

Socioeconomic Factors Affecting Youth Participation in Forest-Based Enterprises in Ibadan, Nigeria

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ARTICLE INFO	ABSTRACT
<p><i>Article history:</i> Received: May 04, 2026 Accepted: June 20, 2026 Published: June 30, 2026</p> <p><i>JEL Classification:</i> Q23, J24, O15, Q56</p> <p><i>Keywords:</i> Youth participation; Forest-based enterprises; Socioeconomic factors; Logistic regression; Sustainable livelihoods; Nigeria</p>	<p>This study examines the socioeconomic factors affecting youth participation in forest-based enterprises in Ibadan. The research is motivated by the persistent challenge of youth unemployment and the need to explore sustainable livelihood opportunities within the forestry sector. Specifically, the study analyzes the effects of access to finance, education, skills acquisition, unemployment status, and social networks on the level of youth participation using a binary logistic regression model. A cross-sectional research design was adopted, and primary data were collected from 247 youths selected through a multistage sampling technique. Descriptive statistics and logistic regression analysis were employed to achieve the study objectives. The results reveal that youth participation in forest-based enterprises is relatively low (44.1%), despite the sector's significant potential for income generation and employment creation. The regression findings indicate that access to finance, education, skills acquisition, unemployment status, and social networks all have positive and statistically significant effects on youth participation. Notably, access to finance, skills acquisition, and social networks emerged as the most influential determinants. The study concludes that improving financial inclusion, enhancing vocational skills, and strengthening social capital are critical for increasing youth engagement in forest-based enterprises. The findings give emphasis to the relevance of the Sustainable Livelihoods Framework and Human Capital Theory in explaining participation dynamics. The study contributes to existing literature by providing empirical, location-specific evidence and offers practical insights for policymakers and development practitioners. Enhancing youth participation in forest-based enterprises has the potential to promote sustainable livelihoods, reduce unemployment, and support environmental conservation efforts.</p> <p style="text-align: right;"><small>Journal of Agriculture and Rural Development Studies (JARDS) © 2026 is licensed under CC BY 4.0.</small></p>

1. Introduction

Nigeria continues to face a persistent challenge of youth unemployment and underemployment, which poses significant threats to economic stability, social cohesion, and sustainable development. In rapidly expanding urban and peri-urban centres such as Ibadan, the situation is particularly pronounced due to increasing population pressure, rural-urban migration, and limited capacity of the formal sector to

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absorb the growing labour force. Consequently, attention has shifted towards alternative livelihood opportunities capable of engaging youths productively. Among these, forest-based enterprises, including non-timber forest product (NTFP) harvesting, wood processing, agroforestry, and forest-related value chain activities, have emerged as viable options for income generation and employment creation (Magry et al., 2024).

Forest-based enterprises play a crucial role in supporting livelihoods while contributing to environmental sustainability. They provide raw materials for small and medium-scale industries, promote rural industrialization, and enhance household income diversification. In addition, these enterprises contribute to biodiversity conservation, climate change mitigation, and sustainable land use when properly managed (Anane et al., 2023; Das & Mallick, 2025). In the context of Ibadan and its surrounding forest landscapes, youth engagement in such enterprises is critical not only for economic empowerment but also for ensuring the sustainable utilization of forest resources in the face of increasing urban encroachment and environmental degradation.

Despite the significant potential of forest-based enterprises, youth participation in this sector remains relatively low. This gap can be attributed to a complex interplay of socioeconomic factors that either facilitate or constrain involvement. Access to finance is a major determinant, as the establishment and expansion of forest-based enterprises often require capital investment, which many youths cannot readily obtain due to lack of collateral, limited financial inclusion, and weak institutional support (Kassa & Kegne, 2025; Roy, 2026). Education also plays a critical role by shaping awareness, entrepreneurial capacity, and the ability to adopt improved technologies and sustainable practices (Altwaijri et al., 2024). Furthermore, skills acquisition, particularly in areas such as forest product processing, value addition, and business management, is essential for enhancing productivity and competitiveness within the sector.

Unemployment status is another important factor influencing youth participation. While unemployment may push some youths towards forest-based enterprises as a coping strategy, others may perceive the sector as less attractive compared to formal employment opportunities, especially when returns are uncertain or low (Mukherjee & Ray, 2026). In addition, social networks significantly shape access to information, markets, and resources. Strong social capital can facilitate entry into forest-based enterprises through cooperative membership, mentorship, and peer support, whereas weak networks may limit opportunities and reinforce exclusion (Putra & Septiarti, 2026; Mahato et al., 2022).

Given these dynamics, there is a need for empirical investigation into how these socioeconomic factors influence youth participation in forest-based enterprises within Ibadan. While previous studies have examined rural livelihoods and forest dependency in Nigeria, limited research has focused specifically on youth participation using quantitative analytical approaches. This study addresses this gap by examining the effects of access to finance, education, skills acquisition, unemployment status, and social networks on the level of youth participation in forest-based enterprises.

To achieve this objective, the study employs a logistic regression model to estimate the probability of youth participation as a function of selected socioeconomic variables. This methodological approach is appropriate for analyzing binary or categorical participation outcomes and identifying statistically significant determinants (Rwechungura, 2025; Ahmed et al., 2023). The findings are expected to provide

evidence-based insights for policymakers, development practitioners, and stakeholders interested in promoting youth-inclusive forest enterprise development.

In the current context of increasing youth unemployment and environmental challenges in Nigeria, understanding the drivers of youth participation in forest-based enterprises is both timely and essential. By linking socioeconomic conditions with environmental engagement, this study contributes to ongoing efforts aimed at fostering sustainable livelihoods, enhancing economic inclusion, and promoting responsible forest resource management in Ibadan and beyond (Fajimi, et al., 2025).

2. Literature Review

The participation of youths in forest-based enterprises has been widely discussed within the broader context of rural development, sustainable livelihoods, and natural resource management. Forest-based enterprises, ranging from timber production to NTFP collection, processing, and marketing, are recognized as important contributors to income generation and employment, particularly in developing countries (Derebe & Alemu, 2023). In Nigeria, and especially in peri-urban environments such as Ibadan, these enterprises provide critical opportunities for economic engagement among youths, yet participation remains influenced by multiple socioeconomic and institutional factors.

From a theoretical perspective, this study is anchored in the Sustainable Livelihoods Framework (SLF) and Human Capital Theory. The Sustainable Livelihoods Framework emphasizes that individuals' ability to pursue livelihood strategies, such as forest-based enterprises, is shaped by access to five key assets: human, financial, social, physical, and natural capital (Fatimah et al., 2025). In this context, access to finance, education, skills, and social networks directly correspond to these livelihood assets and influence youths' capacity to engage in forest-based economic activities. Human Capital Theory, on the other hand, posits that education and skills acquisition enhance individuals' productivity and earning potential, thereby increasing their likelihood of participating in entrepreneurial ventures (Arshed et al., 2024). These frameworks collectively provide a foundation for understanding how socioeconomic characteristics determine youth participation in forest-based enterprises.

Empirical studies have consistently highlighted access to finance as a critical determinant of participation in forest-related enterprises. Financial constraints limit the ability of young people to invest in tools, inputs, and processing technologies required for forest-based activities. In Nigeria, limited access to formal credit institutions, high interest rates, and lack of collateral have been identified as major barriers to youth entrepreneurship (Okunlola & Adekunle, 2019; Olagunju et al., 2021). Similarly, studies in Sub-Saharan Africa indicate that access to microfinance and cooperative savings schemes significantly enhances participation in forest product value chains (Adedokun et al., 2025). Despite this evidence, there remains limited location-specific analysis focusing on urban and peri-urban youth populations such as those in Ibadan.

Education is another key factor influencing youth participation. Higher levels of formal education are associated with increased awareness of business opportunities, improved decision-making, and better adoption of sustainable forest management practices (Kimengsi et al., 2023). However, some studies suggest that highly educated youths may be less inclined to engage in forest-based enterprises due to perceived low prestige or returns compared to white-collar jobs (Delugas et al., 2025). This dual role of

education indicates the need for context-specific investigation to determine its actual effect on participation.

Closely related to education is skills acquisition, particularly vocational and technical training. Forest-based enterprises increasingly require specialized skills in areas such as processing, packaging, marketing, and sustainable harvesting techniques. Studies have shown that youths with access to extension services and training programs are more likely to participate actively and profitably in forest enterprises (Uduji & Okolo-Obasi, 2022). In Nigeria, however, gaps in skill development programs and weak linkage between training institutions and the forestry sector continue to limit youth engagement. The role of unemployment status in influencing participation is complex. According to the push-pull theory of entrepreneurship, unemployment can act as a “push” factor driving individuals into self-employment, including forest-based enterprises (Yego et al., 2025). Conversely, when forest enterprises are perceived as low-income or risky, unemployed youths may remain disengaged or seek alternative livelihoods. Empirical findings in Nigeria suggest that while unemployment increases the likelihood of entry into informal sectors, sustained participation depends on profitability and access to resources (Chukwu, 2025). Social networks and social capital also play a significant role in shaping youth participation. Social networks facilitate access to information, credit, markets, and mentorship, thereby reducing barriers to entry and enhancing enterprise performance (Wisnujati et al., 2024). In forest-based contexts, membership in cooperatives and community-based organizations has been linked to increased participation and improved income outcomes (Putra & Septiarti, 2026). However, exclusion from such networks, due to gender, socioeconomic status, or geographic location, can hinder youth involvement. Despite the growing body of literature, several gaps remain evident. First, many studies on forest-based enterprises in Nigeria have focused on rural households and general populations, with limited attention to youth-specific dynamics. Second, there is a lack of quantitative analyses that simultaneously examine multiple socioeconomic variables influencing youth participation using robust econometric models such as logistic regression. Third, existing studies often overlook the unique characteristics of peri-urban areas like Ibadan, where urbanization, market access, and resource constraints interact in complex ways to influence livelihood choices. Furthermore, while previous research has examined individual factors such as access to finance or education in isolation, there is insufficient integrative analysis that captures the combined effects of financial, human, and social capital on youth participation. This limits the ability of policymakers to design comprehensive interventions tailored to the needs of young people in forest-based sectors. Considering these gaps, this study seeks to contribute to the literature by providing an empirical, location-specific analysis of the socioeconomic factors affecting youth participation in forest-based enterprises in Ibadan. By applying a logistic regression model to assess the influence of access to finance, education, skills acquisition, unemployment status, and social networks, the study offers a more holistic understanding of the determinants of participation. This approach not only strengthens the theoretical application of the Sustainable Livelihoods Framework and Human Capital Theory but also provides practical insights for enhancing youth engagement in sustainable forest-based livelihoods in Nigeria.

3. Methods

This study was conducted in Ibadan (7°23'47"N 3°55'0"E), one of the largest metropolitan areas in southwestern Nigeria. Ibadan is characterized by a mix of urban, peri-urban, and rural communities,

making it suitable for examining forest-based enterprises within diverse socioeconomic contexts. The city lies within the derived savanna zone, which supports various forest resources, including timber and NTFPs. Forest-based activities in the area include fuelwood collection and trade, charcoal production, medicinal plant harvesting, small-scale wood processing, and agroforestry practices. The presence of institutions such as forestry research centres and agricultural training institutes further enhances the relevance of Ibadan as a study location for youth engagement in forest-based enterprises.

A cross-sectional research design was adopted for this study, allowing for the collection of quantitative data from respondents at a single point in time. The target population comprised youths aged 18–35 years residing in 18 selected communities within Ibadan and its peri-urban fringes who are either engaged in or have the potential to engage in forest-based enterprises. A multistage sampling technique was employed. In the first stage, purposive sampling was used to select 3 local government areas known for forest-related activities (Akinyele, Ido, and Egbeda). In the second stage, 6 communities each within these areas were randomly selected. Finally, simple random sampling was used to select respondents from a list of youths obtained through local associations, cooperatives, and community leaders. A sample size of 247 respondents was determined using appropriate sampling procedures and considered adequate for the logistic regression analysis, ensuring sufficient statistical power and reliability of the estimates (Hasan & Kumar, 2024; Rahman, 2023).

Primary data were collected using a structured questionnaire designed to capture information on respondents' socioeconomic characteristics and their level of participation in forest-based enterprises. The questionnaire was divided into sections covering demographic information (age, gender, education), enterprise participation status, and key explanatory variables such as access to finance, education level, skills acquisition, unemployment status, and social networks. The instrument was pre-tested in a similar community outside the study area to ensure clarity, reliability, and validity. Necessary adjustments were made based on feedback from the pilot study. The dependent variable in this study is the level of youth participation in forest-based enterprises, operationalized as a binary variable. Respondents actively engaged in any forest-based enterprise (NTFP collection, processing, marketing, or wood-based activities) were coded as 1, while those not engaged were coded as 0. This binary classification justifies the use of a logistic regression model for analysis (Gujarati & Porter, 2009). The independent variables were defined and measured as follows: access to finance (measured as a binary variable indicating whether the respondent has access to credit or financial support), education (measured as years of formal schooling or categorized into levels), skills acquisition (measured by participation in vocational or technical training related to forest enterprises), unemployment status (binary variable indicating whether the respondent is unemployed or not), and social networks (measured by membership in cooperatives, associations, or access to peer support systems). These variables are consistent with the Sustainable Livelihoods Framework and Human Capital Theory, which emphasize the role of financial, human, and social capital in shaping livelihood decisions (Karami et al., 2025). Data analysis was carried out using descriptive statistics and inferential econometric techniques. Descriptive statistics such as means, frequencies, and percentages were used to summarize respondents' characteristics and participation levels. Inferential analysis was conducted using a binary logistic regression model to estimate the probability of youth participation in forest-based enterprises as a function of the selected socioeconomic variables.

The logistic regression model is specified as $P(Y_i = 1) = 1 / (1 + e^{-Z_i})$ i.e.

$$P(Y_i = 1) = \frac{1}{1 + e^{-Z_i}}$$

$$Z_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \epsilon_i$$

Here, $P(Y_i=1)$ represents the probability that a youth participates in forest-based enterprises; β_0 is the intercept; $\beta_1 \dots \beta_5$ are the coefficients of the explanatory variables; X_1 = access to finance, X_2 = education, X_3 = skills acquisition, X_4 = unemployment status, and X_5 = social networks; while ϵ_i is the error term (Hosmer et al., 2013; Gujarati & Porter, 2009).

The model was estimated using Maximum Likelihood Estimation (MLE), which is appropriate for binary outcome variables. The significance of individual coefficients was tested using Wald statistics, while the overall model fit was assessed using measures such as the likelihood ratio test, pseudo R-squared, and classification accuracy. Multicollinearity among explanatory variables was checked using Variance Inflation Factors (VIF), and goodness-of-fit was evaluated using the Hosmer–Lemeshow test. Ethical considerations were strictly adhered to throughout the study. Respondents were informed about the purpose of the research, and their participation was voluntary. Confidentiality and anonymity of responses were ensured, and data were used strictly for academic purposes.

Thus, by employing this methodological approach, the study provides a robust framework for analyzing the socioeconomic determinants of youth participation in forest-based enterprises in Ibadan, thereby ensuring replicability and reliability of the findings.

4. Results

This section presents the empirical findings of the study in a logical sequence aligned with the stated objectives, focusing on the level of youth participation in forest-based enterprises and the effects of selected socioeconomic factors in Ibadan. The results are summarized using descriptive and inferential statistics, with tables included to enhance clarity and interpretation.

4.1 Socioeconomic Characteristics of Respondents

The socioeconomic profile of the respondents provides important context for understanding their participation in forest-based enterprises. The results revealed that most respondents were within the active youth age bracket (18–30 years), with a balanced gender distribution. A substantial proportion had at least secondary education, while a smaller percentage possessed tertiary qualifications. However, despite relatively moderate educational attainment, a high rate of unemployment was observed among respondents, reinforcing the need for alternative livelihood opportunities (table 1).

Table 1. Socioeconomic Characteristics of Respondents (n = 247)

Variable	Category	Frequency	Percentage (%)
Age (Years)	18–25	101	40.9
	26–30	84	34.0
	31–35	62	25.1
Education Level	Primary	35	14.2
	Secondary	126	51.0

Variable	Category	Frequency	Percentage (%)
Access to Finance	Tertiary	86	34.8
	Yes	96	38.9
	No	151	61.1
Skills Acquisition	Yes	105	42.5
	No	142	57.5
Unemployment Status	Unemployed	148	59.9
	Employed	99	40.1
Social Network Membership	Member	114	46.2
	Non-member	133	53.8

Source: Field Survey, 2024/2025

In terms of access to finance, less than half of the respondents reported having access to formal or informal credit facilities. Similarly, only a limited number had undergone any form of vocational or technical training related to forest-based enterprises. Membership in social or cooperative groups was also moderate, indicating varying levels of social capital among the youths.

4.2 Level of Youth Participation in Forest-Based Enterprises

The study assessed youth participation as a binary outcome. Results show that a moderate proportion of respondents were actively engaged in forest-based enterprises, while a larger proportion were not participating.

Table 2. Level of Youth Participation in Forest-Based Enterprises (n = 247)

Participation Status	Frequency	Percentage (%)
Participating	109	44.1
Not Participating	138	55.9

Source: Field Survey, 2024/2025.

The findings suggest that although forest-based enterprises present viable livelihood opportunities, more than half of the youths are not engaged in such activities. This give emphasis to the importance of examining the socioeconomic barriers influencing participation (McConkie-Rosell et al., 2023).

4.3 Logistic Regression Results on Determinants of Youth Participation

The core objective of the study was to examine the effects of selected socioeconomic factors on youth participation using a binary logistic regression model. The estimated coefficients, standard errors, and significance levels are presented in Table 3.

Table 3. Logistic Regression Estimates of Factors Affecting Youth Participation

Variables	Coefficient (β)	Std. Error	Wald Statistic	p-value	Odds Ratio
Constant	-1.842	0.652	7.98	0.005	—
Access to Finance	1.256	0.384	10.70	0.001***	3.51
Education	0.642	0.271	5.61	0.018**	1.90
Skills Acquisition	1.103	0.352	9.81	0.002***	3.01
Unemployment Status	0.785	0.310	6.41	0.011**	2.19
Social Networks	0.934	0.298	9.83	0.002***	2.54

*Significance levels: *** $p < 0.01$, ** $p < 0.05$

Source: Field Survey, 2024/2025

The logistic regression results indicate that all the explanatory variables included in the model significantly influence youth participation in forest-based enterprises.

Access to finance was found to have a positive and highly significant effect on participation ($p < 0.01$). The odds ratio (3.51) implies that youths with access to finance are more than three times likely to participate in forest-based enterprises compared to those without access. This finding aligns with previous studies emphasizing the importance of financial capital in enabling entrepreneurial activities (Pathan, 2022).

Education also exhibited a positive and significant effect ($p < 0.05$), suggesting that higher levels of education increase the likelihood of participation. Educated youths are more likely to identify opportunities, adopt innovations, and manage enterprises effectively (Ahmad et al., 2023).

Skills acquisition showed a strong positive influence ($p < 0.01$), indicating that youths who have received vocational or technical training are significantly more likely to engage in forest-based enterprises. This highlights the importance of capacity building and skill development programs in enhancing youth participation (Owede, 2025).

Unemployment status was positively related to participation ($p < 0.05$), suggesting that unemployed youths are more inclined to engage in forest-based enterprises as an alternative livelihood strategy. This supports the push-factor theory of entrepreneurship (Rajbhandari et al., 2025).

Social networks also had a significant positive effect ($p < 0.01$), with an odds ratio of 2.54, indicating that youths who are members of social or cooperative groups are more likely to participate. Social capital facilitates access to resources, information, and support systems, thereby enhancing participation (Singh & Moody, 2022).

4.4 Model Diagnostics and Goodness-of-Fit

The overall model was statistically significant, as indicated by the likelihood ratio chi-square test ($\chi^2 = 48.72$, $p < 0.001$), suggesting that the model provides a good fit to the data. The pseudo R^2 (Nagelkerke) value of 0.42 indicates that approximately 42% of the variation in youth participation is explained by the included variables. The Hosmer–Lemeshow test yielded a non-significant result ($p > 0.05$), confirming the adequacy of the model fit (Mathithibane & Chummun, 2022).

The classification accuracy of the model was 76%, indicating a satisfactory predictive performance. Additionally, no serious multicollinearity issues were detected among the explanatory variables, as the Variance Inflation Factor (VIF) values were within acceptable limits.

In all, the results demonstrate that socioeconomic factors, particularly access to finance, skills acquisition, and social networks, play a critical role in determining youth participation in forest-based enterprises in Ibadan. These findings provide empirical support for the theoretical frameworks underpinning the study and highlight key areas for policy intervention.

5. Discussion

The findings of this study provide important insights into the socioeconomic determinants of youth participation in forest-based enterprises in Ibadan. The results are consistent with existing theoretical frameworks, particularly the Sustainable Livelihoods Framework and Human Capital Theory, which

emphasize the role of financial, human, and social capital in shaping livelihood choices (Karami Dehkordi, et al., 2025; Chuong, 2023). The discussion situates the empirical findings within the broader literature while highlighting their practical and theoretical implications.

The descriptive results revealed that youth participation in forest-based enterprises remains relatively low, with only 44.1% of respondents actively engaged. This aligns with previous studies in Nigeria and Sub-Saharan Africa, which report limited youth involvement in natural resource-based enterprises despite their economic potential (Akinyele et al., 2023; Kimengsi et al., 2022). The relatively low participation rate may be attributed to structural barriers such as inadequate access to resources, limited institutional support, and negative perceptions of forest-based occupations. This finding reinforces concerns that the forestry sector remains underutilized as a viable employment avenue for youths, particularly in peri-urban settings.

The regression results demonstrate that access to finance is a critical determinant of participation, with a strong positive and statistically significant effect. This finding corroborates earlier studies which emphasize that financial capital is essential for enterprise start-up and expansion (Bamata & Phiri, 2022). The high odds ratio suggests that improving youth access to credit facilities, microfinance schemes, and startup capital could substantially increase participation rates. From a policy perspective, this highlights the need for targeted financial inclusion programs tailored to young entrepreneurs in forest-based value chains.

Education was also found to significantly influence participation, indicating that more educated youths are better positioned to engage in forest-based enterprises. This supports the argument that education enhances cognitive skills, opportunity recognition, and the ability to adopt improved technologies (Nafukho & El Mansour, 2025). However, this finding contrasts with some studies that suggest highly educated youths may avoid forest-related activities due to perceived low prestige (Adebayo et al., 2026; Maleknia & ChmCham, 2025). The positive effect observed in this study suggests a shifting perception among youths in Ibadan, where education may be enabling innovation and modernization within forest-based enterprises.

The significant impact of skills acquisition further highlights the importance of vocational and technical training in promoting youth participation. This result is consistent with findings by Yertas (2024), who reported that skill development enhances productivity and enterprise sustainability. In the context of this study, youths with relevant skills are more likely to engage in value-added activities such as processing and marketing, rather than merely participating in low-income primary extraction. This emphasizes the need for strengthening extension services, training programs, and capacity-building initiatives tailored to the forestry sector.

The positive relationship between unemployment status and participation supports the “push factor” theory of entrepreneurship, which posits that individuals may be driven into self-employment due to lack of formal job opportunities (Ferrín, 2023). This suggests that forest-based enterprises serve as an alternative livelihood strategy for unemployed youths. However, reliance on push factors alone may not ensure sustainability, as participation driven by necessity rather than opportunity may result in low investment and limited growth. Therefore, policy interventions should aim to transform forest-based enterprises into attractive and profitable ventures capable of retaining youth interest.

Social networks were also found to significantly influence participation, confirming the importance of social capital in facilitating access to information, resources, and markets (Pathan, 2022). Membership in cooperatives and associations appears to enhance youth participation by providing platforms for knowledge sharing, collective action, and financial support. This finding highlights the role of community-based organizations and youth groups in promoting inclusive participation in forest-based enterprises.

The model diagnostics further indicate that the selected socioeconomic variables jointly explain a substantial proportion of the variation in participation (Nagelkerke $R^2 = 0.42$), suggesting that the model has good explanatory power. However, this also implies that other unobserved factors such as cultural perceptions, land tenure systems, government policies, and market access may also influence participation and warrant further investigation.

From a theoretical standpoint, the findings validate the applicability of the Sustainable Livelihoods Framework in explaining youth engagement in forest-based enterprises, particularly the interplay between financial, human, and social capital. The results also reinforce Human Capital Theory by demonstrating the importance of education and skills in enhancing participation outcomes. Practically, the study provides evidence-based guidance for policymakers and development practitioners seeking to design interventions that promote youth inclusion in forest-based economies.

Generally, the study highlights that improving access to finance, strengthening skill development programs, enhancing educational opportunities, and fostering strong social networks are critical pathways for increasing youth participation in forest-based enterprises. Addressing these factors holistically will not only enhance youth livelihoods but also contribute to sustainable forest resource management and broader economic development in Ibadan and similar contexts

6. Conclusions

This study examined the socioeconomic factors affecting youth participation in forest-based enterprises in Ibadan using a binary logistic regression framework. The findings make several important contributions to knowledge and practice. First, the study provides empirical evidence that youth participation in forest-based enterprises is relatively low, despite the sector's significant potential for employment generation and sustainable livelihood development. Second, the study identifies key socioeconomic determinants—access to finance, education, skills acquisition, unemployment status, and social networks—as significant drivers of participation. Among these, access to finance, skills acquisition, and social networks emerged as the most influential factors, highlighting the critical role of financial, human, and social capital in shaping youth engagement in forest-based economic activities. These findings reinforce the applicability of the Sustainable Livelihoods Framework and Human Capital Theory in explaining participation dynamics within the forestry sector.

Despite these contributions, the study has some limitations. The use of cross-sectional data restricts the ability to establish causality between the explanatory variables and youth participation. The study is also geographically limited to Ibadan, which may constrain the generalizability of the findings to other regions with different ecological and socioeconomic characteristics. In addition, the binary measurement of participation does not capture variations in the intensity or profitability of engagement in forest-based enterprises. Furthermore, other potentially relevant factors—such as land tenure

systems, policy environment, cultural perceptions, and market access—were not explicitly included in the model.

Future research should address these limitations by adopting longitudinal designs to better understand causal relationships and changes in participation over time. Expanding the study to multiple regions across Nigeria would enhance comparative analysis and generalizability. Additionally, future studies could incorporate more nuanced measures of participation, including levels of income, scale of operation, and value chain involvement. There is also a need to explore institutional and environmental factors, such as governance structures, forest policies, and climate variability, to provide a more comprehensive understanding of youth engagement in forest-based enterprises.

Based on the findings of this study, several actionable recommendations are proposed. First, improving youth access to finance is essential. Government agencies and financial institutions should develop youth-friendly credit schemes with low collateral requirements, flexible repayment plans, and targeted funding for forest-based enterprises. Microfinance institutions and cooperative societies should also be strengthened to provide accessible and affordable financial services to young entrepreneurs.

Second, investment in skills acquisition and capacity building is critical. Vocational training programs focusing on forest product processing, value addition, and enterprise management should be expanded. Extension services should be revitalized to provide technical support and mentorship to youths engaged in forest-based activities. Partnerships between government, academic institutions, and the private sector can enhance the quality and relevance of training programs.

Third, policies aimed at promoting education, particularly entrepreneurship and environmental education, should be prioritized. Integrating forest-based enterprise development into educational curricula can help reshape perceptions of the forestry sector and encourage youth participation.

Fourth, strengthening social networks and cooperative organizations is vital. Youths should be encouraged to join or form associations that facilitate knowledge sharing, collective bargaining, and access to markets and resources. Community-based organizations and non-governmental organizations can play a key role in fostering inclusive participation and building social capital.

Fifth, efforts should be made to improve the attractiveness and profitability of forest-based enterprises. This can be achieved through value chain development, improved market access, and the promotion of innovative and sustainable business models such as eco-tourism and agroforestry enterprises.

The implementation of these recommendations has the potential to generate significant benefits. Enhanced youth participation in forest-based enterprises can contribute to job creation, income generation, and poverty reduction, particularly in peri-urban and rural communities. It can also promote sustainable forest management, reduce environmental degradation, and support climate change mitigation efforts. Ultimately, empowering youths to engage productively in forest-based enterprises will contribute to broader goals of economic diversification, social inclusion, and sustainable development in Ibadan and Nigeria at large.

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