IMPACT OF FISH MARKETING AGENTS ON FISH PRICE IN BENIN CITY, EDO STATE

BY

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NOVEMBER, 2025

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SUBMITTED TO
THE DEPARTMENT OF AQUACULTURE AND FISHERIES MANAGEMENT, FACULTY OF AGRICULTURE, UNIVERSITY OF BENIN, BENIN CITY, EDO STATE.
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF BACHELOR OF AGRICULTURE DEGREE B. AGRIC (AQUACULTURE AND FISHERIES MANAGEMENT)

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CERTIFICATION

This is to certify that this research work was carried out by Precious ONAH with Matriculation Number **AGR2004386** of the Department of Aquaculture and Fisheries Management, Faculty of Agriculture, University of Benin, Benin City, Edo State, Nigeria

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DEDICATIONS

I dedicate this work first and foremost to Almighty God who has been there right from the beginning to this very point. Special dedication also to my ever-supportive parents and siblings for their relentless support and motivation during the course of this project.

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ABSTRACT

Fish farmers and fishermen have often complained of low profit margin due to the impact of fish marketing agents who often fix fish price without minding the cost of fish production It is therefore important to investigate the roles and impacts of marketig agents. This study examined the impact of fish marketing agents on fish prices in Benin City, Edo State, Nigeria. Four major markets namely New Benin, Uselu, Yanga, and Oka were purposively selected, and primary data were obtained from 101 respondents through the use of structured questionnaires and interviews. Descriptive statistics and Analysis of Variance (ANOVA) at a 5% significance level were employed to analyze the data.

The results revealed that fish marketing in Benin City is dominated by women (59.4%), mostly between the ages of 26–35 years, with moderate educational attainment. Retailers (38.6%) and wholesalers (23.8%) constituted the major categories of marketing agents, with wholesalers (35.6%) identified as having the greatest influence on fish prices. The majority (64.4%) of respondents believed that marketing agents cause price increases and price fluctuations, mainly through transportation cost manipulation (35.6%) and hoarding (33.7%). The major challenges identified included unfair pricing (47.5%), low profit margins (22.8%), and limited access to capital (12.9%). Government intervention (52.5%) and regulation of market agents (45.5%) were the most suggested measures for achieving fair pricing. The study concludes that while marketing agents play a vital role in fish distribution, their activities often lead to price distortions that negatively affect both producers and consumers. It recommends strengthened institutional regulation, improved infrastructure, cooperative marketing, and capacity building to enhance transparency, efficiency, and fairness in fish marketing within Benin City.

CHAPTER ONE

1.0 INTRODUCTION

Fish plays a vital role as a primary source of protein for many populations, especially in developing countries where it contributes significantly to food security (FAO, 2020). However, fluctuations in fish prices present challenges for both producers and consumers. These price variations result from multiple factors, including inefficiencies in the supply chain, transportation expenses, and the influence of market intermediaries (Adeyemo, 1986; Ayanboye *et al.,* 2015).

Marketing agents such as wholesalers, retailers and other intermediaries are central to shaping fish prices, controlling distribution channels, and affecting profitability across the supply chain (Agbebi and Fagbote, 2012).

Research has shown that market intermediaries determine prices based on supply and demand, storage facilities and accessibility to markets (Adenegan and Bolarinwa, 2010). However, their involvement can sometimes result in price distortions that negatively impact both producers and consumers (Adeyemo, 1986). In Benin City, Edo State, the fish trade is an essential part of the local economy yet limited studies have specifically examined how market agents influence fish pricing structures. This research seeks to bridge that gap by analysing the role of market intermediaries in fish pricing in Benin City.

The influence of market agents on fish pricing has been a subject of discussion. While they help in distributing fish, their impact on price stability and fairness raises concerns (Agbebi and Fagbote, 2012). Middlemen and wholesalers often manipulate prices causing an increase in fish prices and reducing the profit margins of fish farmers, fishermen and small-scale traders (Ayanboye *et al.,* 2015).

Additionally, fluctuations in fish prices can be attributed to poor infrastructure, high transportation costs, and inadequate access to market information (Adenegan and Bolarinwa, 2010). While various studies have explored fish price determination in different parts of Nigeria, there is a lack of specific research on Benin City. Since fish is both a food source and an economic commodity, understanding the role of marketing agents in pricing is crucial for developing fair market policies.

1.1 Justification of the Study

Investigating the influence of market agents on fish price determination is crucial for policymakers, traders, and consumers (FAO, 2020). Fish farmers and fishermen have often complained of low profit margin due to the impact of fish marketing agents who often fix fish price without minding the cost of fish production. By analysing how intermediaries affect pricing, this study will contribute to discussions on market regulation and the promotion of fair-trade practices.

The findings will be valuable in improving fish market structures in Benin City, ensuring price stability, and protecting both fish farmers, fishermen and consumers from unfair pricing strategies (Adenegan and Bolarinwa, 2010).

1.2 Aim and Objectives of the Study

The aim of this study will be to examine the role marketing agents play which impacts fluctuations on fish prices in Benin City. The specific objectives includes:

1) identifying the various types of market agents involved in fish trade within the city.

2). assessing the pricing methods adopted by various marketing agents.

3) evaluating how various marketing agents affect the final fish price.

4) identifying the challenges faced by fish traders in the study area.

CHAPTER TWO

2.0 LITERATURE REVIEW

Fish marketing refers to all the processes involved in moving fish and fish products from the point of harvest to the final consumer. These processes include harvesting, preservation, handling, transportation, packaging, distribution and final sales. According to Chaston (1987), fish marketing is more than just the sale of fish; it encompasses activities that ensure products reach consumers in the right form, at the right time and in appropriate locations (Henson and Jaffee, 2004). Fish can be marketed in various forms including fresh, smoked, dried, iced, or frozen depending on consumer demand and regional preferences (Gatta, 2022). In Nigeria, fish marketing often begins at remote landing sites and fish farms where fisher-folks primarily women play a crucial role in sorting and transporting fish to urban and rural markets ("Village Level Aquaculture Development in Africa," 1988). The marketing system includes numerous actors, infrastructures and logistical processes that together determine market efficiency, pricing and accessibility. FAO (2020) noted that effective fish marketing systems are vital for food security, employment and income generation, especially in rural areas where alternative livelihoods are limited.

The Nigerian fish market is characterized by informal structures, fluctuating prices, and fragmented supply chains (Kohli *et al.,* 2003).

While traditional systems persist, emerging urban markets are seeing more organized distribution channels and retail structures. Fish products are typically sold in open-markets, roadside stalls, supermarkets and more recently through online platforms. However, this evolution has been uneven across regions (Adenuga and Montowska, 2023)

2.1 Importance of Fish Marketing

Fish marketing plays an essential role in the fisheries value chain. It connects producers to consumers, facilitates value addition and drives economic activity (Stoll *et al.,* 2021). The importance of fish marketing can be categorized as follows:

a. Livelihood Support

Fish marketing supports millions of livelihoods in Nigeria. From harvesting, processing, and transportation to retail and wholesale distribution, the sector engages both skilled and unskilled labor.

Women dominate retail and processing roles contributing significantly to household incomes and rural economies (Agbebi and Fagbote, 2012). Fish marketing is especially vital in coastal communities where alternatives to fishing are scarce.

b. Income Generation

The sale of fish offers an important source of income for fishing communities and traders. It also contributes to government revenue through taxes, licensing and levies especially in coastal states and major urban centers (Lawal and Idega, 2004). Fish marketing enhances wealth distribution by circulating revenue within communities.

c. Food Security

Fish provides essential animal protein and micronutrients. Efficient marketing ensures year-round availability, stabilizes supply, and makes fish accessible to both rural and urban populations (FAO, 2020). By enabling wide access to affordable protein, fish marketing contributes to improved public health.

d. Economic Development

Fish marketing facilitates trade, encourages entrepreneurship and fosters backward and forward linkages with other sectors such as transportation, ice production, and equipment supply (Chaston, 1987). The fish value chain stimulates local economies and supports auxiliary industries like net making, packaging and transport services.

2.2 Theoretical Framework

Marketing theory provides a basis for understanding how fish markets operate. The classical economic theory emphasizes supply and demand as determinants of price. However, in developing economies, imperfect markets, asymmetric information, and power imbalances often distort this relationship. (Olawunmi and Clarke, 2023)

The value chain approach highlights the roles and relationships of various actors from production to consumption. According to Gereffi and Kaplinsky (2001), understanding value chains allows stakeholders to identify bottlenecks, inefficiencies and opportunities for upgrading. The approach is particularly useful for assessing input-output flows and identifying interventions to add value.

Transaction cost theory is also relevant as it explains how costs such as transportation, negotiation and enforcement influence market structure and behavior. In Nigeria, high transaction costs due to poor infrastructure and informal market practices often reduce efficiency. Other theoretical lenses include behavioral economics which explains decision-making biases by market agents and institutional theory which examines how regulations and norms shape market practices.

2.3 Role of Fish Marketing Agents

Market agents act as facilitators in the distribution of fish which includes wholesalers, retailers, processors, middlemen, brokers, and commission agents. Each plays a distinct role in ensuring that fish reaches the final consumer (Vc, 2019).

a. Wholesalers and Retailers

Wholesalers buy in large quantities from landing sites or fish farms and sell to retailers who distribute fish in small quantities to final consumers (Grema, *et al.,* 2020)

They often control pricing and supply particularly in urban areas.

The Retailers may be formal (shops, supermarkets) or informal (roadside vendors, market stalls). They may get fish supply by buying small quantities from the wholesalers or directly from the producers (farms or landing sites) and as such are influenced by the pricing of the wholesalers (Ndubueze-Ogaraku and Omelogu, 2016)

b. Processors

Processors add value by preserving or processing fish through drying, smoking or freezing. Their role is crucial in extending the shelf life of fish and making it available beyond immediate consumption periods (Akegbejo-Samsons, 1997). Processing contributes to food safety and creates employment. In some cases, wholesalers and retailers may be involved in fish processing as a marketing function during fish marketing.

c. The Brokers (Middlemen)

Brokers connect producers with markets especially where transport and storage are limited. While they facilitate trade, they are also criticized for exploitative practices that reduce

producer margins and inflate consumer prices (Adeyemo, 1986). Brokers play intermediary roles often influencing price outcomes by controlling access to market information.

d. Commission agents

These actors operate in central markets where they help negotiate sales between sellers and buyers earning a commission on each transaction. They often act on behalf of traders and exporters.

The influence of these agents can either promote or hinder market efficiency. While they facilitate the movement of goods, excessive dependence on middlemen leads to price distortions and reduces producer bargaining power (Agbebi and Fagbote, 2012).

2.4 Fish Marketing Channels

A marketing channel refers to the route taken by fish and/or fish by-products from the point of production to the final consumer. Channels vary in complexity and efficiency. However, there are two main defined channels namely: centralized channel and decentralized channel. (Ahmadi and Mahreda, 2019)

a. Centralized Channels

In this system, fish is aggregated at a central location and sold through brokers and commission agents. This model allows for price discovery and economies of scale but may exclude small-scale producers. Centralized channels are more common in export-oriented supply chains (Madugu and Edward, 2011).

b. Decentralized Channels

This involves direct sales from producers to consumers or through a limited number of intermediaries. It is the most common channel system in Nigeria due to limited infrastructure and informal market setups (Madugu and Edward, 2011). Decentralized channels provide better returns for producers but offer less price stability (Madugu andEdward, 2011).

c. Hybrid Systems

Some regions combine both systems, using formal markets for bulk sales and informal outlets for retail distribution. The choice of marketing channel depends on proximity to markets, storage capacity and consumer demand. Hybrid systems are emerging in peri-urban and semi-urban contexts. (Madugu and Edward, 2011).

The length and structure of the channel influence pricing, product quality, and marketing efficiency. Longer chains increase the final price and reduce the earnings of producers. Effective channel management can reduce waste, lower prices and increase profits. (Gatta, 2022)

2.5 Challenges in Fish Marketing

The fish marketing system in Nigeria is constrained by numerous challenges, many of which undermine market efficiency, affect product quality and reduce profitability. (Grema, *et al.,* 2020)

These challenges can be grouped as follows:

a. Infrastructural Deficiencies

One of the most critical challenges facing fish marketing in Nigeria is inadequate infrastructure which includes poor road networks, unreliable electricity, insufficient water supply and lack of

cold storage facilities resulting in significant post-harvest losses. According to Nwabueze and Nwabueze (2010), these losses can reach up to 30–50% in some parts of Nigeria. The absence of preservation technologies also shortens the shelf life of fresh fish making marketing over long distances risky and unprofitable.

b. Price Volatility

Seasonal fluctuations in fish supply leads to unstable prices. During peak seasons oversupply leads to sharp price drops while in off-peak periods scarcity drives prices up. This instability creates uncertainty for both producers and marketers affecting planning and investment decisions. As noted by Madugu and Edward (2011), this volatility undermines income predictability.

c. Market Information Gaps

Limited access to market information leads to inefficient pricing and planning. Many small-scale fishers and traders rely on hearsay or the experience of intermediaries rather than real-time data to make marketing decisions. The lack of transparency gives middlemen undue control over prices and trade volumes.

d. Finance and Credit Constraints

Access to finance remains a persistent issue. Most fish traders operate on a small scale and lack collateral for formal loans. This leads them to depend on informal lenders, who charge exorbitant interest rates. Akegbejo-Samsons (1997) highlighted that financial constraints hinder investment in equipment, cold storage and value addition.

e. Market Exploitation

The dominance of middlemen in the marketing chain often results in exploitative buying practices. Fishermen and producers receive low prices for their products while final consumers pay significantly higher prices. This margin gap is attributed to a lack of bargaining power and absence of producer cooperatives (Adeyemo, 1986).

f. Policy Inconsistencies

Government policies affecting fish marketing are often poorly coordinated or inadequately implemented. Lack of enforcement of market standards, weak regulatory oversight and overlapping jurisdiction among agencies complicate the marketing process. Furthermore, subsidies and grants are inconsistently distributed.

2.6 Marketing Efficiency

Marketing efficiency is defined as the ability to perform marketing functions at the lowest possible cost while delivering maximum consumer satisfaction. Chaston (1987) identifies three main dimensions:

a. Operational Efficiency

Operational efficiency relates to logistics including transportation, storage, handling and delivery. Efficient operations reduce time and cost thereby improving profitability and customer satisfaction. For instance, the availability of insulated containers and ice enhances the quality of fish during transport.

b. Pricing Efficiency

Pricing efficiency refers to the ability of the market to reflect actual supply-demand conditions and costs of production. Inefficiencies in pricing arise when intermediaries dominate and

manipulate markets. Markets with transparent pricing systems tend to be more efficient and fairer.

c. Systemic Efficiency

Systemic efficiency combines both operational and pricing factors to evaluate the overall market performance. Adenegan and Bolarinwa (2010) argue that systemic inefficiency in Nigeria's fish markets is driven by fragmented value chains, informal trading, and lack of institutional support.

Improving marketing efficiency involves enhancing infrastructure, facilitating access to finance and promoting digital platforms for price discovery and distribution coordination.

2.7 Market Integration and Organization

Market integration refers to the level of inter-connectedness and coordination among different segments of the fish value chain. Effective integration ensures seamless transitions between production, processing and retail stages.

a. Vertical Integration

Vertical integration occurs when a firm controls multiple stages of the value chain from production to retail.

This model increases efficiency by minimizing transaction costs and improving quality control. For example, some large-scale farms operate their own hatcheries, processing plants and outlets.

b. Horizontal Integration

Horizontal integration involves collaboration or merging among firms at the same level in the supply chain. This is common among retailers who may form associations to pool resources, share market information and improve bargaining power. Adeyemo (1986) suggests that such integration can help small-scale traders compete with large commercial operators.

c. Market Organization

Proper organization of fish markets includes regulation of prices, grading systems, licensing and the establishment of cooperatives. These structures improve transparency and minimize the negative effects of monopolistic practices. Organized fish markets with facilities like cold rooms, sorting tables and access to logistics are more efficient and equitable.

2.8 Gender Participation in Fish Marketing

Gender plays a critical role in fish marketing with women being prominent actors particularly in processing and retailing.

Studies by Agbebi and Fagbote (2012) indicate that women are more involved in the sale of smoked and dried fish often at local markets. They also dominate fish vending in urban neighborhoods. Their contribution is vital for household income, nutrition and food security.

However, women face specific challenges:

- Limited access to finance and land ownership
- Lower levels of formal education
- Cultural and religious restrictions
- Underrepresentation in cooperatives and policy forums

Addressing gender disparities requires tailored interventions, such as microcredit schemes, training programs and women-focused cooperatives.

2.9 Prospects of Fish Marketing in Nigeria

Despite these challenges, the fish marketing system in Nigeria holds significant growth potential especially with the increasing demand for fish protein, urbanization and digital innovation (Adewumi, 2015). The following offers promising future for fish marketing:

a. Digital Platforms

The rise of e-commerce and mobile technology presents opportunities for more transparent and efficient marketing. Digital platforms allow for direct sales, reduce intermediary exploitation and enhance access to market information.

b. Cold Chain Development

Investment in cold storage infrastructure can reduce spoilage and extend product reach. Public-private partnerships in cold chain logistics are essential for scaling distribution.

c. Policy Reforms

Clear, targeted and enforceable policies around fisheries marketing, credit access and infrastructure development are crucial. Such policies should be inclusive and involve stakeholders at all levels.

d. Capacity Building

Training programs for traders, processors and transporters can improve handling practices, hygiene standards and business acumen. NGOs and academic institutions have a role to play here.

e. Export Potential

Nigeria's proximity to regional markets in West Africa presents opportunities for fish exports. Improved processing, certification and packaging standards can help Nigerian fish compete globally.

CHAPTER THREE

3.0 MATERIALS AND METHODS

3.1 Description of Study Area

The study was carried out in Benin City, the capital of Edo State, located in the South-South geopolitical zone of Nigeria. Benin City lies within the geographical coordinates of Latitude 6°20′N and Longitude 5°37′E. It is bordered by Ovia North-East Local Government Area to the west, Ikpoba-Okha Local Government Area to the south, Uhunmwonde Local Government Area to the east, and Oredo Local Government Area centrally (Oni *et al.,* 2008). (Figure 1)

Benin City is a major urban and commercial center in Edo State with a vibrant fish market system that plays a crucial role in food supply and economic activities (Abolagba *et al.,* 2023). The city is known for its bustling markets, including New Benin Market, Uselu Market, Oba Market and several others where both fresh and smoked fish are sold.

The area experiences a typical tropical climate with two major seasons: the rainy season which usually lasts from March to October and the dry season which lasts from November to February. The city receives an average annual rainfall of about 2,000 mm with peak rainfall occurring between June and September. Temperatures ranges between 24°C and 34°C throughout the year with high relative humidity. (Oni *et al.,* 2008).

Benin City has a population of over 1.5 million people with a significant portion of the residents engaged in trade including fish marketing (Abolagba *et al.,* 2023).

The presence of both inland fish farms and fish traders makes it a strategic location for this research.

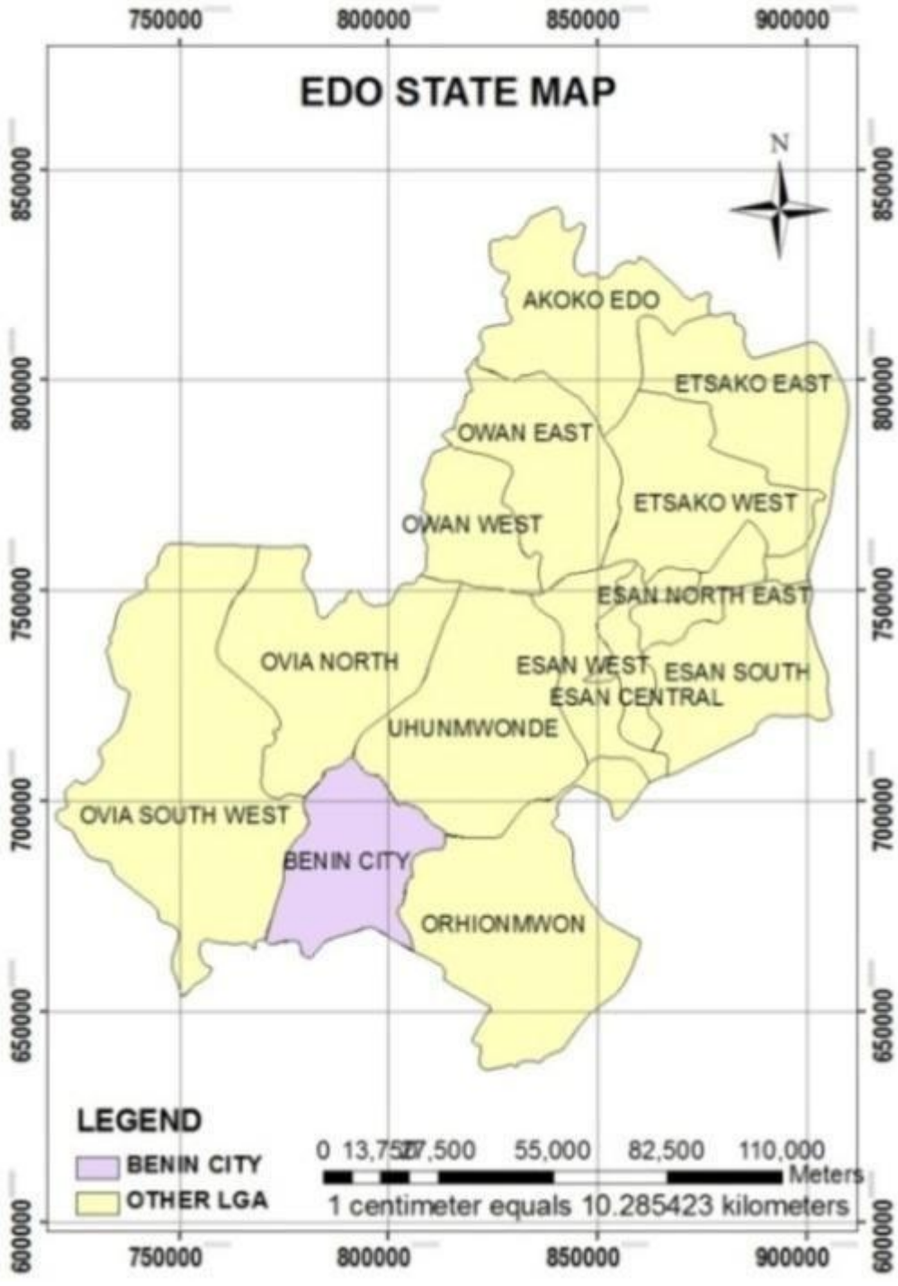

Fig 1 Location of study area in Edo state

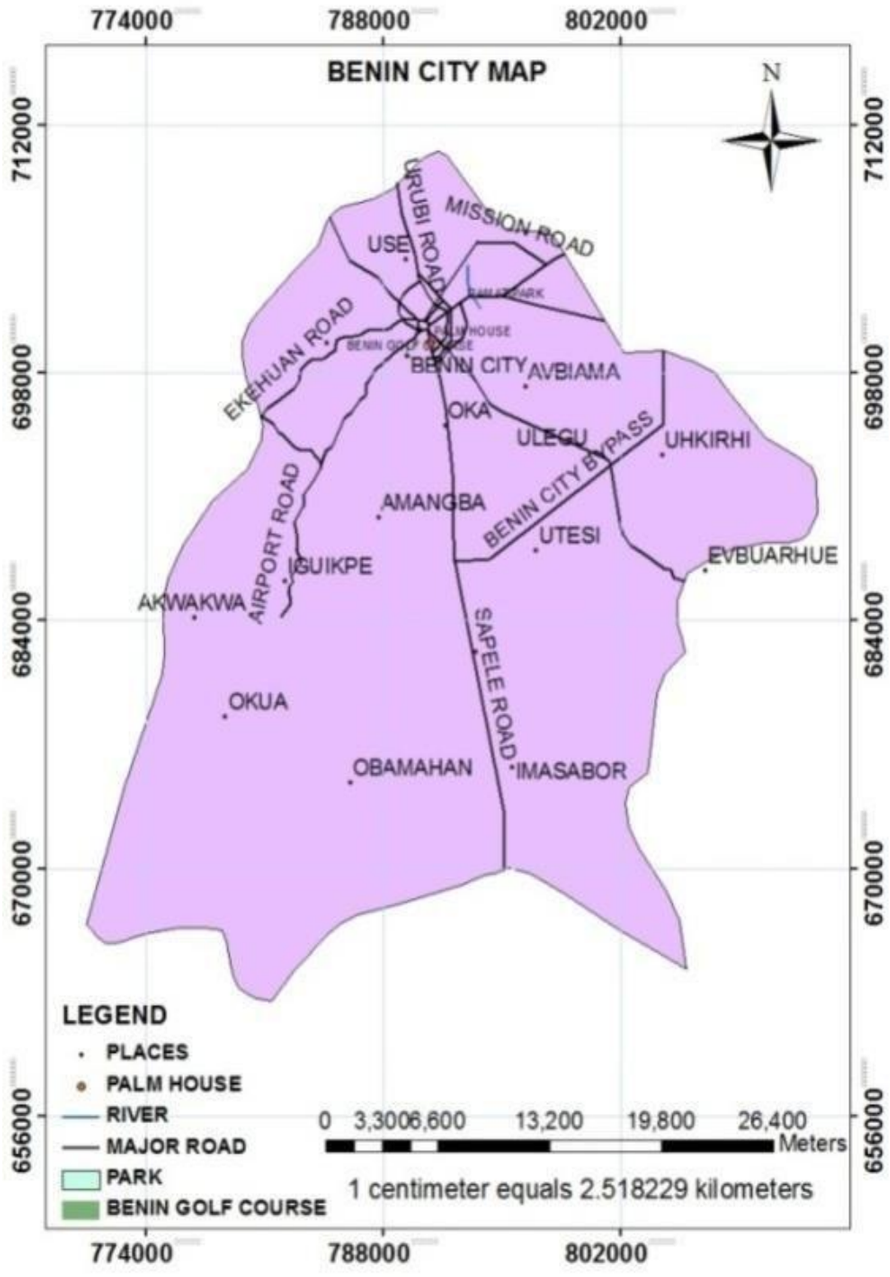

Fig 2 Location of study area in Benin City

3.2 Sampling Procedure

A reconnaissance survey was conducted to identify major fish markets and key stakeholders in fish marketing within Benin City. Based on information gathered, four major fish markets was purposively selected for this study due to their high volume of fish sales, accessibility and significance in fish distribution within the city. These markets includes:

- New Benin Market
- Uselu Market
- Yanga Market
- Oka Market

Within these markets, fish marketing agents such as wholesalers, retailers and other intermediaries were identified as the primary respondents for this research. A purposive sampling technique was adopted to ensure that only individuals actively involved in fish marketing were selected. A total of 101 respondents were selected across the four markets with an average of 20 respondents per market. This sample size was considered adequate to represent the population of fish marketers and marketing agents within the city.

3.3 Data Collection

Primary data was collected through questionnaire (Appendix i) and oral interviews. The questionnaire was divided into different sections:

Section A collected demographic information such as age, gender, education level, years of experience in fish marketing, and type of market activity (wholesaler, retailer, etc.).

Section B focused on fish pricing strategies, price fluctuations, the role of marketing agents in price determination, challenges faced by fish traders, and suggestions for improving price fairness.

Section C allowed questions that covers income gotten from fish and fishing activities. It also covers other possible income channels of the individuals and the disparity between the level of income gotten from fish trading.

Section D focused on policies supporting fishing marketing in Benin city and also recommendations on how better policies can be implemented to improve fair fish pricing.

In addition to the questionnaire, key informant interviews and focus group discussion were conducted with selected market leaders and experienced traders to gain deeper insights into the influence of marketing agents on fish price determination within the study area.

3.4 Data Analysis

The collected data was analyzed using SPSS version 2015. Both descriptive and inferential statistical methods were employed. Descriptive statistics such as frequencies, percentages and means were used to summarize the demographic characteristics of respondents and general market trends. The results were presented in tables and charts for clarity.

Inferential statistics, specifically Chi-square tests and Analysis of Variance (ANOVA) at a 5% significance level were employed to examine the relationships between variables such as market agent type, pricing strategies, and price fluctuations.

Where significant differences are observed, the Duncan Multiple Range Test (DMRT) was used to separate means and determine specific group differences.

CHAPTER FOUR

RESULTS

4.0 Introduction

The results of the study on the impact of fish marketing agents on fish price in Benin City, Edo State is presented in this chapter.

4.1 Socio-Economic Characteristics of Respondents

The results of the socio-economic characteristics of the respondents is shown in Table 1, it includes results on age, gender, marital status, educational level, household size, nature of housing and type of involvement in fish trade. The results show that the majority (30.7%) of respondents were between 26–35 years, indicating that fish trading in Benin City is dominated by young and economically active individuals. Females (59.4%) outnumber males (40.6%), highlighting women's significant role in fish marketing. Most respondents were married (59.4%), suggesting family support in their business. Regarding education, a large portion (37.6%) attained secondary education, followed closely by tertiary education (33.7%), which suggests moderate literacy among traders. Most households had 3–6 members (75.3%), and 69.3% lived in rented apartments, reflecting modest living standards among fish traders.

Variable	Category	Frequency	Percentage (%)
age	18-25 yrs	25	24.8
	26-35 yrs	31	30.7
	36-45 yrs	22	21.8
	46-55 yrs	15	14.9
	56 yrs and above	8	7.9
	18-25 yrs	25	24.8
Gender	Male	41	40.6
	Female	60	59.4
Marital status	Married	60	59.4
	Single	33	32.7
	Widowed	7	6.9
Educational level	No formal education	13	12.9
	Primary education	8	7.9
	Secondary education	38	37.6
	Tertiary education	34	33.7
	Postgraduate education	7	6.9
Household size	1-2 people	10	9.9
	3-4 people	44	43.6
	5-6 people	32	31.7
	Over 6 people	14	13.9
Nature of housing	Rented apartment	70	69.3
	Personal house	30	29.7

Table 1: Socio economic characteristics of fish marketing agents in Benin city.

Source: Field survey, 2025.

4.2 Type of involvement and Role of Fish Marketing Agents

Table 2 summarizes involvement in the fish trade, experience, and perceived influence on fish prices.

Retailers accounted for the largest group of respondents (38.6%) as fish marketing agents, followed by wholesalers (23.8%), indicating that most participants were directly involved in daily market sales. About 49% had less than five years of experience, implying that many are relatively new entrants into the trade. The data also reveal that wholesalers (35.6%) were perceived to have the greatest influence on fish prices, followed by fish farmers/fishermen (27.7%). This confirms the central role of intermediaries in determining market prices.

Variable	Category	Frequency	Percentage (%)
Type of involvement	Fish farming	12	11.9
	Fishing	9	8.9
	Wholesaler	24	23.8
	Retailer	39	38.6
	Consumer	16	15.8
Experience in trading	Less than 3 yrs	25	24.8
	3-5 yrs	24	23.8
	6-10 yrs	22	21.8
	Above 10 yrs	14	13.9
Person with greatest price influence	Fish farmers/fishermen	28	27.7
	Fish wholesalers	36	35.6
	Fish retailers	25	24.8
	Fish consumers	11	10.9

Table 2: Type of involvement and price influence of fish marketing agents

Source: Field survey, 2025.

4.3 Fish Price Determination and Market Influence

Table 3 shows respondents' perceptions of how marketing agents affect prices, how prices are determined, and the mechanisms by which agents contribute to price fluctuation.

The majority of respondents (64.4%) stated that marketing agents cause price increases, while only 28.7% believe they help stabilize prices. Furthermore, 85.1% confirmed that market agents contribute to price fluctuations, mainly through transportation cost manipulation (35.6%) and price hoarding (33.7%). This indicates that intermediaries largely determine market dynamics, influencing the final consumer price through speculative and logistic practices.

Variable	Category	Frequency	Percentage (%)
Effect of marketing agents on price	Stabilize price	29	28.7
	They cause price increase	65	64.4
	They help reduce price	2	2.0
	Both reduce and increase price	4	4.0
Mode of price determination	Based on supply and demand	39	38.6
	Fixed by market agents	15	14.9
	Determined by association	8	7.9
	Negotiated freely through bargaining	36	35.6
Agents contribute to fluctuation	Yes	86	85.1
	No	10	9.9
	Not sure	2	2.0
Means of fluctuation	Price hoarding	34	33.7
	Transportation cost manipulation	36	35.6
	Creation of artificial scarcity	16	15.8

Table 3: Price determination and market influence

Source: Field survey, 2025.

4.4 Challenges Faced by Fish Marketers

The challenges faced by fish marketers related to the activities of fish marketing agents as indicated by the respondents is shown in figure 1. The main challenge identified was unfair pricing (47.5%), followed by low profit margins (22.8%) and limited market access (12.9%). These findings support the argument that intermediaries exert excessive control over pricing mechanisms, leading to reduced profits for producers and traders.

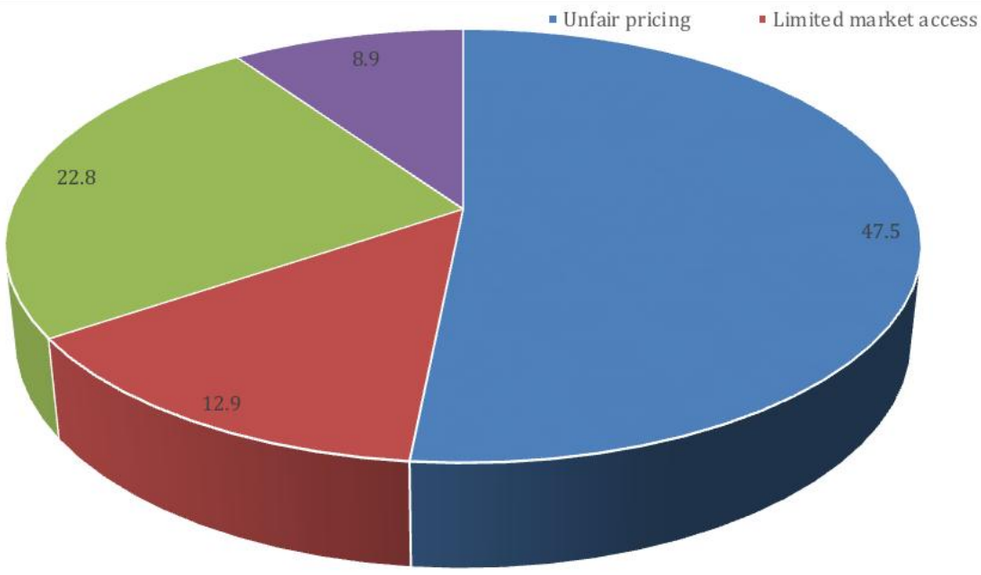

Fig. 3: : Challenges faced by fish marketer(%)

4.5 Suggested Measures to ensure Fair Pricing and Government Intervention

Suggested actions to improve fairness and efficiency in fish pricing is presented in Table 4.

More than half (52.5%) of respondents supported government intervention as the most effective means of achieving fair fish pricing. Additionally, 45.5% emphasized the need for strong regulatory oversight to curb unfair pricing practices, while 21.8% advocated for the regulation of market agents. These responses indicate the necessity for policy action and stronger institutional frameworks to promote equity in fish marketing.

Table 4: Measure of fair pricing and government interventions

Variable	Category	Frequency	Percentage (%)
How fair pricing can be achieved	Government intervention	53	52.5
	Strengthening trader association	12	11.9
	Reducing middlemen	17	16.8
	Market monitoring	16	15.8
Forms of support needed	Better storage facilities	25	24.8
	Improved transport infrastructure	16	15.8
	Regulation of market agents	22	21.8
	Access to market information	11	10.9
	Subsidies for producers	9	8.9
Opinion on managing agents	Proper regulation for fair price	46	45.5
	Sanctions for unfair pricing	14	13.9
	Form cooperatives and provide storage	8	7.9
	Provide loans to farmers and fish traders	7	6.9

Source: Field survey, 2025.

CHAPTER FIVE

5.0 DISCUSSION

This chapter discusses the key findings of the study on the impact of fish marketing agents on fish price in Benin City, Edo State, in relation to the objectives outlined in Chapter One and the reviewed literature in Chapter Two. The discussion highlights patterns observed in the socio-economic characteristics of respondents, the influence of market intermediaries on pricing, and the challenges faced by fish traders.

5.1 Socio-Economic Characteristics of Respondents

The results show that fish marketing in Benin City is dominated by young and middle-aged individuals, with 30.7 % of respondents aged 26–35 years and 21.8 % aged 36–45 years. This age range falls within the most economically active population, suggesting that fish marketing attracts energetic traders capable of managing the physical demands of market activities. This finding aligns with Madugu and Edward (2011), who reported that fish marketing in Adamawa State was driven by traders within their productive years.

In terms of gender, female respondents (59.4 %) outnumbered males (40.6 %), indicating that women play a major role in fish marketing in Benin City. This agrees with Agbebi and Fagbote (2012), who found that women dominate fish retailing and processing across many Nigerian markets. The predominance of women underscores their contribution to household income and local food distribution networks.

Most respondents were married (59.4 %), supporting the view that married individuals rely on family labor and income diversification to sustain their businesses (Oluwasola and Alimi, 2007). Educationally, 37.6 % of respondents attained secondary education and 33.7 % tertiary education.

This relatively high literacy level suggests that fish traders in Benin City can adopt record-keeping and price-monitoring practices more effectively than those in rural settings (FAO, 2020). A majority (69.3 %) lived in rented apartments, showing that most traders operate on modest income levels. Similar socioeconomic patterns have been documented by Abolagba *et al*. (2023) in their study of smoked-fish marketing in Benin City.

5.2 Influence of Marketing Agents on Fish Price

The study reveals that wholesalers (35.6 %) exert the greatest influence on fish prices, followed by fish farmers/fishermen (27.7 %) and retailers (24.8 %). This indicates that price determination in Benin City largely rests with intermediaries who control bulk supply and distribution channels. Adeyemo (1986) and Ayanboye *et al*. (2015) similarly observed that wholesalers and middlemen dominate price setting by controlling access to market information and distribution networks.

Furthermore, 64.4 % of respondents believed that marketing agents cause price increases, while only 28.7 % said they stabilize prices. This perception aligns with the findings of Agbebi and Fagbote (2012), who concluded that middlemen often inflate fish prices to maximize profits at the expense of producers and consumers. The dominance of intermediaries therefore contributes to market inefficiency and reduced profitability for small-scale traders.

5.3 Price Determination and Market Fluctuation

The data show that 38.6 % of respondents identified supply and demand as the main determinant of price, while 35.6 % believed that prices are negotiated freely through bargaining. However, 14.9 % indicated that prices are fixed by marketing agents, reflecting imperfect market conditions in which a few actors influence pricing outcomes. This supports the transaction-cost theory, which explains how high negotiation and transportation costs encourage reliance on intermediaries who, in turn, distort prices (Gereffi and Kaplinsky, 2001).

In addition, 85.1 % of respondents agreed that market agents contribute to price fluctuations, with the leading mechanisms being transportation-cost manipulation (35.6 %) and price hoarding (33.7 %). Similar observations were made by Nwabueze and Nwabueze (2010), who noted that poor infrastructure and information asymmetry create opportunities for traders to exploit price differences across markets.

5.4 Challenges Faced by Fish Marketers

The most significant challenge reported was unfair pricing (47.5 %), followed by low profit margins (22.8 %) and limited market access (12.9 %). These challenges stem from excessive control by intermediaries and the absence of organized market regulation. Adenegan and Bolarinwa (2010) highlighted similar barriers in Oyo State, where weak market integration limited producers' bargaining power.

The findings also correspond with Akegbejo-Samsons (1997), who identified financial constraints and high marketing costs as major impediments to efficiency in Nigerian fisheries. The limited access to formal credit observed in this study suggests that fish traders depend heavily on personal savings or informal loans, which restricts expansion and competitiveness.

5.5 Suggested Measures for Fair Pricing and Government Support

More than half (52.5 %) of the respondents recommended government intervention to ensure fair fish pricing. Others suggested reducing the number of middlemen (16.8 %), improving trader associations (11.9 %), and market monitoring (15.8 %). Respondents also emphasized the need for proper regulation of marketing agents (45.5 %) and sanctions for unfair practices (13.9 %).

These findings are consistent with FAO (2020), which stressed the importance of policy reforms and institutional oversight in improving fisheries marketing efficiency. According to Lawal and

Idega (2004), structured cooperatives and transparent pricing systems can help minimize exploitation by intermediaries.

Overall, respondents' recommendations highlight the need for a multi-stakeholder approach involving government agencies, fish-trader associations, and producers to promote equity, transparency, and sustainable pricing.

CHAPTER SIX

6.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter provides a concise summary of the study on the impact of fish marketing agents on fish price in Benin City, Edo State, followed by conclusions drawn from the findings and recommendations for improving fish marketing efficiency and pricing fairness.

6.1 Summary of Findings

This study assessed how marketing agents influence fish pricing in Benin City, Edo State. Data were collected from 101 respondents across four major markets: Uselu, Yanga, New Benin, and Oka through structured questionnaires. The analysis combined descriptive statistics with frequency and percentage distributions. The key findings are summarized as follows:

1. Socio-economic profile: Fish marketing in Benin City is dominated by young, educated women engaged mainly in retailing. Most respondents were young and economically active, between 26 and 45 years of age. Females (59.4 %) dominated fish marketing, particularly at the retail level. The majority were married (59.4 %), with household sizes between three and six members. Educational attainment was moderate to high, as 37.6 % completed secondary and 33.7 % attained tertiary education.
2. Influence of marketing agents: The majority believe that marketing agents cause price increases and contribute to price fluctuation through transportation-cost manipulation and hoarding. Wholesalers exert the highest influence on fish pricing, followed by farmers/fishermen. Wholesalers (35.6 %) were identified as having the greatest influence on fish prices. 64.4 % of respondents believed that marketing agents cause price increases rather than stabilization. 85.1 % confirmed that market agents contribute to price fluctuations, largely through transportation-cost manipulation and hoarding.

3. Challenges in fish marketing: Unfair pricing, low profit margins, and limited access to capital remain key challenges. The main challenges included unfair pricing (47.5 %), low profit margins (22.8 %), and limited market access (12.9 %). Traders cited high costs of transportation, inadequate storage, and the absence of strong government oversight as key limitations.
4. Recommended interventions: Government intervention, regulation of market agents, and improved infrastructure were the most common suggestions for achieving price fairness. Over half of respondents (52.5 %) advocated government intervention in price regulation. 45.5 % called for strict regulation of marketing agents, while others recommended improved trader associations, subsidies, and infrastructure support. Overall, the study found that fish marketing agents significantly affect price formation, profitability, and fairness in the distribution chain within Benin City.

6.2 Conclusion

The study concludes that fish marketing agents play a critical yet problematic role in the fish supply chain in Benin City. While intermediaries facilitate distribution from producers to consumers, their profit-maximizing behavior often leads to price inflation and reduced earnings for both farmers and small-scale traders.

The predominance of female traders shows that fish marketing is a vital livelihood source, yet systemic issues such as inadequate government monitoring, infrastructural deficits, and unregulated middlemen continue to undermine equity and sustainability in the sector.

If well-coordinated policies are implemented, the fish-marketing system in Benin City could become more efficient, equitable, and supportive of both producers and consumers, contributing meaningfully to local food security and income generation.

6.3 Recommendations

Based on the research findings, the following recommendations are made:

1. Strengthen institutional regulation:

Government agencies such as the Edo State Ministry of Agriculture and Natural Resources should establish clear guidelines to regulate the activities of fish marketing agents and prevent exploitative practices.

2. Enhance access to finance and credit:

Microcredit schemes and cooperatives should be promoted among fish marketers to reduce dependence on exploitative intermediaries and improve business expansion.

3. Improve transportation and storage infrastructure:

Provision of cold-chain systems, better roads, and reliable power supply would reduce post-harvest losses and limit artificial price hikes caused by transport constraints.

4. Encourage cooperative marketing associations:

Fish traders should be organized into cooperatives that can negotiate prices collectively, share information, and strengthen their bargaining power within the value chain.

5. Implement price-monitoring mechanisms:

Regular surveillance of fish prices by government agencies and market unions will ensure fairness and transparency across all market tiers.

6. Capacity building and extension services:

Training programs for fish marketers and farmers should be intensified on record-keeping, market information systems, and business management to improve efficiency and sustainability.

7. Promote public–private collaboration:

Partnerships between government, private investors, and community groups should be encouraged to develop modern fish markets, enhance logistics, and standardize pricing structures.

6.4 Suggestions for Further Studies

Future research should:

Examine seasonal variations in fish pricing across different urban and rural markets in Edo State;

Analyze the profitability differentials between direct-to-consumer sales and agent-mediated marketing; and

Employ econometric models to quantify the exact degree of price influence exerted by middlemen.

REFERENCES

Abolagba, O. J., Ogboru, R. O., Joshua, D. K., and Amadin, D. A. (2023). Assessment of marketing practices and strategies of smoked fish within selected markets in Benin City, Edo State, Nigeria. *Journal of Applied Sciences and Environmental Management*, **27**(11), 2463–2468.

Abolagba, O. J., Ogboru, R. O., Joshua, D. K., and Amadin, D. A. (2023). Assessment of marketing practices and strategies of smoked fish within selected markets in Benin City, Edo State, Nigeria. *Journal of Applied Sciences and Environmental Management*, **27**(11), 2463–2468. https://doi.org/10.4314/jasem.v27i11.36

Adenegan, K. O., and Bolarinwa, A. O. (2010). Price transmission and market integration of fish in Oyo State. *Journal of Rural Economics and Development*, **19**(1), 1–15.

Adenuga, B. M., and Montowska, M. (2023). The Nigerian meat industry: An overview of products' market, fraud situations, and potential ways out [PDF]. *Acta Scientiarum Polonorum Technologia Alimentaria*, **22**(3), 305–329.

Adewumi, A. A. (2015). Aquaculture in Nigeria: Sustainability issues and challenges. *Direct Research Journal of Agriculture and Food Science*, 3(12), 223–231.

Adeyemo, R. (1986). The power of fish trader associations in the marketing of fish in Lagos State. *Fisheries Society of Nigeria Conference Proceedings*, **424**, 141–147.

Agbebi, F. O., and Fagbote, T. A. (2012). The role of middlemen in fish marketing in Igbokoda fish market, Ondo State, South Western Nigeria. *International Journal of Development and Sustainability*, **1**(3), 880–888.

Ahmadi, R., and Mahreda, E. S. (2019). Marketing channels of marine fish in Banjarmasin fishing port, Indonesia. *Marketing*, **4**(3), 55–61.

Akegbejo-Samsons, Y. (1997). Introduction to aquaculture and fisheries management in Nigeria (Natural Resources Series 2). Goal Educational Publishers.

Ayanboye, A. O., Oluwafemi, Z. O., and Rafiu, R. A. (2015). Fresh fish (Clarias gariepinus) marketing system in major towns of Ibarapa zone, Oyo State, Nigeria. *International Journal of Applied Agriculture and Apiculture Research*, **11**(1–2), 76–84.

Ayanboye, A. O., Oluwafemi, Z. O., and Rafiu, R. A. (2015). Fresh fish (*Clarias gariepinus*) marketing system in major towns of Ibarapa zone, Oyo State, Nigeria. *International Journal of Applied Agriculture and Apiculture Research*, **11**(1–2).

Chaston, I. (1987). Marketing in fisheries and aquaculture. Fishing News Books Ltd.

`Food and Agriculture Organization of the United Nations. (2020). The state of world fisheries and aquaculture 2020: *Sustainability in action.* FAO. https://www.fao.org/documents/card/en/c/ca9229enGatta, P. P. (2022). The state of world fisheries and aquaculture 2022. FAO eBooks.

Gereffi, G., & Kaplinsky, R. (2001). The value chain analysis in development research. *IDS Bulletin*, **32**(3), 1–10.

Grema, H. A., Kwada, J. K. P., Bello, M., and Umaru, O. H. (2020). Understanding fish production and marketing systems in North-western Nigeria and identification of potential food safety risks using value chain framework. *Preventive Veterinary Medicine*, **181**, 105038.

Henson, S., and Jaffee, S. (2004). Standards and agro-food exports from developing countries: Rebalancing the debate. World Bank eBooks.

Kohli, A., Moon, C., and Sørensen, G. (2003). States, markets and just growth: Development in the twenty-first century. *Choice Reviews Online*, **41**(2), 41–1045.

Lawal, W. L., and Idega, E. O. (2004). Analysis of fish marketing in Benue State. *In Proceedings of the Annual Conference of the Fisheries Society of Nigeria* (FISON) (pp. 65–72).

Madugu, A. J., and Edward, A. (2011). Marketing and distribution channel of processed fish in Adamawa State, Nigeria. *Global Journal of Management and Business Research*, **11**(4), 21–26.

Ndubueze-Ogaraku, M. E., and Omelogu, W. (2016). Comparative analysis of wholesale and retail frozen fish marketing in Port Harcourt Metropolis, Rivers State, Nigeria. *Journal of Agricultural Research and Development,* **15**(2), 100–109.

Nwabueze, A. A., and Nwabueze, E. O. (2010). An investigation into the problems of fresh fish marketing in Oshimili South Local Government Area of Delta State, Nigeria. Agriculture and Biology *Journal of North America*, **1**(4), 690–693.

Olawunmi, C. A., and Clarke, A. P. (2023). Analysing the marketing strategies that fish farming businesses in the UK can use to gain a competitive advantage. *Journal of Enterprising Communities: People and Places in the Global Economy*, **17**(6), 1410–1438.

Oluwasola, O., and Alimi, T. (2007). Financial intermediation in agriculture in Nigeria: An appraisal of the performance of commercial banks. *Agricultural Economics*, **36**(3), 129-137

Oni, S. I., Ege, E., Asenime, C., and Oke, S. A. (2008, Fall). Rainwater harvesting potential for domestic water supply in Edo State. *Industrial Journal of Management and Social Sciences*, **2**(2), 87–98.

Stoll, J. S., Harrison, H. L., De Sousa, E., Callaway, D., Collier, M., Harrell, K., Jones, B., Kastlunger, J., Kramer, E., Kurian, S., Lovewell, M. A., Strobel, S., Sylvester, T., Tolley, B., Tomlinson, A., White, E. R., Young, T., and Loring, P. A. (2021). Alternative seafood networks during COVID-19: Implications for resilience and sustainability. *Frontiers in Sustainable Food Systems*, 5, 614368.

VC, A. (2019). Marketing of fish products. *Journal of Aquaculture and Marine Biology*, 8(2), 55–61.

Village level aquaculture development in Africa. (1988). OECD Publishing eBooks.

APPENDIX

RESEARCH QUESTIONNAIRE
DEPARTMENT OF AQUACULTURE AND FISHERIES MANAGEMENT
FACULTY OF AGRICULTURE
UNIVERSITY OF BENIN
EDO STATE, NIGERIA

Sir/Madam,

REQUEST FOR YOUR ASSISTANCE TO COMPLETE MY RESEARCH QUESTIONNAIRE

I am a Student of the above department and institution. I am carrying out research titled: "**Impact of Fish Marketing Agents on Fish Price in Benin City, Edo State"**

The purpose of this request is to humbly ask for your assistance to answer all relevant questions in the questionnaire as accurate as possible so as to ensure reliable data in this study.

Your participation in this survey is voluntary. All responses will be anonymous and your answers will be completely confidential.

Thanks for your anticipated cooperation.

Miss Precious Onah

(AGR2004386)

QUESTIONNAIRE

SECTION A : DEMOGRAPHIC DATA

1. What is your age?

(a) 18-25yrs [ ] (b) 26-35yrs [ ] (c) 36-45yrs [ ] (d) 46-55yrs [ ] (e) Above 56 yrs [ ]

2. Specify your gender

(a) Male [ ] (b) Female [ ] (c) Others? [ ] Please specify _____

3. Marital status

(a) Married [ ] (b) Single [ ] (c) Divorced [ ] (d) Widowed [ ]

4. Educational level

(a) No formal education [ ] (b) Primary education [ ] (c) Secondary education [ ] (d) Tertiary education [ ] (e)Postgraduate education [ ]

5. Household size

(a) 1- 2 person [ ] (b) 3-4 people [ ] (c) 5 – 6 people [ ] (d) over 6 people

6. Nature of housing

(a) Rented apartment [ ] (b) Personal house [ ]

7. If personal house, which type of house

(a) Passage house [ ] (b) Bungalow [ ] (c) Duplex [ ] (d) Others specify……..)

8. Type of involvement in the fish trade

(a) Fish Farmer [ ] (b) Fisherman [ ] (c) Wholesaler [ ] (d) Retailer [ ] (e) Consumer [ ] (f) Others? [ ] Please specify _____

SECTION B: MARKET AGENT INFLUENCE AND FISH PRICING

9. How long have you been involved in fish trading/production?

(a) Less than 3 years [ ] (b) 3-5 years [ ] (c) 6-10 years [ ] (d) Above 10 years [ ]

10. In your opinion, who has the greatest influence on fish price in Benin City?

(a) Farmers/Fishermen [ ] (b) Wholesalers [ ] (c) Retailers [ ] (d) Consumers [ ] (e) Others? [ ]

Please specify _____

11. How do you think fish marketing agents affect fish prices?

(a) They help stabilize prices [ ] (b) They cause price increases [ ] (c) They help reduce prices [ ]

(d) Others? [ ]Please specify _____

12. How are fish prices determined in your market?

(a) Based on supply and demand [ ] (b) Fixed by marketing agents [ ] (c) Determined by association [ ] (d) Negotiated freely through bargaining [ ] (e) Others? [ ] Please specify _____

13. Do you think fish marketing agents contribute to price fluctuations?

(a) Yes [ ] (b) No [ ] (c) Not sure [ ]

14. If yes, how do they contribute?

(a) Price hoarding [ ] (b) Transportation costs manipulation [ ] (c) Creation of artificial scarcity [ ]

(d) Others? [ ] Please specify _____

15. Have you experienced profit loss as a result of price manipulation by market agents?

(a) Yes [ ] (b) No [ ]

16. What challenges do you face due to the activities of fish marketing agents? (You can tick more than one)

(a) Unfair pricing [ ] (b) Limited market access [ ] (c) Low profit margins [ ] (d) Exploitation [ ]

(e) Others? [ ] Please specify _____

17. Do you belong to any fish traders or fishermen association?

(a) Yes [ ] (b) No [ ]

18. If yes, does your association help in regulating fish prices?

(a) Yes [ ] (b) No [ ] (c) Sometimes [ ]

19. Do you think the presence of marketing agents is necessary for fish distribution?

(a) Yes [ ] (b) No [ ] (c) Not sure [ ]

20. How would you rate the overall impact of marketing agents on fish prices?

(a) Very Positive [ ] (b) Positive [ ] (c) Neutral [ ] (d) Negative [ ]e) Very Negative [ ]

21. What do you think can be done to ensure fair fish pricing in Benin City?

(a) Government intervention [ ] (b) Strengthening trader associations [ ] (c) Reducing middlemen

[ ] (d) Market monitoring [ ] (e) Others? [ ] Please specify _____

22. How do you transport your fish to the market?

(a) Personal vehicle [ ] (b) Hired vehicle [ ] (c) On foot [ ] (d) Others? [ ] Please specify

_____

23. Do transportation costs significantly affect fish prices?

(a) Yes [ ] (b) No [ ] (c) Not sure [ ]

SECTION C: INCOME AND LIVELIHOOD

24. What is your average monthly income from fish trading/production?

(a) Below ₦50,000 [ ] (b) ₦50,000 - ₦100,000 [ ] (c) ₦101,000 - ₦200,000 [ ] (d) Above

₦200,000 [ ]

25. Do you have any other source of income apart from fish trading/production?

(a) Yes [ ] (b) No [ ]

26. If yes, what is your other source of income?

(a) Civil servant [ ] (b) Private worker [ ] (c) Trade [ ] (d) Artisan [ ] (e) Others? [ ] Please specify _____

27. Compared to your other income source(s), how does fish trading/production perform?

(a) I earn more from fish business [ ] (b) I earn more from other sources [ ] (c) Income is about the same [ ]

SECTION D: RECOMMENDATIONS AND POLICY

28. Are there any government policies or interventions supporting fish marketing in Benin City?

(a) Yes [ ] (b) No [ ] (c) Not sure [ ]

29. If yes, how effective are these policies?

(a) Very effective [ ] (b) Effective [ ] (c) Neutral [ ] (d) Ineffective [ ] (e) Very ineffective [ ]

30. What forms of support would you recommend to improve fair fish pricing? (You can tick more than one)

(a) Better storage facilities [ ] (b) Improved transport infrastructure [ ] (c) Access to market information [ ] (d) Regulation of market agents [ ] (e) Subsidies for producers [ ] (f) Others? [ ] Please specify _____

31. In your opinion, how can the influence of market agents be better managed?

_____

Thank you for your time and honest responses. All information provided will be treated with strict confidentiality and used strictly for academic purposes.