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ORIGINAL ARTICLE

Determinants of Youth Participation in Urban Fish Entrepreneurship in Lagos State, Nigeria

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ABSTRACT
Youth unemployment remains a major development challenge in Nigeria, particularly in rapidly urbanising states such as Lagos. This study analysed the determinants of youth participation in urban fish entrepreneurship in Lagos State, Nigeria. Primary data were collected from 120 youths engaged in fish-related enterprises using structured questionnaires. Descriptive statistics and a binary logistic regression model were employed for data analysis. The results showed that fish production (35.83%) and marketing (34.17%) constituted the dominant areas of youth participation. Access to training (72.50%) and cooperative membership (65.83%) were relatively high, while access to start-up capital remained limited (42.50%). Regression results indicate that years of business experience positively influenced youth participation ($\beta = 0.772$, $p < 0.10$). Access to capital ($\beta = 0.633$), training ($\beta = 0.911$), market access ($\beta = –0.106$), and government support ($\beta = 0.457$) exhibited expected signs but were not statistically significant. Poor infrastructure and inadequate cold storage facilities ranked as the most severe constraints (mean = 4.03). It was concluded that youth participation in urban fish entrepreneurship is driven primarily by experience and enabling institutional conditions, underscoring the need for integrated policies addressing finance, infrastructure, and enterprise support.
***KEYWORDS**: Youth entrepreneurship; fish; urban fisheries; institutional support.*

INTRODUCTION

Youth unemployment remains a critical development challenge in Nigeria, particularly in urban areas where rapid population growth continues to outpace job creation. Recent labour force statistics indicate persistently high youth unemployment and underemployment rates in major cities such as Lagos (NBS, 2022; World Bank, 2023). Despite sustained economic reforms, the capacity of the formal sector to absorb the growing youth labour force remains limited, resulting in widespread underemployment and informal engagement. As traditional wage employment opportunities decline, entrepreneurship has increasingly been promoted as a viable pathway for engaging young people in productive economic activities. Youth entrepreneurship is widely recognised as a mechanism for job creation, income generation, and innovation, particularly in developing economies where labour markets are weakly structured (OECD, 2020; AfDB, 2022). In Nigeria, policy attention has increasingly shifted toward agribusiness entrepreneurship as a strategy for addressing youth unemployment while strengthening domestic food systems. Nigeria continues to experience high youth unemployment and underemployment, which has intensified the search for alternative livelihood pathways such as agribusiness and fisheries entrepreneurship (NBS, 2022; AfDB,

2022; World Bank, 2023). Within the agricultural sector, fisheries and fish-related enterprises offer significant potential for employment generation, income diversification, and food security, especially in rapidly urbanising states such as Lagos, where transforming urban food systems increasingly shape youth employment opportunities (Liverpool-Tasie *et al*., 2021). Fish remains one of the most affordable and widely consumed sources of protein in Nigeria, with consumption driven largely by urban populations (FAO, 2022). The fisheries sector therefore presents opportunities for employment generation, income diversification, and improved food security, particularly for young entrepreneurs. Fish entrepreneurship encompasses a wide range of activities, including fish production, processing, distribution, and marketing. In urban and peri-urban settings, these activities have expanded in response to rising demand, improvements in cold-chain logistics, and increased participation of private actors across the value chain (WorldFish, 2023). Lagos State, as Nigeria's largest metropolitan economy, represents a major hub for fish trade and consumption, offering diverse entry points for youth participation in fish-related enterprises.

Despite these opportunities, youth engagement in fish business entrepreneurship remains uneven and constrained by multiple socio-economic and institutional factors. Evidence suggests that many young people face significant barriers to entry into agribusiness, including limited access to start-up capital, inadequate technical and managerial skills, and weak linkages to markets (Adebayo and Ojo, 2021; Chukwu and Chukwu, 2023). These constraints often discourage sustained participation and limit the growth potential of youth-owned enterprises.

In the fisheries sector, such challenges are frequently compounded by high start-up costs, limited access to specialised training, and regulatory complexities associated with operating in urban environments. Urban fish entrepreneurs must navigate issues related to land use, environmental regulation, and infrastructure constraints, which can disproportionately affect young entrants with limited resources (FAO, 2023; Mafimisebi *et al*., 2024). As a result, participation in fish entrepreneurship is shaped not only by individual characteristics but also by broader institutional and market conditions. Empirical studies increasingly emphasise that youth participation in agribusiness is influenced by a combination of socio-economic factors (such as age, education, and experience), institutional factors (including access to finance, extension services, and government programmes), and market-related factors (such as input availability and output demand) (Oluwatayo, 2019; Adeyemo *et al*., 2024). However, evidence specific to urban fish entrepreneurship remains limited, particularly in rapidly urbanising contexts such as Lagos State.

Against this background, this study examines the determinants of youth participation in urban fish entrepreneurship in Lagos State, Nigeria. By identifying the key socio-economic, institutional, and market-related factors influencing participation, the study provides empirical evidence to inform policies aimed at promoting youth employment, strengthening urban fisheries value chains, and supporting sustainable fisheries development in Nigeria. This study therefore aims to analyse the socio-economic, institutional and market-related determinants of youth participation in urban fish entrepreneurship in Lagos State, Nigeria.

MATERIALS AND METHODS

Study Area

The study was conducted in Lagos State, Nigeria, one of the most urbanised and economically vibrant states in the country. Lagos State serves as a major hub for fish production, processing, distribution, and marketing and accounts for a substantial share of urban fish consumption in Nigeria. The state's dense population, extensive market networks, and expanding fish value

chains make it an appropriate location for examining youth participation in urban fish entrepreneurship (FAO, 2022; WorldFish, 2023; Liverpool-Tasie *et al*., 2021). Fish-related enterprises in Lagos operate across production, wholesale, retail, and value-added processing segments, providing multiple entry points for youth engagement.

Sampling Procedure and Sample Size

The target population comprised youths engaged in fish business entrepreneurship in selected urban and peri-urban areas of Lagos State. Youths were defined as individuals aged 18–35 years, consistent with classifications by the International Labour Organization and Organisation for Economic Co-operation and Development (ILO, 2022; OECD, 2020). A multistage sampling technique was employed. In the first stage, major fish business clusters and markets were purposively selected based on the intensity of fish-related activities. In the second stage, lists of youth fish entrepreneurs were obtained from market associations and cooperative societies. From these lists, respondents were randomly selected. A total of 150 questionnaires were administered, out of which 120 were correctly completed and used for analysis.

Data Collection

Primary data were collected using a structured questionnaire administered through face-to-face interviews. The questionnaire captured information on socio-economic characteristics, nature of fish business activities, access to finance, training and skills acquisition, market access, cooperative membership, institutional support, and level of participation in fish entrepreneurship. The questionnaire was pre-tested among 15 youth fish entrepreneurs outside the selected study locations to ensure clarity, consistency, and reliability. Feedback from the pre-test was used to refine the instrument. To minimise response bias, trained enumerators read out each question to respondents and recorded their responses, thereby accommodating both literate and non-literate respondents, as recommended for household and enterprise surveys in developing-country contexts (Grosh and Glewwe, 2000; Sumberg et al., 2021).

Measurement of Variables

Dependent Variable

Youth participation in urban fish entrepreneurship was measured as a binary variable. Respondents who indicated that they were actively engaged in fish-related enterprises were assigned a value of 1, while those not actively engaged were assigned a value of 0.

Binary measurement of participation has been widely applied in agribusiness and fisheries entrepreneurship studies (Oluwatayo and Ojo, 2022; Adebayo and Ojo, 2021).

Independent Variables

Independent variables were selected based on empirical literature on youth entrepreneurship and agribusiness participation (Adjognon et al., 2017; Chukwu and Chukwu, 2023; Mafimisebi *et al*., 2024) and included:

Age (years)
Gender (1 = male, 0 = female)
Educational level (ordinal)
Years of experience in fish business (ordinal)
Access to start-up capital (1 = yes, 0 = no)
Access to training/skills acquisition (1 = yes, 0 = no)
Access to market outlets (1 = yes, 0 = no)

Cooperative membership (1 = yes, 0 = no)
Access to government or institutional support (1 = yes, 0 = no)
Composite indices for access to capital, training, market access, and government support were constructed from related questionnaire items following standard practice in entrepreneurship and development studies (Naudé, 2021; OECD, 2021).

Analytical Techniques

Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarise respondents' socio-economic characteristics, types of fish business activities, and access to support services. A binary logistic regression model was employed to identify determinants of youth participation in urban fish entrepreneurship. Logistic regression is appropriate when the dependent variable is dichotomous and has been widely applied in participation and adoption studies (Gujarati and Porter, 2009; Mafimisebi et al., 2024; Oluwatayo and Ojo, 2022). The model was specified as:

$$\ln\left(\frac{P_i}{1-P_i}\right) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \cdots + \beta_k X_k + \varepsilon_i$$

Where:

P_i= probability that respondent $i$participates in fish entrepreneurship
β_0= intercept
β_k= parameters to be estimated
X_k= vector of explanatory variables
ε_i= error term

Ethical Considerations

Participation in the study was voluntary. Respondents were informed about the purpose of the study, and verbal informed consent was obtained prior to interviews. Confidentiality and anonymity were assured, and information collected was used solely for academic purposes, in line with international research ethics guidelines (World Bank, 2021).

RESULTS AND DISCUSSION

Socio-economic Characteristics of Youth Fish Entrepreneurs

Table 1 presents the socio-economic characteristics of youth engaged in urban fish entrepreneurship in Lagos State. The results showed a slightly higher participation of females (54.17%) compared with males (45.83%), indicating that fish entrepreneurship provides relatively inclusive livelihood opportunities for both genders in urban environments. This finding supports evidence that women and youth increasingly participate in fish marketing and processing activities in urban and peri-urban contexts, where entry barriers are comparatively lower (Béné *et al*., 2020; WorldFish, 2023).
The age distribution revealed that a substantial proportion of respondents (60.00%) fall within the economically active age range of 25–34 years. This suggests that fish entrepreneurship appeals primarily to young adults who are actively seeking income-generating opportunities in response to limited formal employment options. Similar age patterns have been reported in studies on youth agribusiness entrepreneurship in Nigeria and other sub-Saharan African countries (Sumberg *et al*., 2021; Chukwu and Chukwu, 2023). The strong concentration of youths within the economically active age group may also reflect broader demographic pressure and limited formal employment opportunities in Nigeria, which increasingly push

young people toward self-employment and informal enterprise activities (World Bank, 2023; AfDB, 2022). Educational attainment among respondents was relatively high, with over half (57.14%) possessing tertiary education. This reflects the role of education in enhancing entrepreneurial awareness, business planning capacity, and adaptability to urban market dynamics. Previous studies have shown that higher educational levels increase the likelihood of youth participation in agribusiness and improve enterprise performance (Adebayo and Ojo, 2021; Adeyemo *et al*., 2024).

In terms of experience, the majority of respondents had less than five years of involvement in fish business, indicating that youth participation in the sector is relatively recent. Cooperative membership was also high (65.83%), highlighting the importance of collective action in facilitating access to information, credit, and institutional support. This finding aligns with evidence that cooperative participation enhances youth engagement and resilience in agribusiness enterprises (Béné et al., 2020; Mafimisebi et al., 2024).

Table 1: Socio-economic characteristics of youth fish entrepreneurs (N = 120)

Variable	Category	Frequency	Percentage
Gender	Male	55	45.83
	Female	65	54.17
		120	100.00
Age (years)	< 20	3	2.50
	20–24	23	19.17
	25–29	36	30.00
	30–34	21	17.50
	35+	37	30.83
Marital status	Single	50	41.67
	Married	57	47.50
	Divorced	8	6.67
	Widowed	5	4.17
Education level	No formal	0	0.00
	Secondary	22	18.49
	Diploma	29	24.37
	Tertiary	68	57.14
Years of experience in fish business	< 2	28	23.33
	2–5	42	35.00
	6–10	33	27.50
	> 10	17	14.17
Cooperative membership	Yes	79	65.83
	No	41	34.17

Types of Urban Fish Business Activities Engaged by Youths

Table 2 shows the distribution of respondents across different fish business activities. Fish production (35.83%) and marketing (34.17%) accounted for the largest shares of youth participation, while processing (20.00%) and auxiliary services such as feed and equipment supply (10.00%) recorded lower participation. Fish production and marketing accounted for the largest shares of youth participation, reflecting the income-oriented nature of urban fish enterprises, where market access and commercialisation incentives strongly influence entrepreneurial engagement (Olagunju et al., 2020). This distribution reflects the structure of urban fish value chains, where production and marketing offer more immediate income opportunities and require comparatively lower technical specialization.

The prominence of marketing activities is consistent with findings that urban fish markets serve as critical employment nodes, particularly for youth entrepreneurs who may lack the capital

required for large-scale production or processing facilities (FAO, 2022; Belton et al., 2021). Conversely, the relatively low participation in processing activities may be attributed to higher capital requirements, regulatory compliance challenges, and infrastructure constraints such as inadequate cold storage and unreliable electricity supply (FAO, 2023; Reardon et al., 2021).

Table 2: Fish business activities engaged by youths (N = 120)

Fish business activity	Frequency	Percentage (%)
Production	43	35.83
Processing	24	20.00
Marketing	41	34.17
Services (feed/equipment)	12	10.00
Total	120	100.00

Access to Institutional and Market Support Services

Table 3 summarises respondents' access to institutional and market support services. Less than half of the respondents (42.50%) reported access to start-up capital or affordable credit, underscoring persistent financial constraints facing youth entrepreneurs in Nigeria. This finding corroborates earlier evidence that limited access to finance remains one of the most binding constraints to youth participation in agribusiness entrepreneurship (Adjognon et al., 2017; Adebayo and Ojo, 2021). In contrast, access to training and skills acquisition was relatively high (72.50%), reflecting increased emphasis on youth entrepreneurship programmes and capacity-building initiatives. However, the presence of training alone may be insufficient to ensure effective participation if complementary resources such as finance and market access are lacking. This supports arguments that integrated support systems are necessary to translate skills acquisition into sustainable enterprise participation (Naudé, 2021; OECD, 2021).

More than half of the respondents reported access to market outlets (58.33%) and government support programmes (57.50%). While these figures suggest moderate institutional engagement, the quality, consistency, and accessibility of such support remain critical factors influencing their effectiveness. Cooperative membership further reinforces the role of social networks in facilitating market access and reducing transaction costs for youth entrepreneurs (Béné et al., 2020; Chukwu and Chukwu, 2023).

Table 3: Access to institutional and market support services (N = 120)

Variable	Category	Frequency	Percentage (%)
Access to start-up capital/credit	Yes	51	42.50
	No	69	57.50
Access to training/skills acquisition	Yes	87	72.50
	No	33	27.50
Access to buyers/market outlets	Yes	70	58.33
	No	50	41.67
Benefited from government support programmes	Yes	69	57.50
	No	51	42.50
Cooperative/association membership	Yes	79	65.83
	No	41	34.17

Determinants of Youth Participation in Urban Fish Business Entrepreneurship

The determinants of youth participation were analysed using a binary logistic regression model, and the results are presented in Table 4. The model exhibits reasonable explanatory power, with a McFadden pseudo R^2 of 0.173, indicating that the included variables explain a meaningful proportion of variation in youth participation decisions. Years of experience had a

positive effect on participation and was statistically significant at the 10% level, suggesting that accumulated knowledge and familiarity with fish business operations increase the likelihood of sustained engagement. This finding aligns with empirical studies that highlight experience as a key factor enhancing entrepreneurial confidence and reducing perceived risk among young agripreneurs (Sumberg et al., 2021; Mafimisebi et al., 2024). Although access to capital, training, and government support indices were not statistically significant at conventional levels, their positive coefficients indicate that improvements in these areas may enhance youth participation. This pattern suggests that while institutional and market factors are important, their influence may depend on the depth, adequacy, and coordination of support rather than mere availability. Similar observations have been reported in studies of youth agribusiness entrepreneurship in Nigeria and other developing economies (Adebayo and Ojo, 2021; Adeyemo et al., 2024; FAO, 2023). Overall, the regression results underscore the multifaceted nature of youth participation in urban fish business entrepreneurship, shaped by individual characteristics, accumulated experience, and institutional conditions.

Table 4: Determinants of youth participation in urban fish business entrepreneurship (Logit model)

Variable	Coefficient	Std. Error	z-value	p-value
Age group (ordinal)	-0.010	0.311	-0.033	0.974
Male (1 = yes)	0.302	0.759	0.397	0.691
Education level (ordinal)	0.331	0.430	0.769	0.442
Years of experience (ordinal)	0.772	0.433	1.781	0.075
Cooperative membership (1 = yes)	-0.572	0.774	-0.739	0.460
Access to capital index	0.633	0.430	1.472	0.141
Training/skills index	0.911	0.632	1.442	0.149
Market access index	-0.106	0.708	-0.150	0.881
Government support index	0.457	0.490	0.931	0.352
Constant	-6.887	3.641	-1.891	0.059
Model diagnostics:				
Number of observations	118 (2 cases dropped due to missing values)			
Log likelihood	-32.099			
LR chi-square	13.397			
Prob > chi-square	0.145			
Pseudo R^2 (McFadden)	0.173			

Dependent variable: Participation (1 = actively involved; 0 = not actively involved), where participation = 1 if respondent agreed/strongly agreed to being actively involved.

Constraints Affecting Youth Participation in Urban Fish Business

Table 5 presents the major constraints affecting youth participation in urban fish business entrepreneurship, ranked by mean severity scores. Limited access to finance and inadequate infrastructure remain major constraints to youth participation in urban fish business entrepreneurship, consistent with fisheries-specific evidence from coastal Nigeria highlighting credit constraints and infrastructural deficits as key barriers to youth engagement (Adebo and Sekumade, 2021). These constraints have been widely documented in studies of urban food systems in sub-Saharan Africa (Reardon et al., 2021; FAO, 2023). In addition, climate-related risks and livelihood vulnerability have been shown to influence youth engagement in agricultural and fisheries-based livelihoods, further underscoring the importance of resilient support systems for young entrepreneurs (Ayanlade and Radeny, 2023).

Exploitation by middlemen and lack of training opportunities also ranked highly, highlighting persistent power imbalances and skill gaps within fish value chains. Bureaucratic bottlenecks associated with accessing government support further discourage youth participation, reinforcing concerns about institutional inefficiencies. Although limited access to affordable

credit ranked lower relative to other constraints, it remains a critical barrier given its foundational role in enterprise start-up and expansion (Adjognon et al., 2017; Adebayo and Ojo, 2021).

Table 5: Constraints affecting youth participation (Likert mean scores)

Constraint item	Mean score	Rank
Poor infrastructure/cold storage affects sales	4.03	1
Exploitation by middlemen in marketing	3.85	2
Lack of training opportunities limits participation	3.83	3
Bureaucratic bottlenecks discourage access to support	3.77	4
Lack of collateral prevents access to loans	3.39	5
Limited access to affordable credit	2.83	6

Taken together, the findings indicate that youth participation in urban fish business entrepreneurship in Lagos State is shaped by a complex interaction of socio-economic characteristics, experience, institutional support, and structural constraints. While education, training, and cooperative membership provide a foundation for engagement, persistent challenges related to finance, infrastructure, and market organisation continue to limit the full potential of youth-led fish enterprises. These results reinforce the argument that promoting youth entrepreneurship in fisheries requires integrated policy approaches that simultaneously address individual capacity development and systemic constraints (Béné et al., 2020; FAO, 2022; WorldFish, 2023).

CONCLUSION AND RECOMMENDATIONS

This study analysed the determinants of youth participation in urban fish entrepreneurship in Lagos State, Nigeria. The findings indicate that youth engagement in fish enterprises is influenced by a combination of socio-economic characteristics, accumulated experience, and access to institutional and market support. Fish production and marketing emerged as the dominant areas of youth participation, reflecting their income potential within urban food systems. However, limited access to start-up capital, inadequate infrastructure—particularly cold storage facilities—and market-related challenges continue to constrain effective participation. Although training and government support programmes exist, their impacts appear uneven. Overall, the study highlights the need for integrated interventions that address financial, infrastructural, and institutional constraints to enhance youth participation in urban fisheries entrepreneurship.

Efforts should be made to expand youth-friendly financing schemes with flexible collateral requirements in order to improve access to start-up capital for fish enterprises. There is a need to invest in critical infrastructure, particularly cold storage facilities and reliable electricity supply, to reduce post-harvest losses and enhance enterprise profitability. Entrepreneurship and fisheries training programmes should be strengthened through the integration of technical, managerial, and market-oriented skills. Cooperative membership and value-chain integration should be promoted to improve market access and strengthen collective bargaining power among youth entrepreneurs. In addition, government support programmes should be simplified and better coordinated to ensure more effective and inclusive access for young fish entrepreneurs

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