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ASSESSING YOUTH INVOLVEMENT IN AGRICULTURE IN YOLA-NORTH LOCAL GOVERNMENT AREA OF ADAMAWA STATE

[1]Onwuaroh, A. S*., [1]Tata, L.A., [1]Sabe, A. T. ,[1]Chiroma, A.I. and [2]Ahmad, M.D

[1] Department of Agricultural Economics and Extension, Federal University of Kashere, Gombe, Nigeria

[2]Department of Agricultural Technology, Federal Polytechnic Mubi, Adamawa, Nigeria

***Corresponding Authors' E-mail:** augustinesundaysimon@gmail.com **Tel.:** +2348062510481.

https://orcid.org/0009-0005-6890-5863

ABSTRACT

The study examined youth involvement in agriculture in Yola-North Local Government Area of Adamawa State, Nigeria. Data were collected from 230 farmers using a well-structured questionnaire and analyzed using descriptive and inferential statistics. The results show that the most (52.61%) of respondents were male, with an average age of 21 years. Most respondents (55.22%) were single with an average household size of 4 persons. Educationally, 2.61% had primary education, 7.39% had secondary education, 52.61% had diploma, and 37.39% had HND/Degree, indicating that all the respondents were educated. Additionally, most respondents earned between N40,000 and N200,000 annually. Factors influencing youth participation in agriculture revealed that age and sex were positive and significant at 1% level (P<0.01), while educational level was negative but significant at 10% level (P<0.1). Constraints identified included lack of government assistance, insufficient capital, poor road access, inadequate feed supply, poor extension services, and poor marketing prices. Sex (male) and age were positively associated with youth participation in agriculture, whereas the lack of government support was a significant barrier preventing youth from engaging in agricultural activities. The study recommends that inputs such as agrochemicals and credit should be made available on time and at subsidized rates by both governmental and non-governmental organizations to make agriculture more appealing to youths. Furthermore, the government or relevant institutions should strictly monitor and supervise any development or empowerment initiatives to prevent mismanagement by involved dignitaries.

Keywords: Youths, involvement, agriculture

INTRODUCTION

The significance of agriculture in any economy is paramount. Agriculture plays a crucial role in achieving national food self-sufficiency, contributing over 90% of the total food consumption requirements and supporting a healthy population (Alliance for a Green Revolution in Africa (AGRA), 2017). Notably, more than half of the poverty reduction in many countries worldwide can be attributed to growth in agricultural income (Organization for Economic Co-operation and Development (OECD), 2017). Agriculture is the primary source of food supply for all nations, regardless of their development statusbe it underdeveloped, developing, or industrialized (Murad and Boz, 2018). Therefore, increasing food supply through the agricultural sector is vital for the economic growth of a country (Praburj, 2018).

The youth are considered the greatest asset and the highest investment for a nation's development (National Youth Policy of Nigeria, 2001). They represent the future of agriculture in sub-Saharan Africa (SSA). However, engaging youth in agriculture and its related value chains has been challenging, with limited and sporadic participation that does not reflect the investment made in the sector (Magagula&Tsvakirai, 2020).The National Population Commission (NPC) estimates that half of Nigeria's population falls between the ages of 15 and 34 (Akinwekomi et al., 2017). According to NPC (2013), youth, defined as those between 18 and 35 years old, make up roughly half of the population. As the youth population grows, so does the rate of youth unemployment (Akande, 2014).

A nation's economic success depends on the health and motivation of its young people, and the agricultural sector offers jobs that can enhance living standards (Adesina & Eforuoku, 2018). Historically, agriculture has been a major source of employment in Nigeria, surpassing sectors such as oil and gas, finance, health, service, and manufacturing due to its capacity for self-employment and entrepreneurship. The 15 to 35 age range is ideal for agriculture, which demands enthusiasm, creativity, and innovation. Many young Nigerians are unemployed, but with entrepreneurial spirit and creativity, they have the potential to revolutionize the agricultural industry (Haruna et al. 2019).Adesina and Eforuoku (2018) note that young farmers in Nigeria often use inefficient agricultural inputs, leading to low yields and diminishing interest in agribusiness. The study indicates that a significant percentage of young people in the Southwest of Nigeria are particularly averse to agriculture. Many youths view farming as a thankless job with low pay and no opportunities for advancement.

Most youths lack enthusiasm for farming, having adopted a get-rich-quick mentality that clashes with the long-term investment required in agribusiness. Farming is often seen as a job for the lower class, the uneducated, the elderly, and rural dwellers, making it unattractive to the youth. Despite various incentives aimed at empowering and attracting young people to agriculture, many view participation in such programs as demeaning and unsuitable for educated youth. This perception has significantly reduced youth participation in agriculture. This study aims to assess youths' participation in agricultural activities inYola North Local Government area of Adamawa State, Nigeria. The specific objectives are to:

describe the socio-economic characteristics of youths in the study area;

identify the types of agricultural activities engaged by the participants;

determine the socio-economic characteristics influencing the youths' involvement in Agriculture, and

identify constraints to youths' involvement in Agriculture in the study area.

METHODOLOGY

Study Area

The study was carried out in Yola North Local Government Area of Adamawa State.. The study area spans a total of 1,213.3 km², situated between latitudes 9°06′ and 9°29′ North and longitudes 12°06′ and 12°38′ East (Adamawa State Government, 2016). It borders Fufore Local Government Area to the south and east, Numan to the west, and Song to the north. This region falls within the Sudan Savannah zone and experiences a tropical climate with distinct wet and dry seasons. The dry season runs from late November to April, while the wet season extends from May to October. The average annual rainfall is approximately 956 mm (Adebayo, 1999). Typical of the African savannah, the area has an average minimum temperature of 15.2°C, with seasonal maxima usually occurring in March and April, reaching an average maximum temperature of 39.7°C (Ndaghu et al., 2018). Yola North Local Government Areas of Adamawa state is among the 21 Local Government Areas of the State. The major spoken languages are Hausa, Fulani, and Kilba. The LGA has a projected population of 512,343 people (National population Commission (NPC), 2020) . The main crops cultivated are cereals, vegetables, rice, and maize.

Sampling Technique and Sample Size

A multi-stage sampling technique was used to select the youth farmers for this study. In the first stage, Yola North LGA was purposively selected out of the 21 LGAs in the state due to its high proportion of youth, as projected by the National Population Commission (NPC) for 2019. In the second stage, five villages with high populations of youth were purposively chosen. In the third stage, a simple random sampling technique was used to select youth (15-35 years)from these villages, ensuring unbiased selection. From a sample frame of 1,800 youth, 230 respondents were randomly chosen as the sample size.

Data Analysis

Descriptive statistics such as percentages, frequency counts and means were used to analyze objective i, ii, and iv, while inferential statistics (Logit Regression model) was used to analyze objective iii. The model is implicitly specified as:

$$Y = In(\frac{p}{1-p}) = \beta_0 + \beta_1 X_1 i + \beta_2 X_2 i + \beta_3 X_3 i + \beta_4 X_4 i + \beta_5 X_5 i + \beta_6 X_6 i + \beta_7 X_7 i + e \ldots\ldots(1)$$

Where;

Y= Youth participation in agricultural activities (those involved are scored 1 and those not involved are scored 0)

In = natural logarithm

P= probability

β_0 = constant term

β_1- β_7 = regression coefficients

X_1 = Age (Years)

X_2 = Sex (Male = 1, Female= 0)

X_3 = Educational level (Actual years spend in school)

X_4 = Marital Status, (Married= 1, Otherwise = 0).

X_5 = Occupational (If farming =1. Otherwise = 0).

X_6 = Household size (Number)

X_7 = Income per annum (In Naira)

RESULTS AND DISCUSSION

Socio-Economic Characteristics of the Respondent

Table 1 illustrates that the majority (44.35%) of respondents are between the ages of 15 and 19, with an average age of 21 years. This indicates that respondents in the study area are young people who are in a dynamic period for acquiring new production techniques, which is vital for enhancing the agricultural sector. Furthermore, the table shows that 52.61% of the respondents were male, while 47.39% were female, indicating that both genders are almost equally involved in agricultural activities in the study area. The table also reveals that 2.61% of respondents had completed primary education, 7.39% had secondary education, 52.61% had a diploma, and 37.39% had either an HND or a degree. This demonstrates that all (100%) of the respondents had at least a primary education. These findings are consistent with the study by Falaye et al. (2021), which found that the majority (67%) of youths were aged 15-20, 51.87% of respondents were male, and approximately 97% had at least a primary education. The fact that all respondents have some level of formal education suggests they are likely to adopt modern and innovative farming practices, potentially leading to increased production yields. The average household size of respondents was 4 persons. Regarding marital status, 55.22% of the respondents were single, indicating that single youths are predominant in agriculture and related activities in the study area. The table also shows that their mean annual income was 227,117.4 Naira. While this number is not very promising, it could be enhanced if the youth adopt more agricultural innovations and pursue further training to lower production costs and maximize profits.

Table 1:Socio-Economic Characteristics of the Respondents (n=230)

Variables	Frequency.	Percent	Mean
Sex			
Male	121	52.61	
Female	109	47.39	
Age			
15-19	102	44.35	
20-24	71	30.87	21.38
25-29	42	18.26	
30-35	15	6.52	
Education			
Primary	6	2.61	
Secondary	17	7.39	
Diploma	121	52.61	
HND/Degree	86	37.39	
Marital Status			
Single	127	55.22	
Married	103	44.78	
Household Size			
1-3	73	31.71	
4-6	155	67.39	4.07
7-9	2	0.87	
Income per annum			
40000-200000	166	72.17	
201000-361000	14	6.09	
362000-522000	18	7.83	227117.4
523000-683000	13	5.65	
684000-844000	12	5.22	
845000-1005000	7	3.04	

Source: Field Survey, 2021

Agricultural Activities Engaged by the Respondents

The findings from Table 2 highlight the agricultural pursuits of the youths in the study area. Approximately 78.50% of the respondents participated in crop cultivation, 41.28% in livestock farming, and 15.12% in the processing of agricultural products. Additionally, around 10.50% of the respondents were involved in aquaculture, while 55.23% engaged in poultry farming. This demonstrates that most respondents are involved in crop cultivation, which is consistent with the study by Osabohien et al., (2021) on youth involvement in agriculture and poverty alleviation in Nigeria, indicating that youths are more active in crop cultivation than in other agricultural activities.

Table 2: Agricultural Activities Distribution of the Respondents

Agricultural Activity	Frequency	Percentage (%)
Crop production	135	78.49
Livestock production	71	41.28
Processing	26	15.12
Poultry production	95	55.23
Fish farming	18	10.47
Total	*345	200.58

Source: Field Survey, 2021

*=Multiple response

The Socio-economic Characteristics Influencing the Youths' Involvement in Agriculture

The outcomes of the binary logit regression analysis in Table 3 illustrate the correlation between the socio-economic characteristics of the respondents and their participation in agriculture. The logit regression results can be interpreted using log odds or odds ratios; for this study, the interpretation was conducted using odds ratios. Table 3 indicates that age and sex(male) were positively significant at the 1% level, while educational attainment was negatively significant at the 10% level. This suggests that for each unit increase in age, a youth is 3.472 times more likely to engage in agriculture. Additionally, a male youth is 3.469 times more likely to be involved in agriculture compared to a female youth. On the other hand, with education being negatively significant, each unit increase in educational level reduces the probability of a youth participating in agriculture by a factor of 0.599.

The study by Afolabi et al., (2022) supports this research, highlighting age as a significant positive factor influencing youth participation in agriculture. However, their work also indicated that education is a significant positive factor, which contradicts the findings of this study. Additionally, the results of this study were contradicted by Falaye et al., (2021), who found that both gender and age were significant factors negatively influencing youth involvement in agriculture. Kalule et al., (2017) revealed that individuals with formal education are less likely to engage in agriculture compared to those who are illiterate. This finding aligns with the results of this study, which show that formal education negatively impacts youth participation in agriculture.

Farming is predominantly male-dominated, mainly due to the physical demands involved, especially in Africa where many farmers still depend on small-scale techniques employing tools such as hoes and machetes. Hence, the substantial prevalence of males corresponds with assumptions regarding gender and agricultural efficiency. Moreover, older individuals are anticipated to possess increased awareness and education regarding the advantages of farming, which elucidates why age also exhibits a favorable association with engagement. Promoting youth engagement in agriculture offers the potential for addressing concerns linked to an aging farming population and escalating youth unemployment. Ensuring the enthusiasm and active involvement of young individuals in agriculture is essential for effectively addressing these challenges.

Table 3: **Socio-economic characteristics influencing the youths' involvement in agriculture**

Farming	Odds Ratio	Std. Err.	z	P>|z|	[95% Conf. Interval]
Age	3.472	1.475	2.93	0.003	1.509 7.987
Sex (male)	3.469	1.217	3.55	0.000	1.744 6.902
Educational Level	0.599	0.160	-1.91	0.056	0.354 1.012
Marital Status	0.967	0.333	-0.10	0.923	0.492 1.900
Household size	0.592	0.226	-1.37	0.170	0.279 1.252
Income	1.107	0.168	0.67	0.504	0.821 1.491
Constant	3.355	3.334	1.22	0.223	0.478 23.537

Source: Field Survey, 2021

Constraints Associated with Youth Involvement in Agriculture

The study area identified and ranked the constraints of youth involvement in agricultural production, as detailed in Table 4. The most critical constraint highlighted by the study was the lack of government assistance, cited by 83.04% of respondents. Additionally, 56.1% noted inadequate extension services, while 78.43% identified insufficient capital for farm management as a significant barrier to their engagement in agriculture. Furthermore, 30.00% of respondents cited poor access to roads, 12.61% mentioned inadequate feed supply, and 38.26% indicated low prices in agricultural markets as challenges faced by youth in the region. These challenges collectively impact production, leading to reduced yields and income for farmers, thereby limiting their ability to purchase necessary inputs and expand production to improve agricultural output and profitability. According to Udemezue (2019), a significant number of young individuals lack access to financial support for agricultural activities. He also emphasized that the presence of well-maintained roads and reliable electricity would greatly contribute to retaining youth in rural areas and enhancing their involvement in agriculture. These observations are consistent with the findings of the current study.

Table 4: Distribution of the Respondents Based on Constraints Faced

Problem	Frequency	Percentage (%)	Ranking
Lack of government assistance	191	83.04	1st
Insufficient capital for managing the farm	169	73.48	2nd
Lack or Bad access to the road	69	30.00	5th
Lack of good feed supply	29	12.61	6th
Poor extension services	129	56.09	3rd
Poor marketing prices	88	38.26	4th
Total	**293.48****	**675****	

Source: Field Survey, 2021

*=Multiple response

CONCLUSION AND RECOMMENDATION

The average age of farmers in the study area was 21 years, indicating that most individuals engaged in farming were still in their active phase and possessed sufficient energy for agricultural activities. Sex and age were identified as positive factors influencing youth participation in agriculture, suggesting that participation increases with age. Furthermore, the limited involvement of female youths in agriculture could potentially lead to a decrease in agricultural output, posing risks to food security in the country. The primary constraints identified by youth were the lack of government support and insufficient capital for farm management. Failure to promptly address these challenges may lead to a further decline in youth engagement in agriculture nationwide.

It is recommended that non-governmental organizations and government agencies intensify their efforts to provide maximum financial and moral support to encourage youth participation in agriculture. Also, national leadership should develop programs and policies that specifically support female youths, aiming to increase their participation in agriculture. Furthermore, it is suggested that extension agents should actively educate youths about the opportunities in other sectors of agriculture beyond crop production. This diversification can help mitigate income fluctuations and reduce the vulnerability of farmers to adverse effects caused by climate change, pests, and diseases.

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