Community Member ☐ Non-Governmental Organizations (NGOs)
Official ☐ Government Officer ☐ Academic ☐ other (specify) ☐

B: Level of Stakeholder Engagement in the Blue Economy

5. Kindly **rate your level of agreement** with the statements presented in the table below on a scale of: 1 = Strongly Agree, 2 = Agree, 3 = Neutral, 4 = Disagree, 5=Strongly Disagree

Likert Scale Statements	1 = SA	2 = A	3 = N	4 = D	5 = SD	Total
Stakeholder involvement vital for effective marine resource management in the Blue Economy.						
Diverse stakeholders improve decision-making in the Blue Economy sector.						
Genuine, collaborative engagement enhances Blue Economy stakeholder participation.						
Power imbalances and conflicting interests complicate stakeholder engagement.						
Policies recognizing traditional knowledge and promoting inclusivity are crucial.						
Local communities and small-scale fishers are pivotal for sustainable development.						
Understanding small-scale fishers' engagement in Blue Economy processes is lacking.						

6. What is the extent of stakeholder engagement in the current marine resource management practices within the coastal region of Kenya, focusing on the involvement of Small-Scale Fishers?

.....

.....

C: Socio-Economic and Ecological effects of Stakeholder Participation on Sustainable Blue Economic Development with Reference to Small-Scale Fishers in the Coastal Regions

7. Kindly **rate your level of agreement** with the statements presented in the table below on a scale of: 1 = Strongly Agree, 2 = Agree, 3 = Neutral, 4 = Disagree, 5=Strongly Disagree

Likert Scale Statements	1 = SA	2 = A	3 = N	4 = D	5 = SD	Total
Stakeholder involvement, including small-scale fishers, boosts responsibility in Blue Economy resource use.						
Small-scale fishers' participation crucial for biodiversity protection and socio-economic well-being.						
Community-based management improves coastal fish populations, coral reefs, income, and social networks.						
Engaging small-scale fishers in conservation can diversify income and improve well-being.						

Involving small-scale fisher's aids fish stock recovery and livelihood preservation.						
Holistic approach needed for ecological sustainability and economic prosperity in the Blue Economy.						

8. What are the socio-economic and ecological effects of stakeholder participation on sustainable Blue Economy development in the coastal region of Kenya with reference to Small-Scale Fishers' involvement?

.....

E: Challenges and Opportunities for Effective Stakeholder Participation in the Coastal Region's Blue Economy Development Initiatives

9. Kindly **rate your level of agreement** with the statements presented in the table below on a scale of: 1 = Strongly Agree, 2 = Agree, 3 = Neutral, 4 = Disagree, 5=Strongly Disagree

Likert Scale Statements	1 = SA	2 = A	3 = N	4 = D	5 = SD	Total
Power imbalances challenge stakeholder participation in the Blue Economy.						
Limited resources hinder effective stakeholder engagement in Blue Economy decisions.						
Legal structures affect stakeholder participation in the Blue Economy.						

Conflicting interests hinder stakeholder engagement in balancing development and conservation.						
Transparent communication and collective decision-making can overcome mistrust among stakeholders.						
Awareness campaigns and clear communication foster transparency and collaboration in stakeholder engagement.						

What challenges and opportunities exist for effective stakeholder participation in the initiatives for sustainable Blue Economy development within the coastal region of Kenya?

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F: Sustainable Blue Economy Development in Kenya

10. Kindly **rate your level of agreement** with the statements presented in the table below on a scale of: 1 = Strongly Agree, 2 = Agree, 3 = Neutral, 4 = Disagree, 5=Strongly Disagree

Likert Scale Statements	1 = SA	2 = A	3 = N	4 = D	5 = SD	Total
Stakeholder participation addresses power imbalances in Kenya's Blue Economy.						

Small-scale fishers in Kenya lack resources for meaningful Blue Economy engagement.						
Kenya's regulations facilitate stakeholder involvement in the Blue Economy.						
Balancing economic and environmental interests poses challenges in Kenya's Blue Economy.						
Transparent communication fosters trust among stakeholders in Kenya's Blue Economy.						
Awareness campaigns improve stakeholder engagement in Kenya's coastal region.						
Inclusive policies and capacity-building enhance stakeholder engagement, especially for small-scale fishers in Kenya.						

11. Do you think there is sustainable blue economy development in Kenya? If yes, please explain your response.

.....

THANK YOU

Appendix III: Interview Guide

A: Introduction:

My name is Robert Tirop Birech and I am conducting the interview to gather insights and opinions on sustainable Blue Economy development, with a focus on stakeholder participation, socio-economic effects, ecological effects, challenges, and overall perceptions.

B: Extent of Stakeholder Engagement

- What, in your view, is the extent of stakeholder engagement in the current marine resource management practices within the coastal region of Kenya, particularly concerning the involvement of Small-Scale Fishers?
- Can you provide examples or specific instances of stakeholder engagement in marine resource management in this region?

C: Socio-Economic and Ecological effects of Stakeholder Participation

- In your opinion, what are the socio-economic and ecological effects of stakeholder participation on sustainable Blue Economy development in the coastal region of Kenya, with reference to the involvement of Small-Scale Fishers?
- Can you share any specific examples or observations related to these socio-economic and ecological effects?

D: Challenges and Opportunities

- From your perspective, what are some of the key challenges that Small-Scale Fishers face when it comes to participating in Blue Economy initiatives?

- In your view, what potential opportunities exist to facilitate and enhance stakeholder participation in sustainable Blue Economy development initiatives along the coastal region of Kenya?

E: Perception of Sustainable Blue Economy

- Finally, do you think there is sustainable Blue Economy development in Kenya?
- Can you elaborate on the factors that influence your perception of the current state of sustainable Blue Economy in the coastal region?
- Are there any specific areas where you believe improvements are needed?

Thank You

Appendix IV: University Research Authorization Letter

Telephone: 051- 851141
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National Defence University-Kenya
P O Box 3812 – 20100
Nakuru, Kenya

23 November 2023

TO WHOM IT MAY CONCERN

RE: RESEARCH AUTHORISATION

Col Robert Tirop Birech of National Defence College, a College of National Defence University-Kenya, successfully defended his Master of Arts research proposal and has been allowed to proceed to the field to collect data for his thesis.

The research's topic is, "**Stakeholder Participation for Sustainable Blue Economy Development: Case Study of Small-Scale Fishers in the Coastal Region of Kenya**". The Candidate will be conducting the field work with effect from December 2023.

The purpose of this letter, therefore, is to request you to accord him any necessary assistance to successfully conduct the research.

Your continued assistance is highly appreciated.

Yours faithfully,

Prof Anne W T Muigai
Deputy Vice-Chancellor
National Defence University-Kenya

Appendix V: NACOSTI Permit

 REPUBLIC OF KENYA	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
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This is to Certify that Mr. Robert Tirop Birech of National Defence University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Lamu, Mombasa on the topic: STAKEHOLDER PARTICIPATION FOR SUSTAINABLE BLUE ECONOMY DEVELOPMENT: CASE STUDY OF SMALL-SCALE FISHERS IN THE COASTAL REGION OF KENYA for the period ending : 15/December/2024.	
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