Determinants of poverty among coastal artisanal fishers in Lagos state, Nigeria

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ABSTRACT

This study examined the determinants of poverty status among coastal artisanal fishers in Lagos State, Nigeria. Multi-stage sampling procedure was used in selecting 200 artisanal fishers from nine fishing communities. Data were collected using an interview schedule and analysed using descriptive and Ordinary Least Square Regression (OLS) analytical techniques. Majority of the respondents were married (79.0%) and had formal education (95.5%), with mean age of 35.00±8.55 years. The mean monthly income and household expenditure of the artisanal fishers were ₦163,810.00±110,347.12 and N89, 276.57, respectively. The mean household size and income-earning members were 7±3.81 and 5±2.88 persons, respectively. More than half (52.2%) of the respondents were relatively poor. Constraints facing coastal artisanal fishing were high cost of fishing materials ($\bar{x}$=1.93±.31), inadequate storage facilities ($\bar{x}$ = 1.93±.27), limited access to credit facilities ($\bar{x}$ = 1.88±.45), and low fish catch ($\bar{x}$ = 1.85±.36). Household size (β = -0.128), number of incomes earning members (β= 0.052), and total monthly household expenditure (β= 0.987) significantly influenced poverty among the respondents. The study concluded that poverty is prevalent among coastal artisanal fishers in Lagos State, Nigeria, and that poverty is influenced by household size, number of incomes earning members, and household expenditure. The study recommended that government and concerned stakeholders should collaborate to provide subsidies or microfinance schemes to reduce the cost burden of fishing materials for artisanal fishers.

INTRODUCTION

The World Bank (2020) defines poverty as the incapacity to achieve even the most basic living level. According to the United Nations Development Program - UNDP (2022), poverty can also be seen as a violation of human dignity and a denial of possibilities and choices and an intolerable deficiency in human well-being, encompasses both social and physiological dimensions of suffering. The failure to provide for fundamental material or biological needs, such as insufficient food, health, education, and housing, is physiological deprivation (World Bank, 2001). According to a recent Global Multidimensional Poverty Index 2023 published by United Nations Development Programme - UNDP and Oxford Poverty and Human Development Initiative - OPHI (2023), 1.1 billion out of 6.1 billion people from 110 developing countries are poor, implying that 18% of the population in developing countries live in acute multidimensional poverty. It is worrisome that close to half (534 million) of the poor live in sub-Saharan Africa. The report further indicated that nearly two-thirds and over one-third of the poor people live in middle- and low-income countries, respectively. According to World Bank April report of 2025, Nigeria is home to 19% of the extremely poor population in sub-Saharan Africa, the highest share across the region indicating that over 106 million Nigerians live in extreme poverty (World bank report, 2025).

It is documented that the rural population is disproportionately affected by poverty globally as almost 84 percent of poor people live in the areas (UNDP and OPHI, 2023). According to UNDP (2022), multidimensional poverty is significantly more prevalent in rural areas of Nigeria, affecting 72% of the rural population compared to 42% in urban areas. Although approximately 70% of Nigerians live in rural regions, these areas are home to 80% of the nation's impoverished population. The intensity of poverty is also more pronounced in rural communities including fishing settlements where the poverty severity index stands at 42%, compared to 37% in urban areas. However, despite its resource wealth, Nigeria continues to grapple with widespread poverty. As of 2024, approximately 87 million Nigerians are estimated to be living below the poverty line, positioning the country as having the second-largest population of people in extreme poverty globally, after India (World Bank, 2024). The national poverty rate was projected to reach 38.9% in 2023. According to Lain *et al*. (2022), between 2009 and 2019, the number of impoverished individuals increased despite a decline in poverty rates. Regrettably, despite the region's importance to the Nigerian economy in terms of employment opportunities, meeting the non-food

needs of the majority of the nation's expanding population, generating income, and providing raw materials, rural communities are more susceptible to poverty and its effects. This is because rural areas, where most residents are crop farmers, fishers, hunters, and merchants of agricultural products and byproducts are where the primary production of food crops, cash crops, livestock, and aquatic species, including fish, begins. Millions depend on artisanal fisheries, especially in coastal areas like Lagos State, for their livelihoods (Ojebiyi *et al*., 2023). Small-scale, traditional fishing methods typify these fisheries and are vital to this industry (FAO, 2016). Nevertheless, despite its importance, artisanal fishermen frequently encounter various difficulties, such as poverty, which compromises their socioeconomic security and feeds a vicious circle of susceptibility (Adeleke and Oloko-Oba, 2019).

The main source of income for residents in coastal areas is fishing and businesses related to fisheries. According to Ibrahim *et al*. (2009), a significant segment of Nigerian fishing households are subsistence small holders who primarily depend on the use of non-motorized boats and fishing nets as part of a traditional system marked by low capital investment, low technology, and labor-intensive practices. Despite the fact that artisanal fishing, in particular, accounts for the majority of agricultural produce in Nigeria, poverty is, ironically, most prevalent and severe in the country's rural areas (UNDP, 2022). Numerous integrated programs and policies have been developed to address poverty in all of its manifestations since the Nigerian government recognised the multi-sectoral and multi-dimensional nature of poverty. The National Accelerated Fish Production Project (NAFPP), the Integrated Rural Fisheries Development Project, the Fish Storage, Processing and Marketing Scheme, and the National Economic Empowerment and Development Strategy (NEEDS) are a few of these initiatives and programs (National Bureau of Statistics - NBS, 2005).

In Lagos State, Nigeria, poverty is still a major problem for artisanal coastal fishers. Despite their crucial role in the economy and food security, many of these fishers are impoverished and unable to meet their basic needs (NBS, 2020). This paradox highlights the need for a nuanced understanding of the underlying factors perpetuating their socio-economic vulnerability, which makes it difficult to implement focused initiatives to improve their situation. The importance and efficacy of governmental interventions in alleviating poverty in developing nations have been significantly impacted by the interconnections between artisanal fishing households and poverty. Even though practically every household in coastal and riverine areas fishes. Artisanal fisheries have been associated with limited enhanced income and improved quality of life (Etim *et al*., 2008). Studies on poverty in Nigeria and the worldwide fisheries industry are available, but few explicitly address the factors contributing to poverty among Lagos State's coastal artisanal fishers. Comprehending these factors is essential for formulating efficacious measures to mitigate poverty that are customised to the distinct socio-economic milieu of this population.

In view of this; the need to assess the current poverty situation among artisanal fishing households in coastal fishing communities of Lagos State becomes imperative. Specifically, the study described the socio-economic characteristics of fishing households, examined the fishing characteristics of the fishing households, determined the fishing household's monthly expenditure, assessed the poverty status of the fishing households, and determined the severity of constraints faced by the fishing households. The study tested if there are significant relationships between selected fishing characteristics and poverty among fishing households at significant levels of 5%.

METHODOLOGY

The study was carried out in Lagos State which has a coastline of 180km along the coast of the Atlantic Ocean, it therefore has 22.5 percent of Nigeria coastline and occupies an area of about 3,577 sq. km. land mass with about 786.94 sq. km. The state has marine, brackish and freshwater ecological zones with varying species that provide productive fishing opportunity for fishers (Figure 1).

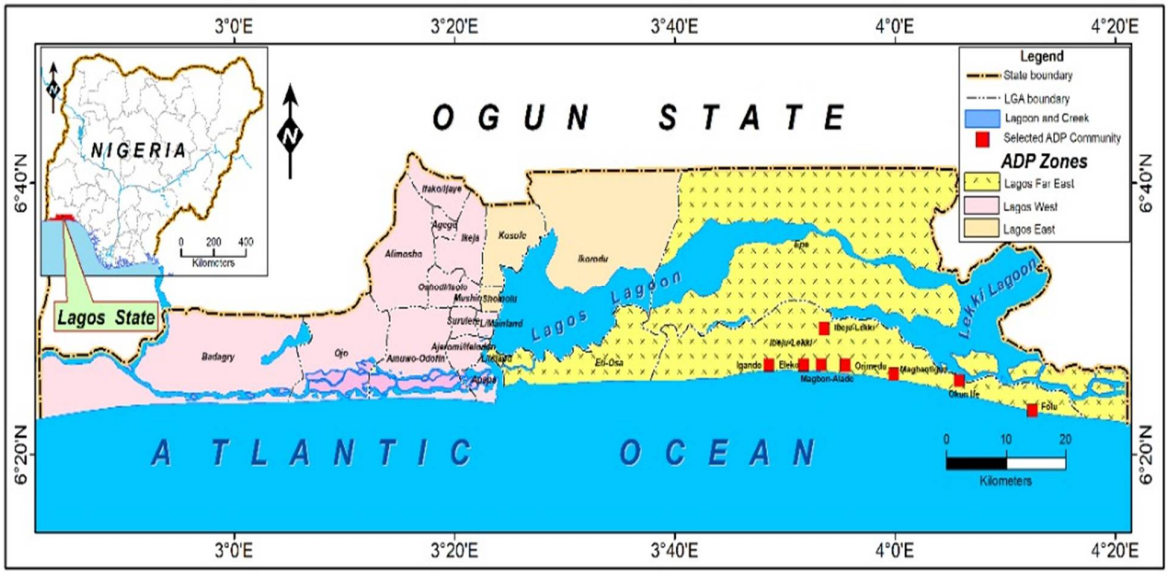

Figure 1: Map of the study areas
Source: Geography Department University of Ibadan

Sampling techniques and sample size

A multistage sampling procedure was used. At the first stage, one out of the three agricultural development programme zones were purposively selected due to high coastal fishing activities which is Far Eastern zone. At the second stage, nine fishing communities: Eleko (95); Ibeju-Lekki (150); Orimedu (200); Igando (77); Magbo-Alade (88); Magbotigun (100); Lekki (150); Folu (55) and Okun Ife (80) were purposively sampled from the selected zone due to highest concentration of fishers and intensity of fishing activities. From a sampling frame of 995 artisanal fishers in the selected communities, 20 percent was randomly selected: Eleko (19); Ibeju-Lekki (30); Orimedu (40); Igando (16); Magbo-Alade (18); Magbotigun (20); Lekki (30); Folu (11) and Okun Ife (16) in Stage 3 to give a total of 200 artisanal fishers which served as the sample size for this study. The sampling frame was obtained by compiling the list of fishers from the selected fishing communities with the help of agricultural development program extension personnel and research assistants in the study locations.

Data were elicited using a validated and pretested interview schedule on the stated objectives. Fishers were either visited in their homes or at the landing sites for data collection. The interview schedule was interpreted in the local language (Yoruba) of the respondents by the researcher to the fishers, and their responses were recorded in English language.

Household expenditure: This was measured at interval level with a list for estimating the spendings of the households monthly under the food and non-food items. The household expenditure was computed as the summation of food expenses and non-food expenses.

Poverty status: This was measured based on the classification of poor and non-poor households in relation to the level of their monthly per capita expenditure by each household monthly total per capita expenditure (Sanusi *et al.*, 2021). The monthly per capita expenditure is obtained by dividing the total household monthly expenditure by household size. Any household with a per capita expenditure lower than the mean per capita expenditure of the respondents is considered poor while those with higher per capita expenditure are categorized as non-poor (Sanusi *et al*., 2021).

$$Per\ Capita\ Expenditure\ (PCE) = \frac{\text{Total Household monthly expendditure}}{\text{Household size}}$$

Constraints facing artisanal fishers: This was measured with a 16-item scale on a three response options of Major constraint, Minor constraint, and Not a constraint. The options are assigned scores of 2, 1 and 0, respectively. Mean values were computed and used in ranking the items in descending order of severity such that items with mean values above the cut-off point (1.00) are considered as severe while those with values below the cut-off point are considered otherwise.

Data obtained from the survey were cleaned, coded and entered into the Statistical Package for Social Sciences (SPSS) version 21.0 for analysis. The data were subjected to descriptive (frequency counts, percentages, means) and inferential (Ordinary Least Square Multiple Regression) statistics. The regression analysis model was used to determine production by relating per capita household expenditure directly to exogenous asset endowment of the households.

RESULTS AND DISCUSSION

Socioeconomic characteristics of fishers

The socioeconomic characteristics of the fishers are presented in Table 1. It shows that 33.0% and 42.0% were within the age brackets of 21-30 years and 31-40 years, respectively. The mean age was 35.13±8.55 years. According to the research findings, the average age of the artisanal fishing workforce in Lagos State indicates that most workers are in their prime working years. This demographic profile may impact several characteristics of poor status, such as generating income, taking care of the home, and obtaining social services. Salau and Olaleye (2020) posit that while younger fishers may encounter obstacles in relation to skill development and labor market engagement, older fishers may possess greater experience and expertise regarding fishing tactics. This result is consistent with that of Olaoye *et al*. (2012) and Olaoye *et al*. (2018), who discovered that fishers in Ogun Waterside were within the productive and economically active age range, potentially increasing fish catches and enhancing household and family livelihoods. This, however, ran counter to Baiyewu's (2020) findings, which indicated that younger people were less likely to fish and that older fishers were the ones who fished. This implies that while artisanal fishers are still active, their fish supply would be sustainable. More than half (53.5%) were Christians and 44.5% and 2.0% were Muslims and traditional worshipers, respectively. Majority (79.0%) of the fishers were married, and 19.5% were single. The distribution of fishers based on marital status revealed that married people dominated the fishing community. This suggests that the make-up of households and family dynamics may have a big impact on how poor coastal artisanal fishers are. Married fishers may have extra financial obligations, such as providing for dependents and covering home costs, which may have an impact on their financial security and susceptibility to poverty. Adelekan and Ojo (2018) posit that poverty consequences may arise from variations in household decision-making processes and resource allocation techniques between married and single fishers. Additionally, it implies that the fishers were accountable and that fishing gave them the ability to guarantee food security for their families. This supports Baiyewu's (2020) assertion that marriage may catalyze taking up fishing as a means of meeting one's obligation to provide for the necessities of the household. According to Mafimisebi *et al*. (2016), married fishers likely pursued fishing to secure a reliable source of income to support their families. Table 1 also reveals that 39.0% of the fishers had a household size of 4-6 persons while 21.5% and 21.0% had household size ranging from 7-9 persons and >9 persons, respectively. The mean household size was approximately 7±3.81 persons. Close to two-thirds (65.5%) of the fishers had 6-10 dependents with the mean household dependent being about 5±2.88 persons. Due to the typically large family sizes within the fishing industry, it can be inferred that fishers tend to have a high number of dependents as well as multiple household income earners, underscoring the significant role of family composition in their socio-economic dynamics. A large family implies that family members could support artisanal fishing for little or no labor expense. Additionally, fishers with larger households are more likely to be impoverished because of higher expenses. This is consistent with the claims made by Anyanwu (2013) that large households in Nigeria experience greater rates of poverty. The majority of fishers worked primarily as fishers, according to research findings, and various enterprises associated with fishing. This demonstrates how coastal populations rely on artisanal fishing for their economic sustenance. Many households along Lagos State's coastline rely heavily on fishing for employment, income, and food security, which supports local economies and preserves livelihoods (Olatunji and Mshelia, 2018; Olofin and Oladeji, 2019; Ojebiyi *et al*., 2023). Majority (98.0%) were involved in fisheries related occupation. Table 1 also shows that the fishers' mean monthly income was N163, 810.00±110,347.12. Majority (93.0%) of the fishers had 1-5 income earning household members. Also, Table 1 shows that more than half (54.0%) of the fishers had secondary education, 37.50% had primary education, while the remaining 4.5%, 3.0% and1.00% had no formal education, tertiary education and religious education respectively. Table 1 also show that 55.0% of the fishers owned their residence, while 22.0% (had both owned and inherited residence) and 16.0% are inherited, while few (7.0%) rented their apartments. The study's findings showed that most fishers were classified as literate, and a larger percentage had completed at least secondary school, suggesting that fishing is also a source of livelihood for educated people. This will facilitate the implementation of various innovations and tactics in addition to better fishing technologies. The educational background of the fishers raises the possibility that human capital elements, including skill development and educational achievement, may impact the poverty condition of artisanal coastal fishers. According to Adeyanju and Olaniyan (2019), education improves fishers' ability to take up alternate

sources of income, obtain formal employment, and adjust to shifting market conditions and technological breakthroughs. According to earlier research (Onemolease and Oriakhi, 2011; Olaoye *et al*., 2013; Tiamiyu *et al*., 2015; Olaoye *et al*., 2016), the adoption of technology by farmers positively correlates with education. Additionally, Adeleke (2013) claimed that educated fishers would be more familiar with the fundamentals of fishing operations and would find it simpler to implement innovations from research institutes and extension agencies in order to increase output.

Table 1: Socioeconomic characteristics of respondents (n = 200)

Variables	Frequency	Percentage	Mean ± Std Dev
Age (years)			
≤ 20	5	2.5	
21 – 30	66	33.0	
31 – 40	84	42.0	35.13±8.55
41 – 50	39	19.5	
>50	6	3.0	
Religion			
Christianity	107	53.5	
Islam	89	44.5	
Traditional	4	2.0	
Educational status			
No education	9	4.5	
Primary education	75	37.5	
Secondary education	108	54.0	
Tertiary education	6	3.0	
Religious education	2	1.0	
Marital status			
Married	158	79.0	
Single	39	19.5	
Divorced/ Separated	3	1.5	
Residential status			
Owned	110	55.0	
Inherited	32	16.0	
Owned/inherited	44	22.0	
Rented	14	7.0	
Household size (persons)			
1-3	37	18.5	
4-6	78	39.0	
7-9	42	21.0	7±3.81
>9	43	21.5	
Number of household dependent			
1-5	131	65.5	
6-10	61	30.5	5±2.88
11-15	8	4.0	
Primary occupation			
Fisheries related	196	98.0	
Non fisheries related	4	2.0	
Income primary occupation			
25001-50000	26	13.0	
50001-75000	13	6.5	163,810.00±110,347.12
75001-100000	51	25.5	
>100000	110	55.0	
Number of incomes earning member			
1-5	186	93.0	2.15±1.61
6-10	14	7.0	

Fishing characteristics of artisanal fishers

The fishing characteristics of artisanal fishers are presented in Table 2. It reveals that about half (51.0%) of the fishers engaged in fishing for 6-10 hours per day

with a mean working hours of 5.75±1.51. Half (50.0%) of the fishers had more than 15 years of fishing experience while 23.5% and 24.5% had 6-10 years and 11-15 years of experience, respectively. The mean year fishing experience was 18.4±9.58 years. All the fishers engaged in fishing on a daily basis. Also, 41.5% of the fishers participated in fishing during the morning and night periods while 27.0% go fishing in the morning alone. Also, 37.5% of the fishers had been residing in the community for 11-20 years, 23.0% of the fishers resided for 1-10 years and 21-30 years, while 16.5% of the fishermen resided for more than 30 years, respectively. The mean year of residency was 20.30±12.46. The results also demonstrate the fishing industry's major contribution to Lagos State's local economy, which includes income generation, business stimulation, and support for coastal communities' diversification of sources of income. The fishers' years of experience were noticeable, allowing them to exhibit a high degree of ability, wisdom, and tacit knowledge from years of experience on the water. Their vast experience makes them proficient in many fishing-related areas, such as resource management, fish behavior, navigation, and handling gear (Adeyanju and Olaniyan, 2019; Ajayi and Adesina, 2019). As a result, the fishers should be able to cover their home expenses. The survey results also showed that artisanal fishers engaged in fishing daily, with mornings being their most common time. This implies that fishing was preferably done in the morning by the fishers as this will enable them to know the direction of fishes for a better output (FAO, 2012).

Table 2: Distribution of artisanal fishers' fishing characteristics (n = 200)

Variables	Frequency	Percentage	Mean± Std Dev(SD)
Working hours/day			
1-5	98	49.0	
6-10	102	51.0	5.75±1.51
Year of experience			
1-5	4	2.0	18.45±9.56
6-10	47	23.5	
11-15	49	24.5	
>15	100	50.0	
How often do you fish?			
Daily	200	100	
Period of fishing			
Morning	36	18.0	
Afternoon	8	4.0	
Night	2	1.0	
Morning and afternoon	17	8.5	
Morning and night	83	41.5	
Morning, afternoon and night	54	27.0	
Year of residency			
1-10	46	23.0	20.30±12.46
11-20	75	37.5	
21-30	46	23.0	
>30	33	16.5	

Household expenditure

Table 3 reveals that a total of N89,276.5±26,415.33 was the monthly total household expenditure of the sampled fishers with total food expenses accounting for 46.6%. On the other hand, non-food expenses accounted for 53.4% of the household monthly expenditure. The results further revealed that 17.0% and 16.2% were expended on clothing and education, respectively. The least expenditure was on housing and home maintenance. The fishers' average monthly earnings, though varied, was almost ₦164,000, more than the ₦30,000 minimum wage for Nigerian laborers. Different levels of adoption of new technologies and variations in fishing intensity could cause monthly income fluctuation. These results are consistent with those of Baiyewu (2020), who found that artisanal fishers' high-income levels were caused by their nearly full-time commitment to fishing. According to Omitoyin and Fregene (2012), most of Lagos State's artisanal fishers made fishing their full-time job. Food items only made for roughly 47% of household expenses, meaning that non-food items accounted for more than half of household spending. The percentage of household spending on non-food goods can be used as a stand-in for gauging the standard of living and general well-being of Lagos State's artisanal fishing households. Increased spending on non-food products might be a reflection of easier access to consumer goods, infrastructure, and necessary services, which would improve living conditions, social welfare, and human development

outcomes in coastal areas (Adeyanju and Olaniyan, 2019). Due to the seasonal and erratic nature of fishing earnings, the difficulty in obtaining financial services, and the exposure to external risks like market volatility, climate change, and policy changes, artisanal fishing households may continue to be susceptible to economic shocks and fluctuations even with their comparatively high expenditures on non-food items. Strategies for household resilience, like asset accumulation, savings, and unofficial insurance networks, may be crucial in preserving household well-being and acting as a buffer against fluctuations in income (Adelekan and Ojo, 2018; Salami and Daramola, 2021).

Table 3: Mean household expenditures per month (n= 200)

Items	Mean (N)	Std. Deviation	Percent of household expenditure
Staple food	32460.00	19963.35	36.4
Vegetables	5711.43	6429.29	6.4
Fruits	1008.33	722.076	1.1
Dairy	2418.53	2153.32	2.7
Total food expenditure	41598.29	21509.02	46.6
Non-food expenses (clothing)	15202.28	12882.48	17.0
Communication (Airtime)	7018.55	3228.27	7.9
Housing and Home maintenance (kerosene)	97.10	57.49	0.1
Social expenditure (Alms, offering and tithe)	3153.66	1635.29	3.5
Health	7760.47	3686.66	8.7
Education	14446.22	5000.75	16.2
Total non-food expenditure	47678.28	19201.49	53.4
Total	89,276.57	26415.33	

Source: Field survey (2021)

Poverty status of artisanal fishers

Figure 1 reveals that slightly above average (52.2%) were relatively poor, while 47.8% were relatively non-poor. The inability of households to meet basic requirements and obtain necessary services, as shown by food insecurity, substandard housing, poor healthcare, and low educational attainment, is reflected in poverty, according to Adeyanju and Olaniyan (2019). According to this survey, over half of the fishers were moderately impoverished. This discovery aligns with the findings of Oyetade *et al*. (2023a), who similarly revealed that over 50% of artisanal fishers in Ogun Waterside Local Government Area were impoverished, suggesting that poverty is not limited to artisanal fishers in Lagos State. This implies that artisanal fishers are often impoverished. This emphasizes the socioeconomic difficulties that artisanal fishing communities encounter. The vulnerability of artisanal fishers to external shocks and pressures, such as market fluctuations, regulatory changes, environmental degradation, and climate variability, is reflected in their poverty. Although fishing is a source of income for coastal communities, it also carries dangers that can worsen poverty and reduce the resilience of households (Olatunji and Mshelia, 2018; Salau and Olaleye, 2020).

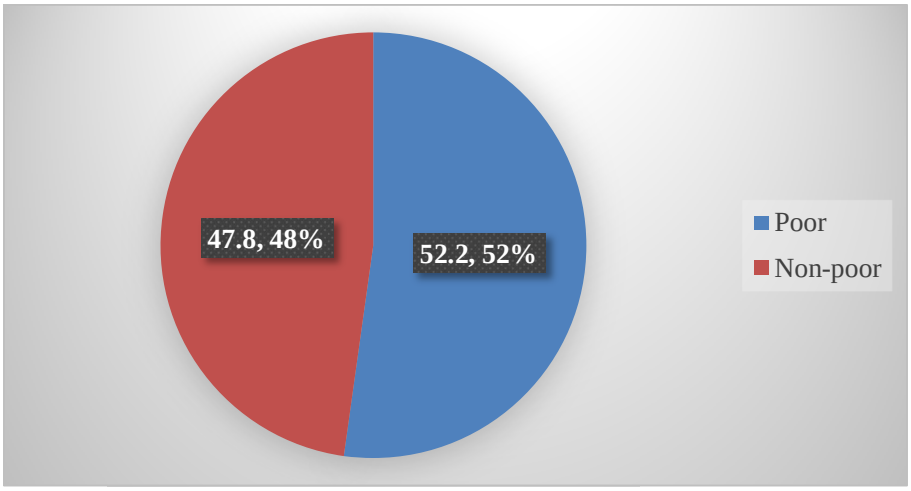

Figure 1: Distribution of artisanal fishers by poverty status

Constraints facing artisanal fishers

The severity of constraints facing Artisanal Fishers are presented in Table 4. The mean values presented in Table 4 revealed that high cost of fishing materials ($\bar{x}$=1.93±.31), inadequate storage facilities ($\bar{x}$ = 1.93±.27), access to credit facilities ($\bar{x}$ = 1.88±.45), fish storage ($\bar{x}$ = 1.88±.46), low fish catch ($\bar{x}$ = 1.85±.36).compass for navigation ($\bar{x}$ = 1.80±.40), environmental influence - wave/cold ($\bar{x}$ = 1.75±.48), gears and craft inefficiency ($\bar{x}$ = 1.51±.50), tearing of nets by engine ($\bar{x}$ = 1.51±.50), lack of communication network ($\bar{x}$ = 1.50±.50), poor durability of fishing net ($\bar{x}$ = 1.42±.49), inability to repair gears and crafts ($\bar{x}$ = 1.35±.48), oil spillage ($\bar{x}$ = 1.33±.62), and inadequate fishing materials ($\bar{x}$ = 1.26±.44) were severe constraints facing artisanal fishing

While stealing of crafts, gears and catches ($\bar{x}$ = 0.74±.44), and government policy ($\bar{x}$ = 0.71±.45) were not severe constraints faced by artisanal fishers. However, fishers also considered lack of communication network ($\bar{x}$ = 1.50±.50), inability to repair gears and crafts ($\bar{x}$ = 1.35±.48), oil spillage ($\bar{x}$ = 1.33±.62) and inadequate fishing materials ($\bar{x}$ = 1.26±.44) as minor constraints.

The results showed that artisanal fishing has a variety of difficulties, including expensive equipment prices, subpar facilities, restricted loan availability, and low fish harvest. For artisanal fishers, the high expense of fishing supplies, such as equipment, boats, and gasoline, poses a major financial challenge. Previous submissions (Ajayi and Adesina, 2019; Olofin and Oladeji, 2019) state that financial limitations prevent investment in fishing technology and equipment, impacting the industry's productivity and profitability. Post-harvest losses and a decline in the market value of the catch may result from restricted access to suitable storage facilities for fish preservation. Artisanal fishing communities have food insecurity and unstable income due to inadequate storage infrastructure (Salau and Olaleye, 2020). In addition, investments in business expansion, equipment upgrades, and fishing operations are hampered by limited access to financial institutions. Fishers may find it difficult to obtain funding for boat purchases, equipment repairs, or value-added processing ventures, limiting their capacity to increase output and earnings (Adelekan and Ojo, 2018; Salami and Daramola, 2021). Oyetade *et al*. (2023b) also found limited access to finance, improved fisheries technologies and extension workers, and high cost of constructing fishing equipment as main challenges facing women fisher folks in Lagos State, Nigeria.

Table 4: Severity of constraints (n=200)

Variables	Major constraints	Minor constraints	Not a constraint	Mean±SD	Rank
High cost of fishing materials	94.5	4.0	1.5	1.93±.31	1st
Inadequate storage facilities	93.5	6.0	0.5	1.93±.27	1st
Access to credit facilities	93.0	2.0	5.0	1.88±.45	3rd
Fish spoilage	92.5	2.5	5.0	1.88±.46	3rd
Low fish catch	84.5	15.5	0.0	1.85±.36	5th
Compass for navigation	79.5	20.5	0.0	1.80±.40	6th
Environmental influence (wave/cold)	76.5	21.5	2.0	1.75±.48	7th
Gears and craft inefficiency	51.0	49.0	0.0	1.51±.50	8th
Tearing of nets by engine	51.0	49.0	0.0	1.51±.50	8th
Lack of communication network	50.0	50.0	0.0	1.50±.50	10th
Poor durability of fishing materials	41.5	58.5	0.0	1.42±.49	11th
Inability to repair gears and crafts	34.5	65.5	0.0	1.35±.48	12th
Oil spillage	40.5	51.5	8.0	1.33±.62	13th
Inadequate fishing materials	26.0	74.0	0.0	1.26±.44	14th
Stealing of crafts, gears and catches	74.0	26.0	0.0	0.74±.44	15th
Government policy	71.0	29.0	0.0	0.71±.45	16th

Relationship between selected fishing characteristics and poverty status

Results on the relationship between the respondents' socio-economic characteristics and poverty status are presented in Table 5. Results show that household size (β = -0.128, $p \leq 0.01$), number of incomes earning household members (β= 0.052, $p \leq 0.05$), and total monthly household expenditure (β= 0.987, $p \leq 0.01$) were significant determinants of poverty among fishers.

Fishing techniques that are not sustainable, habitat degradation, climate variability, and overfishing contribute to decreased fish capture levels. The long-term sustainability of artisanal fisheries is threatened by low fish availability, which also restricts fishers' revenue opportunities (Salau and Olaleye, 2020).

Findings further indicated that while household size had negative relationships, number of incomes earning household members and total monthly household expenditure had positive relationships with poverty among the fishers. The negative coefficient for household size suggests that among fishers, lower levels of poverty are related to larger household sizes. This finding can be explained by the idea of economies of scale within homes, even though it initially seems paradoxical. Larger households frequently benefit from pooled resources and collaborative contributions, which lowers per capita expenditures and lowers the incidence of poverty (Salau and Olaleye, 2020). A household that has more members that contribute to income generation is less likely to be impoverished, as indicated by the positive coefficient for the number of income-earning persons. To lessen household vulnerability and increase socioeconomic resilience among fishers, this research highlights the significance of varied livelihood options and diverse revenue streams (Salami and Daramola, 2021). Also, there is a correlation between higher levels of expenditure and increased poverty among fishermen, as seen by the large positive coefficient for total monthly household expenditure. This is consistent with previous submissions (Adeyanju and Olaniyan, 2019; Olatunji and Mshelia, 2018) that households with higher spending can experience more financial strain and find it harder to meet their necessities, which could increase the likelihood that people will experience poverty.

Table 5: Socio economic determinant of poverty status (n= 200)

Variables	Unstandardized Coefficients		Standardized	t	p-value
	B	Std. Error	Coefficients (β)		
(Constant)	-4492.134	3489.542		-1.287	0.200
Age	-25.201	48.426	-0.008	-0.520	0.603
Income from fishing	-0.001	0.003	-0.005	-0.391	0.696
Household size	-895.863	258.211	-0.128	-3.470	0.001**
Number of household dependent	478.252	262.656	0.052	1.821	0.070
Number of incomes earning household member	858.648	336.530	0.052	2.551	0.012*
Years of experience	263.884	292.615	0.096	0.902	0.368
Years of residence	13.454	206.132	0.006	0.065	0.948
Working hours/day	700.576	1405.269	0.040	0.499	0.619
Total expenditure	.988	0.012	0.987	81.257	0.001**

R-square = 0.975; *and ** indicate significant determinants at 0.05 and 0.01 levels respectively

CONCLUSION AND RECOMMENDATIONS

This study concludes that poverty is prevalent among artisanal fishers, and they are faced with multifaceted constraints, including high cost of fishing materials, inadequate storage facilities, limited access to credit, post-harvest losses, low fish catch, and environmental influences. Household size, number of incomes earning members, total monthly household expenditure were determinants of poverty, among coastal artisanal fishers in Lagos State, Nigeria. Based on the findings of this study, the study recommended that: Extension agents, in collaboration with relevant government and non-governmental agencies should provide training, subsidies or microfinance schemes to reduce the cost burden of fishing materials for artisanal fishers.

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