

ASSESSMENT OF RURAL YOUTH PARTICIPATION IN AGRICULTURAL-BASED LIVELIHOOD ACTIVITIES IN CENTRAL AGRICULTURAL ZONE, CROSS RIVER STATE, NIGERIA.

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Abstract

This study assessed rural youth participation in agricultural-based livelihood activities in the Central Agricultural Zone of Cross River State, Nigeria. The study specifically sought to examine the socio-economic characteristics of rural youths, ascertain the agricultural-based livelihood activities participated by rural youths, determine the extent of participation and assess the constraints to rural youth participation in agricultural-based livelihood activities. A random sampling procedure was used in selecting 148 rural youth farmers. Data were collected using structured questionnaires and analyzed with percentages and mean statistics. The result of the socioeconomic characteristics revealed that majority (61.5%) were male, most (46.6%) were between 26-30yrs. Majority (77.7%) were single having household size of 5 and above. Average (56.1%) had secondary education. Most (44.6%) had 10yrs and above farming experience. Majority (71.6%) had bimonthly extension contact with (69.6%) being members of cooperative majority (65.5%) having estimated annual income of $\geq 1,000,100$. Majority (87.2%) participated in farm labor with high extent of participation ($\bar{x} = 3.12$) ranked 1st. lack of capital/ access to credit ($\bar{x} = 3.19$; $SD = 0.76$) was the major constraint to rural youth participation. The result of binomial logistic regression analysis revealed a statistically significant influence of the socio-economic characteristics of youths on the extent of participation in agricultural-based livelihood activities at 1% level of significance. The study concludes that farm labour among others agricultural-based livelihood activities was highly participated by youth. It was recommended that Youths be encouraged to participate effectively in other agricultural-based livelihood activities by providing necessary information and financial support services accessible to youths in the study area.

Keywords: Rural youths, Participation, Agricultural- based, Livelihood activities,

Introduction

Background of study

Agriculture is widely acknowledged as a sector with significant potential for generating employment opportunities for youths in sub-Saharan Africa. Globally, it serves as a major source of livelihood for many people and continues to play a crucial role in enhancing food security and reducing poverty across numerous African nations (Mthi et al., 2021). According to the World Bank (2019), approximately 76% of the population resides in rural areas, and about 90% of these rural inhabitants are involved in agricultural activities. The agricultural sector contributes about 70% of rural employment and accounts for over 85% of total rural income (OECD, 2017). When effectively developed, it has the potential to provide sustainable jobs and income for the rapidly increasing youth population in Africa especially in Nigeria, where roughly 69% of young people live in rural areas and rely on agriculture as their main source of livelihood (CBN, 2021).

Rural youth participation in agricultural activities refers to the active involvement of young people in agricultural livelihood pursuits within their communities (Thomas & Eforuoku, 2020). Youths represent vital assets to any nation therefore, motivating them to engage actively in agriculture can inject fresh energy, creativity, and innovation into the development of rural communities (Owolabi et al., 2023). Active participation enables young

people to contribute meaningfully to their personal growth and the development of their communities. It also helps them acquire essential life skills, gain awareness of human rights and citizenship, and foster positive civic engagement. According to Vihi (2023), the participation of rural youths in farming helps to curb the growing youth unemployment rate in Nigeria.

Agricultural development can reduce poverty directly by enhancing youth participation in farming activities that generate higher incomes, and indirectly through improved labour market opportunities and lower food prices (Aya et al., 2025). Chigonda (2017) noted that rural youth in Nigeria possess the potential to participate effectively in agricultural livelihood activities. However, despite being recognized as a major human resource base in the country, many of them show little interest in farming. The declining interest of youths in agriculture is largely linked to the poor state of agricultural productivity in rural areas and inadequate government support (Kwenye & Sichone, 2016). As the backbone of Nigeria's population and future leaders, young people continue to encounter these barriers, which hinder their effective participation in agricultural activities (Olah & Okon, 2022). The poor state of agricultural production in rural areas across Africa, largely due to inadequate government support, has led to declining youth interest in agriculture (Adesina, 2025). The absence of effective support systems for young people has further prevented them from taking advantage of the various agricultural opportunities provided by the government (Aya & Eremi, 2015). Also, the persistently low participation of Nigerian youths in agriculture can be attributed largely to inadequate financial resources (Olatinwo et al., 2017). Additionally, many youths remain poorly involved in agricultural activities because of limited awareness, low exposure, indifferent attitudes, inadequate training, and lack of encouragement from traditional leaders and community elders (Cheteni, 2016). To enhance a nation's economic development, it is essential to encourage youth participation in agricultural activities, as they form a vital segment of society and represent one of the greatest assets of any nation (Maisule et al., 2023).

Despite the Nigerian government's efforts to engage youths in agriculture, many young people remain only marginally involved in farming, often prioritizing activities they believe will yield quicker financial returns. Notably, policies and programmes designed to enhance youth participation in agriculture and ensure their active involvement in agricultural initiatives have not been adequately implemented (Twumasi, 2019). As a result, these efforts have had minimal impact. Although several studies have examined youth involvement in agriculture, there remains a scarcity of research focused on assessing rural youth participation in agricultural-based livelihood activities, particularly within the central agricultural zone (Eta et al., 2015).

It is widely recognized that youths in Central Agricultural zone are talented, energetic, and highly committed. However, the significance and challenges associated with rural youth participation in agriculture remain inadequately understood. Therefore, this study aimed to evaluate the level of rural youth involvement in agricultural-based livelihood activities within the central agricultural zone of Cross River State, Nigeria.

Methodology

The study was conducted in the Central Agricultural Zone of Cross River State, Nigeria, which comprises six (6) blocks: Abi, Boki, Etung, Obubra, Ikom, and Yakurr. Geographically, the zone lies between latitudes 4.00° and 6.00°N and longitudes 6.00° and 9.00°E. It is bordered by Yala and Ogoja to the north, Biase and Abia State to the south, the Republic of Cameroon to the east, and Ebonyi State to the west. The total land area of the region is approximately 7,666 km², representing about 38% of the State's total landmass (20,156 km²), and it is located around latitude 5°45'N and longitude 8°30'E of the Greenwich Meridian. The region has an estimated population of 1,016,818 people (Olah & Okon, 2022).

The zone is characterized by fertile soil, a tropical rainforest climate with high rainfall, and inland valleys that favor the cultivation of crops such as rice, cocoa, yam, and plantain. Agriculture forms the backbone of the local economy, dominated by both smallholder farmers and large public sector farms (Aya & Eremi, 2015). For this study, three blocks; Boki, Etung, and Ikom were randomly selected. From these, nine (9) cells were further chosen at random, and a total of 148 farmers were proportionately sampled. Data were collected using structured interview schedules and analyzed with descriptive statistical tools.

Socioeconomic characteristics was measured using table, frequency and percentages. Types of agricultural-based livelihood activities participated by youths were measured by asking farmers to indicate ‘yes’ or ‘no’ on a list of agricultural-based livelihood activities provided. Any variable ($\geq 50\%$) was regarded as participated, while variable ($< 50\%$) not participated.

Extent of participation was rated on a four point likert scale of; High, Moderate, Low, Very low; 4,3,2 and 1 was assigned respectively with regards to the listed agricultural-based livelihood activities. A decision rule of 2.5 was used as a benchmark (<2.5 = Low; ≥ 2.5 = High). The values were added together and divided by 4 to get a mean score of 2.5. Any variable with a mean of 2.5 and above was regarded as high participation ranked in ascending order, while variable with a mean of less than 2.5 was regarded low participation.

Constraints faced by youths in participating in agricultural-based livelihood activities was rated on a 5- point Likert scale of strongly agreed= 5, agreed= 4, undecided=3, disagreed=2 and strongly disagreed= 1. The values were added together and divided by 5 to get a mean score of 3.0. Any variable with mean of 3.0 and above was considered as major constraint ranked in ascending order, while mean value with less than 3.0 was considered as minor constraint.

Variables in objectives one and two were presented and analyzed using percentage and frequency while variables in objectives three and four were analyzed using mean statistics. Binomial logistic regression analysis was used to test the influence of rural youths’ socioeconomics characteristics on the extent of participation in agricultural-based livelihood activities.

Results and Discussions

Socio-economic characteristics of rural youth farmers.

The results on table 1 reveals that majority (61.5%) of the rural youth farmers were males. 44.0% of the rural youth farmers were within the age bracket (26-30yrs), This indicates that most of the young farmers were in their formative years, a stage characterized by energy and vigor that can be channeled into productive and meaningful agricultural activities. This finding aligns with the study by Angba et al. (2019), which revealed that individuals within this age group are typically active, productive, and capable of contributing significantly to the growth of the agricultural sector and the overall economy. Majority (77.2%) of the youths were single. This shows that they were still under the auspices of their parents and were free to participate in family labour. This finding is consistent with the report of Nyabam et al. (2017), who observed that marital status had no significant influence on the choice of livelihood activities among rural youths. Additionally, the results showed that most (56.8%) of the youth farmers had 5 and above household members. Majority of youth in this age grade still live in the family house supporting a large farming population. These are normal circumstances in rural communities because the majority of family heads, particularly farmers, think that having more children who will work on the farm is preferable to using outside labour. This might have an impact on involvement in agricultural livelihood. Half of the respondent (56.1%) had secondary education. This implies that most of the youth had one form of education or the other. Most (44.6%) have farming experience of 10yrs and above, while (71.6%) had bi-monthly extension contact. Fewer extension contacts provide

ineffective and unsustainable extension services. This result is in line with Munishi et al., (2017), who found that poor visibility of extension personnel hinders youth participation and capacity development. Majority (69.6%) were members of cooperative groups. Membership in a social organization positively affects hours spent by youths in agricultural activities. 37.8% of the rural youth farmers had an annual income of $\geq \text{₦ } 1,000,100$. As the respondents' wealth increases, the probability of intensively participating in agricultural-based activities will increase. These findings agree with the assertion of Iyamah et al., (2025), who found that increase in income motivate increase participation in agricultural activities.

Socio-economic characteristics of rural youths

Table 1: Distribution of respondents based on the socio-economic characteristics (n=148)

Item	Frequency	Percentages (%)
Sex		
Male	91	61.5
Female	57	38.5
Age		
18-21	34	23
22-25	45	30.4
26-30	69	46.6
Marital Status		
single	115	77.7
Married	33	22.3
Household size		
1-2	23	15.5
3-4	41	27.7
5 and above	84	56.8
Educational level		
No formal education	-	-
primary education,	23	15.5
secondary education	83	56.1
tertiary education	42	28.4
Years of experience		
< 1 yr.	6	4.1
1-4yrs	27	18.2
5-9yrs.	49	33.1
10yrs and above.	66	44.6
Extension contact		
Fortnightly	8	5.4
Monthly	34	71.6
Bimonthly	106	23.0
Membership of cooperative group		
Yes	103	69.6
No	45	30.4
Annual income		
$\leq \text{₦}500,000$	9	6.1
$\text{₦}(500,100-1,000,000)$	42	28.4
$\geq \text{₦ } 1,000,100$	97	65.5

Source: Field survey (2025)

Agricultural-based livelihood activities participated by rural youths

The result in table 2 reveals the agricultural-based livelihood activities youths participated in include; farm labour (labour utilized in the farm) with 87.2% involvement and ranked 1st; horticulture (vegetable / fruits production) with 85.8% involvement and ranked 2nd; agroforestry (integrating trees into farming) with 83.1% involvement and ranked 3rd; arable crop production (planting and maintaining crops) with 70.3% involvement and ranked 4th. The overall result indicates that youths in the study area were significantly involved in agricultural-based activities such as; cocoa, cassava, maize, vegetable, yam, plantain and banana production among others. These activities are youth friendly and the major source of livelihood in the study area, hence the reason for youth participation. This is in line with the findings of Vihi et al.,(2023) that youths participate fully in activities they perceived to increase their income.

TABLE 2: Distribution based on Agricultural-based Livelihood Activities participated by Rural Youths

S/N	Agricultural-based Livelihood Activities Participated	Frequency (f)	Percentages (%)
1	Farm labour (labour utilized in the farm)	129	87.2
2	Horticulture (Vegetable / fruits production)	127	85.8
3	Agroforestry (Integrating trees into farming)	123	83.1
4	Arable crop production (planting and maintaining crops)	104	70.3
5	Livestock production (Raising animals-poultry, pigs, goats)	100	67.6
6	Hunting	94	63.5
7	Food processing (palm oil, palm kernel, groundnut oil etc.)	92	62.2
8	Lumbering/ saw milling	89	60.1
9	Apiculture(Bee keeping)	86	58.1
10	Mixed farming (Combining crops and livestock)	83	56.1
11	Organic farming (Growing crops and raising animals without synthetic fertilizer)	81	54.7
12	Aquaculture (Fishery)	79	53.4
13	Mushroom cultivation	76	51.4

Source: Field survey (2025); (< 50% = Not participated: ≥ 50% = participated)

Extent of rural youths Participation in Agricultural-based livelihood activities

The result in table 3 reveals the extent of youths participation in agricultural-based livelihood activities; farm labour (labour utilized in the farm) ($\bar{x}$ =3.12) ranked 1st ; horticulture (vegetable / fruits production) ($\bar{x}$ = 3.08) ranked 2nd; arable crop production (planting and maintaining crops) ($\bar{x}$ =3.04) ranked 3rd and agroforestry (integrating trees into farming) ($\bar{x}$ =3.01) ranked 4th. Fruits and vegetable farming as well as cocoa production are lucrative livelihood activities associated with the people of central agricultural zone. Youth supply most of the labour needed in these agricultural activities. This support the finding of Aya &

Eremi, (2015) who observed that youths engage in better and more lucrative means of livelihoods that will significantly increase their income.

Table 3: Distribution of respondents based on their extent of participation in Agricultural Livelihood Activities

S/n	Extent of youth participation in Agricultural –based Livelihood Activities	Mean	Rank
1	Farm labour (labour utilized in the farm)	3.12	1 st
2	Horticulture (Vegetable / fruits production)	3.08	2 nd
3	Arable crop production (planting and maintaining crops)	3.04	3 rd
4	Agroforestry (Integrating trees into farming)	3.01	4 th
5	Livestock production (Raising animals-poultry, pigs, goats)	2.93	5 th
6	Hunting	2.89	6 th
7	Lumbering/ saw milling	2.77	7 th
8	Aquaculture (Fishery)	2.68	8 th
9	Food processing (palm oil, palm kernel, groundnut oil etc.)	2.59	9 th
10	Mixed farming (Combining crops and livestock)	2.54	10 th
11	Organic farming (Growing crops and raising animals without synthetic fertilizer)	2.52	11 th
12	Apiculture(Bee keeping)	2.50	12 th
13	Mushroom cultivation	2.30	13 th

Source: Field survey (2025); ($\bar{x} < 2.50$ = Low; $\bar{x} \geq 2.50$ = High).

Constraints to Rural Youth Participation in Agricultural-based Livelihood Activities

The result in table 4 reveals the constraints to rural youth participation in agricultural-based livelihood activities; lack of capital/ access to credit ($\bar{x}$ =3.19; SD = 0.76); insufficient land for cultivation/ lack of land ownership ($\bar{x}$ =3.14; SD = 0.74); lack of interest due to drudgery in farm operations ($\bar{x}$ =3.12; SD = 0.73); high cost of input / implements like fertilizers and seeds ($\bar{x}$ = 3.07; SD = 0.71). Reduced agricultural productivity and low farmer incomes are linked to limited land availability, inadequate financial support, and poor dissemination of information on modern agricultural practices. Access to land is particularly crucial for young people, as their livelihoods in rural areas largely depend on agriculture. These findings are consistent with those of Adesina et al. (2025), who reported that low income, restricted access to land, insufficient support for agricultural training, and the high cost of farm inputs discourage potential farmers from engaging in agricultural activities. However, farm theft ($\bar{x}$ =2.58; SD=0.56) was the least constraint.

Table 4: Distribution based on Constraints to Rural Youth Participation in Agricultural-Based Livelihood Activities

Constraints to youth participation n=148	Mean	SD
Lack of capital/ access to credit	3.19	0.76
Insufficient land for cultivation/ lack of land ownership	3.14	0.74
lack of interest due to drudgery in farm operations	3.12	0.73
High cost of input / implements like fertilizers and seeds	3.07	0.71
Poor transport infrastructure and social amenities	3.03	0.67
Inadequate labour saving technologies for ease of operations	3.01	0.68
Lack of awareness/ knowledge on new agricultural practices	2.98	0.69
Poor market access/ competitive market for agricultural products	2.93	0.68
Lack of incentives from government	2.85	0.67
Inadequate training on new agricultural practices	2.79	0.65
Poor visibility of extension personnel /extension services	2.75	0.66
Inadequate youths empowerment schemes from the government	2.66	0.58
Farm theft	2.58	0.56

Source: Field survey 2025. Decision rule : ($\bar{x} \geq 3.0$ = major constraint; $\bar{x} < 3.0$ = minor)

Table 5 shows that sex (.371), age (.387), educational level (3.421), years of farming experienced (3.813), and estimated annual income (1.884) were statistically significant at 5% level of significance. This suggests that male youths who are older, more educated, have longer farming experience, and earn above-average income are more likely to engage in agricultural-based livelihood activities than their counterparts. Therefore, the socio-economic characteristics of youths significantly influence their level of participation in agricultural-based livelihood activities within the central agricultural zone. The findings of this study align with those of Adaigho et al. (2018), who identified educational level and gender as key factors influencing youth's participation in agricultural-based livelihood activities in the study area. The result also supports the observation of Aya and Eremi (2015), who reported that as farmers advance in age, their years of farming experience increase, which in turn enhances their level of participation in agriculture.

Table 5: Binomial logistic regression analysis showing the influence of socio-economic characteristics of rural youths on their participation in agricultural-based livelihood activities

Variables	Coefficient	Std. Error	P-Value
Sex	0.371*	0.059	0.018
Age	0.387*	1.412	0.015
Marital status	-4.181	0.201	0.0051
Educational status	3.421*	0.021	0.042
Years of farming experience	3.873*	0.362	0.000
Household size	-1.179	0.244	0.001
Estimated annual income	1.884*	0.513	0.044
Constant	-3.301	3.113	
Wald Chi2	61.472		
Prob > Chi2	0.000		

Source: Field Survey, 2025 *P ≤ 0.05

Conclusion and Recommendations

The study was conducted to assess youth participation in agricultural-based livelihood activities in the Central Agricultural Zone of Cross River State, Nigeria. Findings revealed that youth engagement significantly enhances agricultural-based livelihood activities in the area. Among these activities, farm labour recorded the highest level of youth participation. However, several challenges were identified, with lack of capital emerging as the major constraint limiting their involvement. The null hypothesis was rejected, indicating a statistically significant influence of youths' socio-economic characteristics on their participation in agricultural-based livelihood activities at the 1% level of significance. The study therefore recommends that youths should be further encouraged to actively engage in diverse agricultural-based livelihood activities by ensuring the provision of relevant information and accessible financial support services within the study area.

References

- Adesida, I.E., Nkomoki, W., Bavorova, M., & Madaki, M.Y. (2021). Effects of agricultural programmes and land ownership on the adoption of sustainable agricultural Practices in Nigeria. *Sustainability*, 13, 7249. <https://doi.org/10.3390/su13137249>.
- Angba, A.O., Adesope, O.M. & Aboh, C.L. (2019) Effect of Socioeconomic Characteristics of Rural Youths on Their Attitude towards Participation in Community Development Projects. *International NGO Journal*, 4, 348-351
- Aya, C. F., Eremi, E.O. & Iyamah, D.A (2025). Contributions of Agricultural Extension Services to Improve Vegetable Production in Calabar Municipality Local Government Area, Cross River State, Nigeria. *Proceedings of the Annual conference of the Agricultural Extension Society of Nigeria*. 30(1):249-256.
- Central Bank of Nigeria CBN (2021). Statistical bulletin, Vol. 26 December, 2021 Abuja: Central Bank of Nigeria. AGRA. (2017). *Africa Agriculture Status Report: The Business of Smallholder Agriculture in Sub-Saharan Africa* (Issue 5). Nairobi, Kenya: Alliance for a Green Revolution in Africa (AGRA). Issue No. 5
- Eta, H.C., Aya, C. F., Iyamah, D.A. & Sunday, M. T. (2015). Perceived Effects of Rural Urban Youth Migration on Agricultural Labor Supply in Ika Local Government Area, Akwa Ibom State, Nigeria. *International Journal of Natural and Applied Science*, 10(1&2); 128-133.

- Aya, C. F. & Ereimi, E. O. (2015). Effect of Farming Activities on Agricultural Biodiversity Management in Cross River State, Nigeria. *International Journal of Natural and Applied Science*, 10(1&2); 123-127.
- Olah, C.M. & Okon, E.T. (2022). Factors Affecting Pineapple Production in Central Agricultural Zone of Cross River State, Nigeria. *American Journal of Environmental and Resource Economics*. 7(1); 2022; 8-14. doi: 10.11648/j.ajere.20220701.12
- Owolabi, J. O., Ojo, I. H. & Musa, Y. (2023). Youth Participation in Improved Agricultural Production Practices In Sabon Gari Local Government Area, Kaduna State; *J. Hum. Soc. Sci. Crtv. Arts*, 18(1&2): 27– 36.
- Nyabam, V. S., Tarawali, G. & Ijie, B.A. 2018. Empirical analysis of IITA youth in agribusiness model as a panacea for solving youth unemployment problem in Nigeria. *International Journal of Governance and Development*. 6 (11):146-152.
- Vihi, S.K., Selzing, P.M., Jesse, B. & Adeniyi, F.O. (2023). Determinants of Youth's Involvement in Arable Crop Farming in Shendam Local Government Area of Plateau State, Nigeria. *J. Appl. Sci. Environ. Manage*. 27 (12): 2857-2864
- Munishi, R. G., Mgelwa, A. S. & Guan, X. 2017. Exploring factors affecting performance of Smallholder tea farmers in Tanzania. *Journal of Economics and Sustainable Development*, 8(20):95-106.
- Chigonda, T.(2017). Exploring Livelihood Benefits from a Community-Based Conservation Area in South-Eastern Zimbabwe. *The International Journal of Humanities & Social Studies*. 5 (9):219-228
- Kwenye, J.M. & Sichone, T. (2016) Rural Youth Participation in Agriculture: Exploring the Significance and Challenges in the Control of Agricultural Sector in Zambia. RUFORUM Working Document Series (ISSN 1607-9345) 14: 473-477.
- Mthi, S., Yawa, M., Tokozwayo, S., Ikusika, O., Nyangiwe, N. , Thubela, T. , Tyasi, T. , Washaya, S., Gxasheka, M., Mpisana, Z. and Nkohla, M. (2021). An Assessment of Youth Involvement in Agricultural Activities in Eastern Cape Province, South Africa. *Agricultural Sciences*, 12, 1034-1047.
- Cheteni, P. (2016) Youth Participation in Agriculture in the Nkonkobe District Municipality, South Africa. *Journal of human ecology* 55(3):207-213
- Organisation for Economic Co-operation and Development (OECD) 2017. Agricultural progress and poverty reduction Agricultural Progress and Poverty Reduction: Synthesis Report (OECD Food, Agriculture and Fisheries Working Paper No. 49).
- Olatinwo, L.K., Fawole, B.E. & Akinyemi, M. (2017) Constraints of Rural Youth's Participation in Agricultural Development in Dutsin-Ma Local Government Area of Katsina State, Nigerian. *Journal of Agriculture and Human Ecology*, 1, 1-11
- Iyamah, D.A., Aya, C. F., Eta, H. C. & Azonta, J.C (2024). Constraints to climate change adaptation by oil palm farmers in Arochukwu Local Government Area, Abia State, Nigeria. *Book of Proceedings of the First Faculty of Agriculture International Conference*, University of Calabar. 1(1): 575-581
- Maisule, A. M., Sennuga, S. O., Bamidele, J., Alabuja, F. O. & Osho-Lagunju, B. (2023). Rural Youth Participation in Agriculture-Based livelihood Activities in Abuja, Nigeria, *International Journal of Research and Scientific Innovation (IJRSI)*:45-62
- Thomas, K. A. & Eforuoku, F. (2020). Determinants of Participation in Youth-in-Agriculture Programme in Ondo State, Nigeria. *Journal of Agricultural Extension*: 20(10) 60.
- Twumasi, M. A., Jiang, Y. & Acheampong, M. O. (2019). Determinants of agriculture participation among tertiary institution youths in Ghana. *Academic Journal of agricultural extension and rural development*, 11(3), 56-66.