
Assessment of Youths' Participation in Cocoa Production in Umuahia Agricultural Zone, Abia State, Nigeria

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Abstract

*This study examined youth participation in cocoa production in the Umuahia Agricultural Zone, Abia State, Nigeria. Using multistage sampling, 80 respondents were selected, and data were analyzed with descriptive statistics, multiple regression, and correlation. Results showed a high level of youth involvement in cocoa production, with a high grand mean of 3.64, particularly in gathering pods ($\bar{x} = 3.96$), planting ($\bar{x} = 3.96$), processing ($\bar{x} = 3.81$), and marketing ($\bar{x} = 3.75$). Despite challenges including inadequate extension services ($\bar{x} = 3.33$), insufficient training ($\bar{x} = 3.68$), lack of improved technologies ($\bar{x} = 3.96$), and lack of insurance ($\bar{x} = 3.43$), youths perceived cocoa farming as lucrative and beneficial to their income and welfare. Significant determinants of participation included marital status, education, farming experience, credit access, and cooperative membership. Correlation analysis revealed a moderate positive relationship ($r = 0.5525^{***}$) between involvement and positive perception of cocoa production. The study concludes that youths are actively engaged in cocoa farming and recommends that government and NGOs enhance training, extension services, and access to improved technologies to address constraints and further support youth participation.*

Keyword: Youths, Youth's Participation, Cocoa Production

Introduction

Agriculture remains a vital sector of the Nigerian economy, it accounts for approximately 23% of gross domestic product (GDP) and employs about 36–45% of the national workforce, mostly in our rural communities. (National Bureau of Statistics, 2023; World Bank, 2023). According to Nkang (2021), the need to diversify the productive base of the economy, reduce dependency on oil exports, improve the efficiency of the agricultural sector, and intensify private-sector growth has positioned cocoa as a top cash-crop enterprise in Nigeria. Nkang (2021) further states that cocoa production contributes significantly to national development as a leading agricultural export earner, generating foreign exchange, providing raw materials for various industries, and supporting millions of jobs both directly and indirectly.

Cocoa (*Theobroma cacao*) is a major agricultural export crop, with Nigeria producing about 5% of total world output (FAO, 2011). Adesina (2022) notes that Nigeria produces about 250,000 metric tonnes of cocoa annually, competing favourably with other leading producers such as Ivory Coast, Indonesia, and Ghana. Prior to the oil boom in the mid-1970s, cocoa was one of Nigeria's highest foreign-exchange earners and long generated substantial revenue for the country (Onwumere & Alamba, 2022; Folayan et al., 2018). Cocoa is used for beverages, confectionery, cosmetics, soap, and pharmaceuticals. It is cultivated in fourteen Nigerian states, including Abia, Akwa Ibom, Cross River, Delta, Edo, Ekiti, Ogun, Ondo, Osun,

Oyo, Kogi, Kwara, Adamawa, and Taraba (FGN, 2019). While cocoa production originated in South America, Africa now supplies the majority of cocoa beans to the world market. In Nigeria, cocoa production is a crucial source of livelihood for many farming households, especially youth, who represent the future of the agricultural sector. Over four million people currently depend on the cocoa sector for employment (Nigeria Statistical Service [NSS], 2018). Nigeria is the fourth largest producer of cocoa in the world, after Ivory Coast, Indonesia, and Ghana, and the third largest exporter, after Ivory Coast and Ghana. The discovery of oil in the 1960s shifted Nigeria's investment focus away from cocoa, leading to a significant decline in production (Ndu, 2020).

Youth participation in cocoa production constitutes an important segment of the agricultural workforce. Youth are an essential human resource for current and future agricultural and rural development (Skuz, 2005). Okwoche et al. (2012) note that one of the main setbacks in agricultural development programmes, particularly in cocoa production, is the failure to fully integrate youth into these initiatives. Diversifying the economy away from petroleum and increasing youth engagement in agriculture are vital to Nigeria's progress, as envisioned in Vision 2020 (Nduka, 2021).

Integrating youth into cocoa production will strengthen the sector and boost productivity, given their innovation, physical strength, and adaptability. However, the pursuit of white-collar jobs, poor rural infrastructure, and inconsistent government policies have discouraged youth participation in cocoa farming. Nduka (2021) observes that youth participation in cocoa production remains low. Despite efforts by the government, NGOs, and private institutions to encourage youth involvement in agriculture, these efforts have not significantly altered the age distribution of the farming population.

Against this background, this study assesses the level of youth participation in cocoa production in the Umuahia Agricultural Zone of Abia State, Nigeria. The specific objectives are to identify cocoa production activities in which youth participate, determine their level of participation, assess their perceptions of cocoa production, and ascertain the constraints influencing youth participation in cocoa production in the study area.

Hypothesis

H₀₁: There is no significant relationship between the respondents' level of participation in cocoa production and their perception about cocoa production

Methodology

This study was carried out in the Umuahia Agricultural Zone of Abia State, Nigeria. The state is one of five in the South-East region and is made up of 17 local government areas divided into three agricultural zones: Umuahia, Ohafia, and Aba. Abia is a notable cocoa-producing state, with the Umuahia and Ohafia zones serving as the primary areas for cocoa cultivation.

The study population consisted of youth involved in cocoa production in the Umuahia Agricultural Zone of Abia State. A multi-stage sampling technique was adopted to select respondents. In the first stage, two LGAs, namely Umuahia North and Ikwuano, were purposively selected because of the large number of young cocoa farmers in those areas. In the second stage, two communities were selected from each LGA; in the third stage, two villages were selected from each community; and in the fourth stage, ten youth cocoa farmers were randomly selected from each village, yielding in a total sample size of 80 respondents.

Data for this study were obtained from primary sources and were collected using a structured questionnaire and in-depth interviews with respondents. The data were analyzed using descriptive statistics. The study hypothesis was tested using the Pearson Product-Moment Correlation (PPMC) to examine the relationship between respondents' level of participation in cocoa production and their perceptions of cocoa production.

Model specification; PPMC

$$r = \frac{n\sum XY - (\sum X)(\sum Y)}{\sqrt{(n\sum X^2 - (\sum X)^2)(n\sum Y^2 - (\sum Y)^2)}}$$

Where;

r = correlation coefficient

Y = Perception about cocoa production (Mean)

X = Level of participation in cocoa production (Mean)

N = sample size of the youths.

The correlation coefficient will be further tested using this formula.

$$t = \frac{r \times \sqrt{n-2}}{t-r^2}$$

Where;

t = test of significance

r = correlation coefficient

n = sample size

Results and Discussion

Level of Participation of the Youths in Cocoa Production

Table 1 presents the level of participation of the youths in cocoa production in various cocoa production activities in the study area.

Table 1: Level of participation of the youths in cocoa production n = 80

Variables	Always (4)	Seldom (3)	Rarely (2)	Never (1)	Mean
Gathering of cocoa pods	78	1	2	0	3.96
Land Clearing	58	12	5	5	3.54
Planting	77	3	0	0	3.96
Weeding	44	30	2	4	3.43
Fertilizing	51	29	0	0	3.63
Spraying	50	13	10	7	3.33
Harvesting	47	24	5	4	3.43
Processing	69	5	6	0	3.81
Marketing	70	3	4	3	3.75
Grand mean = 3.64					

Source: Field Survey, 2024. Decision rule: Mean ≥ 2.5 = High level of participation, Mean < 2.5 = Low level of participation.

The results in Table 1 show that planting and gathering cocoa pods had the highest mean score (3.96), indicating very strong youth involvement in these activities. These key tasks are fundamental to successful cocoa production and central to the farming cycle. Consistent participation in these activities underscores every cocoa farmers' commitment to both crop establishment and the critical post-harvest processes that ensure quality and maximize yields. Other activities, such as processing ($\bar{x} = 3.81$) and marketing ($\bar{x} = 3.75$), also showed significant engagement by the youths. This highlights that youth cocoa farmers in the study area recognize the importance of value addition and market access within the cocoa value chain. The grand mean for youth participation across cocoa production activities was 3.64, indicating a high level of youth involvement in cocoa production in the study area. This finding aligns with Adeloye et al. (2017), who also reported high youth participation in cocoa plantations in Ondo State, Nigeria.

The Youths' Perception of the Cocoa Production Activities

Table 2 shows the result of the respondents' perceptions of various aspects of cocoa production activities in the study area. These perceptions were assessed by eliciting statements designed to capture their attitudes, beliefs, and experiences regarding the role of cocoa production in supporting livelihoods. The findings revealed a grand mean of 3.16, indicating that respondents generally had a positive perception of cocoa production's capacity to meet their welfare needs. The highest mean scores from the result were from statements indicating that youths' participation in cocoa production contributes substantially to farm labor ($\bar{x} = 3.95$), thereby reducing labor costs for their families, and assists in family upkeep ($\bar{x} = 3.98$). This demonstrates that youths recognize the value of their involvement in cocoa farming for both household support and personal livelihood improvement. Additionally, respondents perceived cocoa production as a

means for youths to earn supplementary income ($\bar{x} = 3.90$) and remain productively engaged within their communities ($\bar{x} = 3.93$). Furthermore, the findings indicated that youths did not perceive cocoa production activities as being mainly for school dropouts ($\bar{x} = 1.48$); rather, they viewed these activities as a viable means of enhancing their general well-being ($\bar{x} = 3.45$). These outcomes are consistent with those of Ajayi and Solomon (2022), who reported that youth participation in cocoa farming in Ondo State, Nigeria, was associated with increased household welfare and reduced labor costs.

Table 2: The respondents' perception of the cocoa production activities **n = 80**

Technologies	SD (4)	A (3)	D (2)	SD (1)	Mean
Participation of the youths in cocoa production assist in family upkeep	79	1	0	0(0)	3.98
Youths contribute so much to farm labour	77	2	1	0	3.95
Cocoa production activities are quite strenuous	15	53	12	0	3.03
Few youths participate in cocoa production	18	41	21	0	2.96
Youths' engagement in cocoa production helps to improve their general wellbeing	38	40	2	0	3.45
It helps youths to get extra income	75	3	1	1	3.90
It helps youths to be gainfully engaged in the community	76	2	1	1	3.93
Cocoa production activities are mainly for dropouts	0	2	35	43	1.48
Cocoa production activities is not a good economic activity for youth	1	0	59	20	1.78
Grand mean	3.16				

Source: Field Survey, 2024. Decision rule: Mean ≥ 2.5 = High perception, Mean < 2.5 = Low perception.

Constraints that Influence Youths' Participation in Cocoa Production

The results in Table 3 show the constraints that influence youths' participation in cocoa production in the study area. Lack of access to improved technologies recorded the highest mean score ($\bar{x} = 3.96$), indicating it is a major limiting factor. This indeed is a major constraint given that, without access to innovative technologies, farmers may struggle to optimize yields and compete effectively in the market. Additionally, inadequate training ($\bar{x} = 3.68$) and insufficient extension services ($\bar{x} = 3.33$) emphasize the need for enhanced support and resources to equip young farmers with the necessary skills and knowledge for successful cocoa production. Furthermore, the lack of an insurance policy ($\bar{x} = 3.43$) emerged as another important constraint, leaving farmers vulnerable to risks such as crop failure due to pests, diseases, or adverse weather conditions, all of which can significantly impact their livelihoods. The findings showed a grand mean of 3.60, well above the benchmark of 2.5, implying that respondents are indeed facing significant constraints in participating in cocoa production. These results corroborate Adeogun's (2015) participatory diagnostic survey in Cross River State, Nigeria, which reported that lack of access to improved technologies and inputs were major challenges faced by youths in cocoa production.

Table 3: Constraints that influence youths' participation in cocoa production n=80

Constraints	SA (4)	A (3)	D (2)	SD (1)	Mean
Inadequate extension service	26 (104)	54(162)	0(0)	0(0)	3.33
Inadequate training	55 (220)	25(75)	0(0)	0(0)	3.68
Lack of access to improved technologies	77 (308)	3 (9)	0(0)	0(0)	3.96
Lack of insurance policy	35 (140)	45 (135)	0(0)	0(0)	3.43
Grand mean	3.60				

Source: Field Survey, 2024. Decision rule: Mean ≥ 2.5 = Constraining factor, Mean < 2.5 = non-constraining factor.

Hypothesis Testing

The result in Table 4 revealed a moderate, statistically significant positive correlation, with a correlation coefficient of 0.5525, between youths' level of participation in cocoa production and their perception of cocoa farming. In simple terms, this means that as youths become more involved in cocoa production, their views about the benefits and value of cocoa farming tend to become more positive. The strength and significance of this relationship indicate that the association is very unlikely to have occurred by chance, as the statistical analysis showed a meaningful and reliable connection between the two variables. This finding is consistent with Adeogun (2015), who also reported a positive association between youth participation in cocoa farming and their attitudes toward cocoa production. Similarly, Ajayi and Solomon (2022) found that, in Ondo State, youths who were more involved in cocoa farming tended to have more favourable perceptions of cocoa production.

Table 4: Correlation result of the relationship between youths' level of participation in cocoa production and their perception about cocoa production

	Respondents' level of participation in cocoa production	Their perception about cocoa production
Youths' level of participation in cocoa production	1.0000	
Youths' perception about cocoa production	0.5525***	1.0000

Source: Field Survey Data, 2024

Conclusion and Recommendations

The study concludes that respondents demonstrated a high level of involvement in cocoa production activities, including gathering pods, land clearing, planting, weeding, fertilizing, spraying, harvesting, processing, and marketing. Although they faced challenges such as inadequate extension services, insufficient training, lack of improved technologies, and absence of insurance policies, they still perceived cocoa production as a lucrative venture with the potential to enhance their income and overall welfare. Furthermore, the study indicated a positive correlation between respondents' level of involvement in cocoa production and their perceptions of it, highlighting a meaningful and dependable relationship between these factors.

Recommendations

1. Government and NGOs should provide regular training programs on cocoa farming techniques, pest management, and market access to address gaps in farmers' knowledge and extension services. This will help overcome the challenges of inadequate training and limited support.
2. The government should enhance farmers' access to improved agricultural technologies and offer more flexible credit facilities. This will enable farmers to invest in high-quality seeds and equipment, leading to higher productivity and increased income.
3. Farmers should be encouraged to join and actively participate in cooperative societies while also working to strengthen existing ones. Cooperatives offer essential support, shared resources, and better market access, enabling farmers to collaborate more effectively, overcome challenges, and increase their participation in cocoa production.

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