



The Role of Small Fisheries on Economic Growth in: Case Study Mogashu, Somalia

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Abstract

The paper critically examines the role of small fisheries in Somalia's economic growth, highlighting their significance in income generation, employment, and food security. With a coastline of over 3,300 kilometers, small-scale fisheries support thousands of coastal communities, stimulate subsidiary industries, and contribute to foreign exchange. The study identifies socio-economic benefits such as job creation and sustainable practices, while also addressing challenges like overfishing, climate change, and inadequate infrastructure. The research is guided by four objectives: assessing the impact of small fisheries on local employment and economic growth; examining their role in international trade; investigating their contribution to livelihoods; and evaluating their impact on GDP. By analyzing current data and case studies, the study emphasizes the need to enhance the capacity of small fisheries for greater economic resilience and proposes policy recommendations. Ultimately, it argues that supporting small fisheries is crucial for sustainable development and economic stability in Somalia.

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Keywords: Role of small fisheries, economic growth

1. Introduction

This chapter highlighted the following sections; Background of the study, problem statement of the study, Research objectives, Research questions, Scope of the study, Significance of the study and conceptual frame work of the study

1.1. Background of the study

The fishery sector plays a crucial role in economic growth through its contributions to GDP, employment, trade, and livelihoods. By focusing on sustainable practices, countries can maximize the benefits of fisheries while ensuring the health of marine ecosystems, (FAO, 2020) ^[10]. Fisheries significantly contribute to national GDP, particularly in coastal countries. The Food and Agriculture Organization (FAO) reports that fisheries and aquaculture contribute around 1.3% to global GDP (FAO, 2020) ^[10]. In developing nations, this figure can be much higher, showcasing the sector's importance in economic development. The fishery sector provides millions of jobs worldwide, particularly in rural and coastal areas. According to the FAO, about 59.6 million people were employed in the fisheries sector in 2018, with further indirect employment opportunities in related industries (FAO, 2020) ^[10]. This employment is crucial for poverty alleviation and economic stability.

For the Employment Generation, this employment is crucial for poverty alleviation and economic stability. It is also significant for the International Trade and Exports and takes part a numerous important for Fisheries which play a vital role in international trade, with fish and fish products being major export commodities for many countries. In 2018, global fish exports were valued at approximately \$164 billion, highlighting the economic significance of countries. The sector supports not only fishers but also those involved in processing, distribution, and retail. Improved livelihoods through fisheries can lead to enhanced economic growth and community development.

Economic growth refers to the increase in the production of goods and services in an economy over a specific period, typically measured by the percentage change in real Gross Domestic Product (GDP). This measure reflects the overall economic performance and the increase in a nation's wealth. For the Measurement Economic growth is usually quantified by changes in

real GDP, which adjusts for inflation and provides a more accurate representation of actual growth (Mankiw, 2014) ^[5]. Fish farming has been practiced in different parts of the World like Europe, Canada, East Asia, China, Africa and developing Countries like Nigeria (FAO 2009) ^[10]. It has been in practice since the ancient Civilization of Egypt and China. More than 120 Million People throughout the World are estimated to depend on fish for all or part of their income (http://wif.jcs.net/icst_2006/jsp_files/wif/home_jsp_2006). Worldwide harvest of fishery products has steadily increased to meet the growing global demand for Sea food (Anderson, 2009). Over 4000 Aquatic species are harvested Worldwide, 80 % of the World's fisheries are located in the Coastal and Ocean environment and nearly 20 % are found in the inland freshwater fisheries (P. D. Rabo, D. U. Zarmai, B. A. Jwanya, S. H. Dikwahal, 2014) ^[15]

There are many Factors Contributing to Growth such as Investment: Increased investment in physical capital, such as infrastructure and technology, leads to enhanced productivity (Barro & Sala-i-Martin, 2004) ^[3]. Labor Force: Growth in the labor force, through population increases or enhanced skills, contributes to higher output. Technological advancements and innovations improve production efficiency and create new markets (Schumpeter, 1934) ^[8]. The availability and effective utilization of natural resources significantly impact growth, especially in resource-rich nations.

Globally, Fisheries play a significant role in contributing to economic growth in various countries, including the United States and Norway. Here are key insights into how fisheries impact economic growth in these nations, United States. The fisheries sector in the USA contributes approximately \$253 billion annually to the economy, which includes commercial fishing, recreational fishing, and seafood processing. This sector supports over 1.7 million jobs nationwide, providing essential employment opportunities, particularly in coastal communities. The National Oceanic and Atmospheric Administration (NOAA) emphasizes that sustainable fisheries management has led to increased fish stocks and higher economic returns, underscoring the importance of effective regulatory frameworks for economic growth. Norway In Norway, the fisheries and aquaculture sectors are crucial to the economy, contributing about 1.5% to its GDP and employing over 40,000 people directly. Norway is one of the world's largest exporters of seafood, with fish exports valued at approximately \$10 billion annually The country's commitment to sustainable fishing practices and innovation in aquaculture has allowed it to maintain a competitive edge in global markets while ensuring long-term resource sustainability (National Marine Fisheries Service, 2020) ^[21].

In Africa, Fisheries play a crucial role in the economic development of various African countries, significantly contributing to employment, food security, and export revenues. Here are key insights into the impact of fisheries on economic growth in Kenya and Tanzania:

Kenya Economic Contribution: The fisheries sector contributes approximately 0.5% to Kenya's national GDP. **Employment:** It employs over 700,000 people directly, with many more involved in related industries, making it vital for livelihoods, especially in coastal communities. **Food Security:** The fishing industry is essential for food security and nutrition in these areas. **Government Initiatives:** The Kenyan government has implemented policies to enhance sustainable fishing practices and improve the livelihoods of fishers. There are also initiatives aimed at boosting

aquaculture to increase fish production and reduce pressure on wild stocks [FAO, 2020; Mungai *et al.*, 2019] ^[10]. **Tanzania Economic Contribution:** Tanzania's fisheries sector accounts for about 1.7% of the national GDP. **Employment:** It provides employment for over 1.5 million people, particularly in rural areas where it serves as a primary source of income and nutrition. **Sustainable Practices:** The government has invested in sustainable fisheries management practices to combat overfishing and improve the health of fish stocks. **Aquaculture Development, Initiatives to develop aquaculture are being promoted to enhance food security and economic resilience** [FAO, 2020; Msalilwa, 2021] ^[10]. Overall, both Kenya and Tanzania recognize the importance of sustainable fisheries management and aquaculture development as essential strategies for enhancing economic growth and food security. (Horigue, V., Möllmann, C., Maina, J., & Schiele, , 2022)

The fisheries sector in Somalia has significant potential for boosting economic growth, food security, and job creation. It contributes about 5% to the national GDP and employs around 200,000 people directly, with many more in related activities like processing and trade. This sector is essential for poverty alleviation in coastal communities, where fishing is often a primary income source. However, the fisheries sector faces challenges such as overfishing, illegal fishing, and inadequate infrastructure. To unlock its full potential, improvements in regulation and investment in sustainable practices are necessary. Establishing effective fisheries management systems and investing in aquaculture are crucial for ensuring long-term sustainability and enhancing economic growth. (Cashion, T., Glaser, S. M., Persson, L., Roberts, P. M., & Zeller, D. , 2018).

Problem Statement

Somalia has one of the longest coastlines in Africa, stretching about 3,333 kilometers along the Indian Ocean and the Gulf of Aden. This coastline offers opportunities for maritime trade, fishing, and tourism, but the collapse of the Somali government in 1991 severely impacted institutional frameworks, particularly in fisheries management. This breakdown has led to food insecurity and undermined livelihoods in coastal communities. Despite the potential for economic growth in the fisheries sector, several challenges exist. **Overfishing and Resource Depletion, Illegal and unsustainable fishing practices have depleted fish stocks, threatening local livelihoods and the sector's viability.** **Lack of Infrastructure and Investment:** Insufficient facilities for landing and processing fish, along with poor transportation networks, limit market access and the potential for aquaculture development. **Insecurity and Governance Issues.** Ongoing conflict and weak governance hinder effective fisheries management, allowing illegal fishing to flourish. **Limited Market Access:** Many fishers struggle to reach local and international markets, affecting their income due to poor supply chain infrastructure and marketing knowledge. **Food Security Concerns:** The fisheries sector is vital for food security, providing essential protein sources for many communities, Overall, these challenges impede the development of sustainable fisheries, despite the opportunities presented by Somalia's rich marine resources. The study aims to explore the fisheries sector's role in Somalia's economic growth. (Hassan, M. H., & Gichinga, D. L., 2018) ^[18].

1.2. Research objectives

The general objective of this study is to role of fishery On Economic growth in Somalia.

1.2.1. Specific Objectives

The specific objectives for the study will be;

- 1 To determine the role of small fisheries local employment on Economic growth in Somalia
- 2 To examine the role of fishery of international trade export on Economic growth in Somalia
- 3 To investigate the role of small fisheries Livelihoods Improvement on Economic growth in Somalia
- 4 To find out the role of small fisheries in GDP on Economic growth in Somalia

1.3. Research questions

1. What is the role of small fisheries local employment on Economic growth in Somalia?
2. What is the role of fishery of international trade export On Economic growth in Somalia?
3. What is the role fishery Livelihoods Improvement on Economic growth in Somalia?
4. What is the role of fishery of GDP on Economic growth in Somalia?

1.4. Significant of the Study

The research will provide insights into the role of fisheries and their impact on economic growth in Somalia. The findings will assist the federal government of Somalia in assessing the significance of fisheries within the country. This will enable informed decision-making aimed at enhancing economic growth and effectively addressing poverty for all citizens.

Additionally, the study's results are crucial for legislators, as they allow policymakers to evaluate the contribution of fisheries to economic growth and ensure that efforts are directed toward fostering overall economic development. The education sector in Somalia has suffered due to the effects of ongoing upheavals. Without the necessary

infrastructure and government support, educational development has largely depended on community initiatives. Currently, with the help of non-state actors such as local and international NGOs, as well as community-based organizations (CBOs), local communities are leading the recovery efforts in economic growth.

1.5. Scope of the Study

The scope of the study is role of fishery On Economic growth in Somalia.

1.5.1. Content Scope

The content scope of this study confines to identifying role of fishery On Economic growth in Somalia

1.5.2. Time cope

The study will conduct from September 2024 up to October 2024.

1.6. Operational Definitions

A **fishery**: refers to a specific place or system where fish are harvested for commercial, recreational, or subsistence purposes. It encompasses the entire range of activities associated with the catching, processing, and selling of fish and other aquatic organisms, including management practices aimed at sustaining fish populations and their ecosystems. (FAO, 2020) ^[10].

Economic Growth: Economic growth denotes the rise in the output of goods and services within an economy over a specific period, usually quantified by the percentage change in real Gross Domestic Product (GDP). It serves as a vital measure of economic performance and plays an essential role in enhancing living standards and overall societal well-being. Typically, economic growth is assessed through real GDP, which takes inflation into account, thereby presenting a clearer picture of an economy's condition Real GDP is modified to show the value of goods and services generated during a particular timeframe, providing valuable insights into economic activity. (Mankiw, 2014) ^[5].

Conceptual Framework

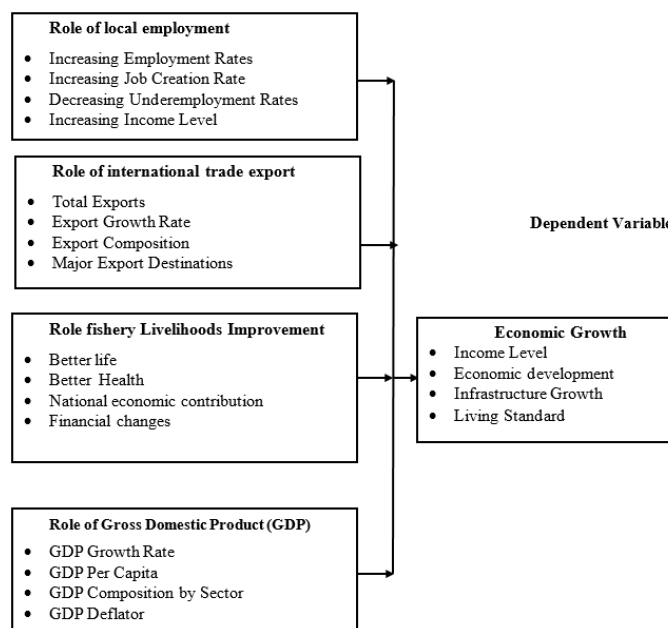


Fig 1: The Conceptual Framework

2. Literature Review

2.1. Introduction

This research reviewed relevant literature to explore the Role of small fisheries On Economic growth in Somalia. This chapter develops theoretical review linking the variables to theories and objectives of this study. The literature review is undertaken to reveal the conceptual framework and empirical review in respect of each variable. A critical review was also discussed to collate the important aspects of literature on the variables.

2.2. Theoretical Literature Review

The theoretical review helps to extract, comprehend and ground key concepts and variables of the study. It explores past studies that relate to the objectives and constructs conceptualized in the study. According to Munday theoretical framework introduces and describes the theory which explains why the research problem under study exists. A theoretical framework consists of concepts, together with their definitions, and existing theory/theories that are used for the particular study.

2.2.1. Ecosystem-Based Fisheries Management (EBFM) theory

Ecosystem-Based Fisheries Management is a vital approach that seeks to integrate ecological, social, and economic factors in fisheries management. By focusing on the health of entire ecosystems, EBFM aims to ensure the sustainability of fish stocks and the communities that rely on them, Ecosystem-Based Fisheries Management (EBFM) is a comprehensive approach to managing fisheries that considers the entire ecosystem, including the interactions among species, their habitats, and human influences. This management strategy aims to maintain healthy, productive, and resilient marine ecosystems to ensure they can provide the services that communities depend on the important Key Features of EBFM are one: Holistic Approach: EBFM recognizes that fish populations are part of a larger ecosystem and that management should consider all interactions within that ecosystem rather than focusing on a single species in isolation. This includes understanding the effects of environmental changes, pollution, and habitat degradation on fish populations. Two Sustainability Goals: The primary goal of EBFM is to maintain ecosystems in a healthy state, which in turn supports sustainable fisheries. This involves balancing ecological needs with human demands for fishery resources. Three Integrated Ecosystem Assessments: EBFM utilizes integrated ecosystem assessments (IEAs) to evaluate the status of ecosystems and the impacts of various activities. These assessments help managers make informed decisions by predicting future conditions under different management scenarios four Stakeholder Engagement: EBFM emphasizes the importance of involving various stakeholders, including local communities, fishers, and conservationists, in the management process. This collaborative approach helps to balance social, economic, and ecological needs and five Adaptive Management: EBFM is designed to be adaptive, allowing for changes in management practices based on new scientific information and changing environmental conditions. This flexibility is crucial for responding to uncertainties and challenges in fisheries management. The Benefits of EBFM are Improved Decision-Making: By considering the full range of ecosystem interactions, EBFM enhances the ability to predict the outcomes of management

decisions, leading to more effective and sustainable practices. Ecosystem Resilience: Maintaining ecosystem health contributes to resilience against environmental changes, such as climate change, which can significantly impact fish populations and habitats. Economic Viability: Sustainable management practices can lead to more stable fish populations, which benefits the fishing industry and local economies.

This theory is also with a Challenges of EBFM which is Complexity of Ecosystems: The interconnected nature of ecosystems can complicate management efforts, requiring extensive data and understanding of various ecological interactions and Conflicting Interests: Balancing the diverse interests of stakeholders can be challenging, necessitating effective communication and negotiation strategies.

2.2.2. Biogeography Theory

Biogeography theory explores the distribution of species and ecosystems across geographic spaces and through geological time, integrating ecological and evolutionary concepts. Central to this theory is the Island Biogeography Theory, developed by Robert MacArthur and Edward O. Wilson, which posits that species richness is determined by the balance between immigration and extinction rates, influenced by island size and distance from the mainland. This framework has profound implications for understanding biodiversity patterns, informing conservation strategies, and managing ecosystems in the face of environmental change. By applying biogeographical principles, researchers can better predict species distributions and develop effective conservation measures to protect and restore biodiversity. (MacArthur, R. H., & Wilson, E. O. 1967) ^[25].

Biogeography theory explains the Conservation Planning: Designing Protected Areas: Biogeography informs the design of nature reserves by emphasizing the importance of size and connectivity between habitats. Larger and well-connected reserves can better support species populations and enhance biodiversity. it is also Biodiversity Assessment, Evaluating Species Richness: The principles of biogeography help in assessing species richness in different regions, guiding conservation efforts and prioritizing areas for protection based on their biodiversity value. (MacArthur, R. H., & Wilson, E. O. 1967) ^[25]. Restoration Ecology, Habitat Restoration: Understanding species distributions and ecological interactions allows for more effective restoration of degraded habitats, ensuring that restored areas can support viable populations. Invasive Species Management, Predicting Invasion Patterns: Biogeography theory aids in predicting how invasive species might spread into new areas, helping in the formulation of management strategies to mitigate their impacts. Climate Change Studies, Assessing Vulnerability: By understanding how species distributions are affected by climate factors, biogeography can help identify species and ecosystems that are most vulnerable to climate change, guiding conservation priorities. Ecological Research, understanding Ecological Dynamics: Biogeographical principles are essential for studying ecological processes, such as species interactions, community structure, and the evolutionary history of species in relation to their environments. (MacArthur, R. H., & Wilson, E. O. 1967) ^[25].

2.2.3. Adaptive Management theory

Adaptive management is a dynamic and iterative approach to managing natural resources that emphasizes learning from

management actions and adjusting practices based on outcomes and new information. This framework is particularly valuable in the context of ecological systems, where uncertainty and complexity are prevalent. The core principles of adaptive management include:

1. **Learning through Action:** Adaptive management treats management interventions as experiments, allowing managers to learn about the ecological system's responses to various actions. This process involves careful monitoring of outcomes to inform future decisions.
2. **Iterative Process:** The approach is characterized by a continuous cycle of planning, implementing, monitoring, and adjusting management strategies. This iterative nature ensures that management practices evolve in response to new data and changing environmental conditions.
3. **Integration of Knowledge:** Effective adaptive management requires the integration of scientific knowledge with local stakeholder input. Engaging stakeholders in the decision-making process enhances the relevance and acceptance of management actions, fostering a collaborative environment for learning and adaptation.
4. **Focus on Uncertainty:** Adaptive management explicitly acknowledges the uncertainties inherent in ecological systems. By embracing this uncertainty, managers can develop flexible strategies that are better suited to cope with unexpected changes and challenges.
5. **Framework for Decision-Making:** The adaptive management framework provides a structured approach to decision-making that prioritizes learning and adaptation. It encourages managers to set clear objectives, identify management alternatives, and evaluate the effectiveness of actions based on empirical evidence.

Despite its potential benefits, the implementation of adaptive management faces challenges, such as the need for robust monitoring systems, adequate funding, and the commitment of stakeholders to engage in the learning process. Addressing these challenges is crucial for realizing the full potential of adaptive management in achieving sustainable resource management outcomes.

2.2.4. Role of international trade export

Around the world, small-scale fisheries (SSF) are common and extremely significant. They are dynamic, diversified, and decentralized. The variety of gear types utilized, the animal groups targeted, and the many human societies from throughout the world that depend on these fisheries all contribute to their diversity. Due to the large number of fishermen, the numerous ports and seaports, and the possibility that these fisheries may operate in nations or areas with little government involvement, where fishermen must make their own decisions, SSF are decentralized. Lastly, because fishermen frequently switch between species, gear types, or even livelihoods based on the production and availability of species in nearshore seas, these fisheries are dynamic. Although both large- and small-scale fisheries (Elena M. Finkbeiner, 2015) ^[20] Since the globe is becoming more interconnected than ever before global markets are becoming more and more significant for social, environmental, and economic results on a variety of levels.

Globalization accelerates the movement of people, information, and goods across borders, resulting in more economically interconnected markets and frequently fewer and less diverse market participants.

2.2.5. Role of Gross Domestic Product (GDP)

The small-scale fisheries sector plays an important role in contributing to the livelihoods of the poorest sectors of society in diverse ways, providing employment, fish for consumption and financial revenues from the sale of fish. This contribution can be further enhanced when fisheries are managed both sustainably and equitably. We refer to this as 'improved' fisheries management. As many as 36 million people worldwide are estimated to be involved in the fisheries and aquaculture sector In the Western Indian Ocean (WIO) region (Comoros, Kenya, Madagascar, Mauritius, Mozambique, Réunion, Seychelles, Somalia, South Africa and Tanzania. fisheries play an important role in national economies, providing from 5.0% to 99.1% of national agricultural exports as well as sources of employment, income and animal protein. In many of the PRSPs, however, fisheries have been sidelined or have not received treatment in accordance with their important contribution to the livelihoods of some of the poorest sectors of society. Small-scale fisheries in Somalia play a crucial role in the country's economy and contribute significantly to the Gross Domestic Product (GDP). These fisheries provide livelihoods for many coastal communities, supporting food security and local economies. Small fishers often engage in subsistence fishing, which is vital for nutrition and sustenance in rural areas. Additionally, the fisheries sector in Somalia has the potential for growth and development, particularly through sustainable practices and improved management. Enhancing the capacity of small fishers can lead to increased fish production, which can further contribute to GDP and create job opportunities.

2.2.6. Role of Small Fisheries on Local Employment

Statistics on international trade also show how little the fishing industry contributes to the economy. Fish imports made for 1.1% of the 2009 bill of food and farm imports, according to Kurien John and Lopez Rios Javier. In 2009, the share of fish in food and agricultural exports was approximately 0.7 percent of overall exports. Due to a lack of data, it is challenging to estimate the contribution to employment. An estimated 30,000 fulltime and 60,000 part-time individuals were directly engaged in fishing in 2005 (FAO Fishery Country Profile, 2005). Less than 1% of Somalis work in the fishing industry, and the majority of them engage in subsistence or small-scale fishing, according to Bergh. The FAO stated that in 2009, the average person consumed 3.1 kilogram of fish. It puts the nation at the bottom of the African fish consumption scale (average of 9.4 kg). The majority of fishing goods are supplied domestically, and Somalia is a net exporter in terms of volume. Supply is complemented by imports, although imports have sharply declined since 2006. However, it should be highlighted that these numbers are estimations and that there is a substantial amount of fishing that goes unreported in Somalia, which could cause apparent supply levels to understate the significance of fish in dietary preferences. When considering Somalia as a whole, the contribution of fisheries to food security is negligible. However, in Somalia's coastal regions and fishing towns, the fishing industry is a vital source of income. According to FAO estimates from 2009, fisheries

products make up just 3.1% of animal protein intake, which is significantly less than the average for Africa (19.1%). However, the amount of protein that people consume each day from fish is increasing gradually; in 2009, (COUNTRY REVIEW SOMALIA, 2014).

2.2.7. Role of Small Fisheries Livelihoods Improvement

The role of small fisheries in improving livelihoods for the Somali population is significant, given the country's rich marine resources and the challenges, faced by its fishing sector. The small fisheries sector in Somalia holds significant potential for improving livelihoods, but it faces numerous challenges that need to be addressed. Sustainable management practices, investment in infrastructure, and protection against illegal fishing are essential for realizing this potential and enhancing the resilience of Somali communities. **Employment Opportunities:** The small-scale fishing sector in Somalia employs over 70,000 people, contributing approximately \$135 million annually to the economy, which represents about 1-2% of the country's GDP. This sector provides crucial income for many families in a country where poverty is widespread. **Potential for Growth:** With its extensive coastline along the Indian Ocean and Gulf of Aden, Somalia has the potential to enhance its fishing industry significantly. However, this potential is often undermined by illegal foreign fishing and lack of infrastructure. **Illegal Fishing,** a major challenge for small fishers is the competition from illegal foreign fishing fleets, which have been estimated to account for about two-thirds of the total catch in Somali waters since the 1990s. This not only depletes local fish stocks but also undermines the livelihoods of local fishers. **Lack of Infrastructure:** Many small-scale fishers rely on outdated equipment and lack access to necessary resources such as spare parts and storage facilities. This hampers their ability to compete effectively and sustain their livelihoods. **Historical Context:** The transition from a predominantly nomadic lifestyle to fishing was initiated in the late 1970s to reduce vulnerability to droughts. However, the civil war and subsequent government collapse in 1991 severely disrupted the development of the fishing sector, leading to a lack of reliable fishery statistics and management. **Community Resilience:** Fishing cooperatives were established to help nomadic populations adapt to fishing. These cooperatives aimed to foster community resilience and provide a stable source of income, although they faced numerous operational challenges. **Food Security:** The fishing sector plays a critical role in food security for coastal communities. By providing a source of protein and income, small fisheries contribute to the overall well-being of the population.

2.2.8. Role of Small Fisheries on Economic Growth

The small fisheries sector in Somalia plays a crucial role in the country's economic growth, leveraging its extensive marine resources to provide employment, enhance food security, and stimulate local economies. **Employment Generation,** Small fisheries are a significant source of employment for coastal communities. They provide livelihoods for thousands of fishers and their families, contributing to local economies. It is estimated that the fishing sector employs over 70,000 people, which is vital in a country where job opportunities are limited due to ongoing economic challenges and instability. **Contribution to GDP** The fisheries sector contributes approximately \$135 million annually to Somalia's economy, accounting for about 1-2% of the country's Gross Domestic Product (GDP). This

contribution is particularly important in a nation where economic diversification is needed to reduce reliance on aid and enhance self-sufficiency. **Sustainable Resource Management** the Somali government has recognized the potential of its fisheries and is working to develop a sustainable fisheries management framework. By promoting responsible fishing practices and protecting marine resources, the government aims to increase the annual fish catch from the current levels of about 6,000 metric tons to over 200,000 metric tons, which could significantly boost economic output and create more jobs. The small fisheries sector plays a critical role in ensuring food security for the Somali population. Fish is a primary source of protein for many communities, and enhancing the fisheries sector can help improve nutritional standards and reduce food insecurity, which is essential for a healthy workforce. Despite its potential, the small fisheries sector faces significant challenges, including illegal fishing by foreign fleets, lack of infrastructure, and inadequate support for local fishers. Addressing these challenges through improved governance, investment in infrastructure, and community support programs can unlock the full economic potential of the fisheries sector. (Somalia Investment Promotion Agency (SOMINVEST), 2024)

3. Summery

3.1. Methodology

A descriptive research design was employed in this study. Given that it describes phenomena; the descriptive study design was the most appropriate. According to Kothari (2014), descriptive studies are most suited for examining the relationships between factors that characterize and explain phenomena, such as the case of determining the economic role of small fisheries. 52 unskilled fish traders from three targeted main fisher markets in three districts (Mogadishu, Wadajir, Harardwayne, and Adbidasis districts) as well as staff members of the Somalia Ministry of Blue Economy and Marine Security were interviewed using structured questionnaires in Mogadishu, Somalia. The study reached 60 populations, including both public and private sectors. This is due to the fact that some of them were national staff members and they have, been involved directly in many activities related to commerce and economic transactions.

3.2. Sampling and sample size

Sampling is the process of identifying the sample size from the target population. Stratified sampling method was used to classify the target population into four districts main market fish of Mogadishu and some staff of ministry of blue economy and marine reoccur of Somalia. Yamane, (1973) sample size calculation formula was used to arrive at a sample size as follows; the sample size was 52 as shown below;

$$n = \frac{N}{1 + N(e)^2} = \frac{60}{1 + 60(0.05)^2} = 52 \quad N = \text{Population, } e = \text{error (always 5\%)}$$

Table 1

Total	52	100%
Employment Sector	Frequency	Percent
Three District fish Market	39	75%
Staff of Ministry of Blue economy	13	25%
Total	52	100%

4. Dissuasion and analysis

Table 2: Demographic Characteristics

Variables	Profile of the respondents	
Gender	Frequency	Percent
Male	30	57.6%
Female	22	42.3%
Total	52	100%
Age	Frequency	Percent
30-35	22	42.3%
35-40	16	30.7%
40-45	7	13.4%
45-50	5	10%
50-55	1	1%
55-60	1	1%
Total	52	100%
Employment Sector	Frequency	Percent
private	39	75%
Public	13	25%
Total	52	100%
Experience	Frequency	Percent
2-5	25	48.1%
7-10	12	23%
11-20	8	15.4%
25 and above	7	13.5%
Total	52	100%
Level of Education	Frequency	Percent
Bachelor	10	19.2%
Secondary	27	51.9%
Illiterate	15	28.8%
Total	52	100%
Marital status	Frequency	Percent
Single	7	13.4%
Married	43	82.6 %
Divorced	2	3.8%
Total	52	100%

Summary of the Participants' Demographic Characteristic Information

In terms of the genders 57.6% of the interview participants were male and 42.3% were female; this shows that the most respondents met with the study was male in both the public and private sector. The interviewee average of Age participants met with the study was 42.3% which was 30- 35 and the second 30.7% of the age was 35-40. The Employment Sector was both Private and Public, they were 75% of the interviewees were private and 25% of the second part were

public. The Experience Levels of the respondents were between 2-5 year which was the 48.1% and the second number was 7-10 years which also the 23% and the education level was 51.9% of were secondary level while the 19.2% of bachelor degree and 28.8% were illiterate. And marital status the most of the respondents (43) interviewed was men. Of the respondents approached, 82.6% were married, while 7 others which is the percent of 13.4% were single; only two participants were Divorced (2) which was 3.8%. As shown, the participants were most have married.

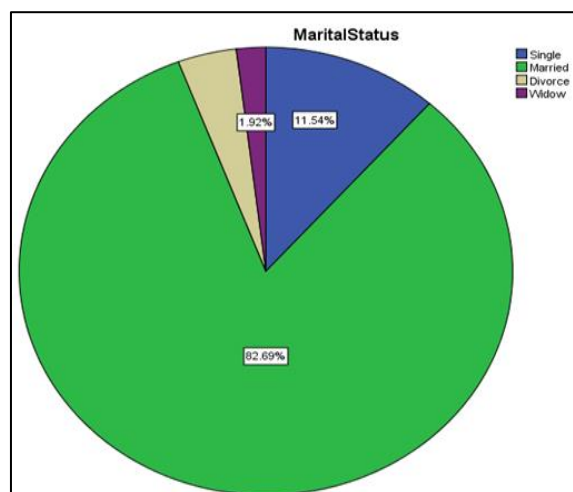


Fig 1

Table 3: Exporting seafood brings significant foreign income to Somalia

Variable	Frequency	Percent
Strongly Agree	33	63.5
Agree	14	26.9
Disagree	4	7.7%
Strongly Disagree	1	1.9%
Total	52	100%

According to the survey results, of 63.5 percent of respondents strongly agreed, 26.9% agreed, and 1.9 percent disagreed with the above statements. These findings suggest that most respondents strongly agree that exporting seafood is a significant source of foreign currency for Somalia. However, the result shows the 63.5 percent of respondents strongly agreed.

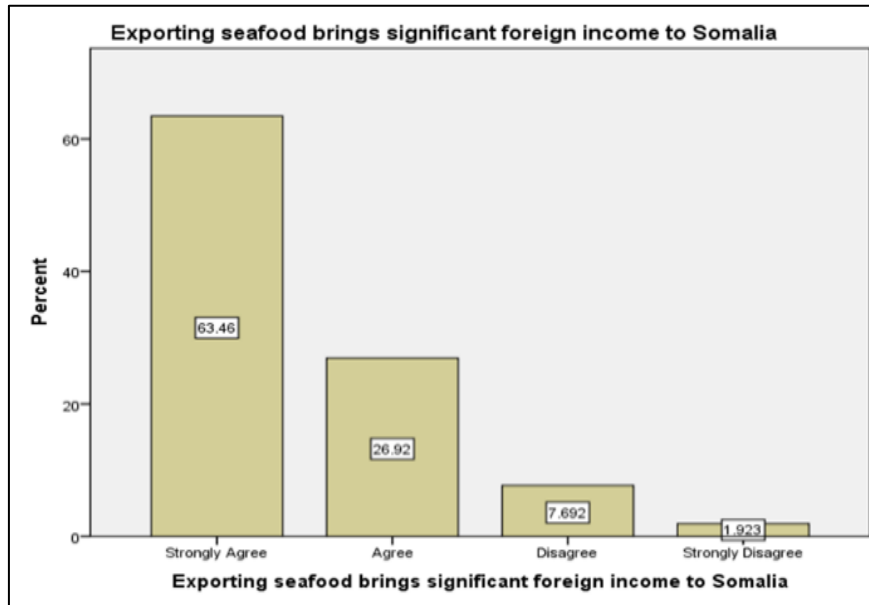


Fig 2

Table 4: Access to foreign markets helps fishers get fair prices

Variable	Frequency	Percent
Strongly Agree	36	69.2%
Agree	12	23.1%
Disagree	2	3.8%
Strongly Disagree	2	3.8%
Total	52	100%

The results show that 69.2 percent of respondents strongly agreed with the statement that access to foreign markets helps fishermen obtain fair prices, 23.1 percent agreed with the statement, and 3.8 percent disagreed. These results suggest that a greater proportion of respondents believe that access to foreign markets will benefit Somalia's local economy, therefore the maximum respondents of 69.2% were strongly agree.

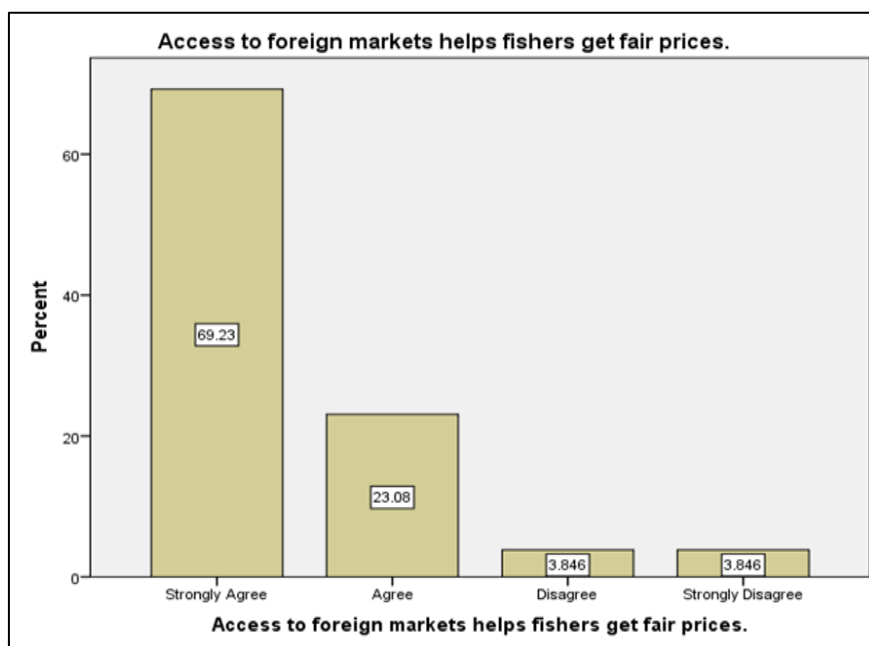


Fig 3

Table 5: Export volumes have grown steadily over the past 5 years

Variable	Frequency	Percent
Strongly Agree	32	61.5%
Agree	13	25.0%
Disagree	5	9.6%
Strongly Disagree	2	3.8%
Total	52	100%

The article interviewers showed that, 61.5, percent of respondents strongly agree with statements of Export volumes have grown steadily over the past 5 years. And 25. Percent of respondents agree 12.8, percent of respondents disagree the above statements therefore the most of the respondent 61.5% ware shows they are believing that, export volumes have grown steadily, in the past 5 yes.

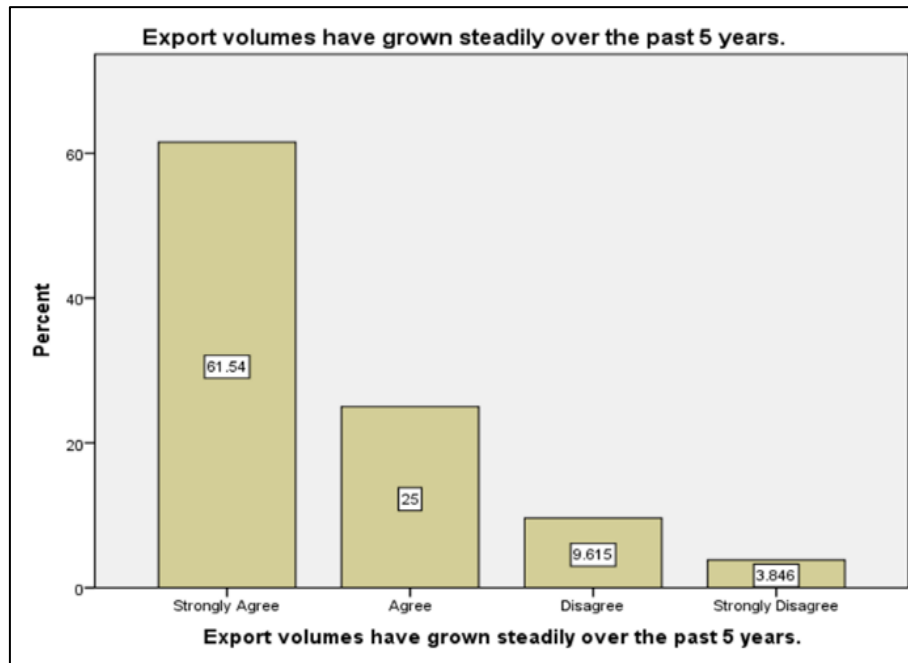


Fig 4

Table 6: Seafood export is an important part of Somalia's trade portfolio

Variable	Frequency	Percent
Strongly Agree	28	53.8
Agree	21	40.4%
Disagree	3	5.8%
Strongly Disagree	0	0
Total		100%

The result of the respondents shows that, 53.8 percent of respondents strongly agree with statements, Seafood export is an important part of Somalia's trade portfolio, and 40 percent of respondents agree and finally 5.8 percent of respondents disagree, therefore the popular of 53.8 shows for their acceptance.

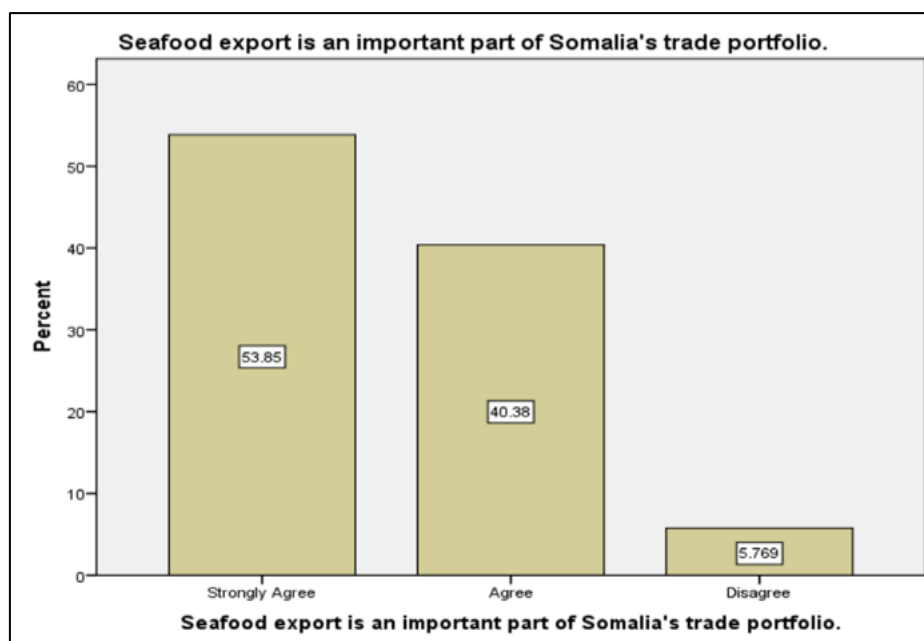


Fig 5

Table 7: My household income has risen over the past 5 years

Variable	Frequency	Percent
Strongly Agree	33	63.5%
Agree	12	23.1%
Disagree	5	9.6%
Strongly Disagree	2	3.8%
Total	52	100%

Accounting to survey the result show that, 63.5 percent of respondents strongly agree with statements, of my household income has risen over the past 5 years. And 23.1 percent of respondents agree and finally the 9.6 percent of respondents disagree. Therefore, the highest present of the respondent of 63.5 replay straggly agree the last five years their income have gradually increased.

5. Discussion

The following are some possible debate topics based on the facts about the connections between small-scale fishermen and economic growth:

- The first objective which was, Role of fishery of local employment on economic growth in Somalia, therefor the participant of the interviewers Annalise indicates the assumption of 36 of the participant which becomes as in 69.5 percent of respondents strongly agreed, 14(26.9%)agreed, and 3.8 percent disagreed with the above statements. These findings suggest that most respondents strongly agree,69.5 are majority accepted of that exporting Role of fishery of local employment on economic growth in Somalia
- And second question of the first objective is also have given the same levels of the result of the participating of 40 interveners which is 76.9 percent of respondents strongly agreed with the statement that access to foreign markets helps fishermen obtain fair prices,10 of 19.2 percent agreed with the statement, and (2) 3.8 percent disagreed. These results suggest that a greater proportion of respondents believe that access to foreign markets will benefit Somalia's local economy, therefore the maximum respondents of 76.9 % ware strongly agree and third question of the, interviewers showed that, 61.5, percent of respondents strongly agree with statements of Export volumes have grown steadily over the past 5 years. And 25. Percent of respondents agree 13.5 percent of respondents disagree the above statements therefore the most of the respondent 61.5% ware shows they are believing that, export volumes have grown steadily, in the past 5 yes.
- The four results show that,(36) 69.2 percent of respondents strongly agreed with the statement that access to foreign markets helps fishermen obtain fair prices, 23.1 percent agreed with the statement, and 3.8 percent disagreed. These results suggest that a greater proportion of respondents believe that access to foreign markets will benefit Somalia's local economy, therefore the maximum respondents of 69.2% ware strongly agree
- In addition to that, finally I am here concluding that the fives objective of Fisheries make a large contribution to Somalia's GDP and they 39 of 75 percent of respondents strongly agree with statements and 10 of 19.2 percent of respondents' ware agree and 2 of 3.8 percent were disagree, therefore, the findings of that the small unskilled fishers in Somalia are tax payer and make lager contributing, to grouse doomist product (GDP)

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