

# Determinants of youths' participation in agribusiness activities in Imo State, Nigeria

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## ABSTRACT

The study examined factors that influenced youths' participation in agribusiness activities in Imo State, Nigeria. A sample of 300 youths, selected using a multistage sampling procedure participated in the study. Data were collected using a structured interview schedule and the variables were analyzed using percentage and mean score. The hypothesis was tested using a multiple regression model. Results showed that the majority (76.3%) of the youths were married, received an average of secondary school education and have spent an average of 11 years in agribusiness. Crop farming ( $\bar{X} = 4.1$ ), livestock farming ( $\bar{X} = 3.5$ ) and sale of produce ( $\bar{X} = 3.7$ ) were the major agribusiness activities undertaken by the youths. The result further showed that the youths participated in an average of three agribusiness ventures. The major challenges to participation in agribusiness included access to information and knowledge ( $\bar{X} = 3.7$ ), access to ICT ( $\bar{X} = 3.1$ ) and markets availability ( $\bar{X} = 3.1$ ). The multiple regression results showed that at  $p \le 0.05$  and an F-value of 102.8, the socioeconomic characteristics of the farmers accounted for 76% of the variations in the youth's participation in agribusiness activities. The significant variables included age (t = -3.4), household size (t = 2.5), educational qualification (t = 4.0), access to fund (t = 3.6) and income (t = 3.1). It was recommended that extension and advisory services should be improved to improve the dissemination of agricultural information.

Keywords: Determinants, youths' participation, agribusiness activities, challenges.

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## INTRODUCTION

The world population is projected to reach 9 billion by 2050. The number of young people is also expected to increase to 1.3 billion by 2050, accounting for almost 14% of the projected global population (FAO, 2014). Most will be born in developing countries in Africa and Asia, where more than half of the population still lives in rural areas (UNDESA, 2012). Africa is the only region where the youth bulge will continue to grow in the foreseeable future, presenting both an opportunity and imminent threat to social cohesion as well as massive migration in search of opportunities if appropriate policies are not made to harness the dividends of a rising population (International Labour Organization (ILO), 2020). Just over one in five youth were not in employment, education or

training in 2019 and this state of joblessness has steadily grown since 2012 mirroring the trends in global rate (African Development Bank, AfDB, 2016).

Young people in Africa are faced with multiple challenges ranging from economies that grew but could not create sufficient jobs before the global financial and economic crisis to sluggish growth emanating from adverse weather conditions and poor commodity prices. Youth account for 60% of all Africa's joblessness (Ighobor, 2017). Of Africa's nearly 420 million youth, aged 15 to 35, one-third is unemployed and discouraged, another third is vulnerably employed and only one in six in wage employment. Youth face almost doubles the unemployment rate of adults, with significant variation by country. While 10 to 12 million youth enter the workforce each year, only 3.1 million jobs are created, leaving a lot of youth unemployed. The majority that are employed are engaged in the informal sector, which presents its challenges. The lack of wage jobs pushes youth into the informal sector, estimated to account for nearly 80% of jobs in some countries (AfDB, 2016). By 2030, one-fifth of the global labour force and nearly one-third of the global youth labour force will be from Africa (ILO, 2020).

The consequences of youth unemployment in Africa are pervasive and severe. Unemployment translates to poorer living conditions, outmigration, violent conflicts and brain drain. Sadly, youth unemployment constitutes a failure to take advantage of one of the assets of the continent – the large and growing population of talented young people. Covid-19 pandemic will likely worsen this trend. A report by the African Union estimates that nearly 20 million jobs both in the formal and informal sectors are threatened with destruction.

Due to the characteristics of its demographic trends, Africa is the region of the world where this challenge is and will increasingly be a deep concern (it is holding 60%) of the projected world's labour force growth, 60% of the population is under 25 years and about 400 million people will enter the labour force in the next 15 years) (Losch, 2014). Addressing the multi-faceted causes and consequences of youth unemployment on the continent will help drive inclusive economic growth, turning Africa's demographic dividend into an economic one (AfDB, 2016). The agricultural sector is expected to drive a large part of this effort. This is anchored on its position as the main activity of the people and its potential to stimulate a sustainable inclusive growth process, providing jobs and supporting diversification. According to UNFPA (2014), almost 90% of the world's youth live in less developed countries, where two-thirds of the population engages in agriculture. A report by the Federal Ministry of Agriculture and National Bureau of Statistics (2020) showed that 52.6% of youths worked as employees while 47.4% worked as employers in the agricultural sector across the six geo-political zones of the country.

Chait (2014) defines agribusiness as agriculturallyrelated businesses including warehouses, wholesalers, retailers and more. It shows the interrelationships among the supply or value chains of food and fibre organizations (Van Fleet et al., 2014; Conforte, 2010). They also focus on the food system from input supply through production, processing and distribution to retail outlets and the consumer (King et al., 2010). Numerous factors have been reported as hindering youth's participation in agribusiness. USAID (2015) listed family and community pressure, perceived lack of profitability, access to land, access to finance, access to training and education and information as limiting youth's participation in agribusiness. Gichimu and Nieru (2014) reported obstacles such as lack of land and credit to finance startups as preventing youths from engaging in agribusiness. Adeyanju et al. (2020) found a lack of access to finance, mentorship and information as challenges to youth's participation in agribusiness.

In Imo State, Nigeria, youths occupy the largest proportion of the active labour force and consequently the most unemployed. A survey by the Federal Ministry of Agriculture and National Bureau of Statistics (2019) reported that about 81% of youths in Imo State are not engaged in agriculture despite its huge potential. This has resulted in massive out-migration of youth in search of 'white collar' jobs, leaving agriculture in the hands of an ageing workforce. While the growing spate of youth unemployment is gaining global attention, little is known about the factors influencing youth participation in agribusiness in Imo State, Nigeria.

Hence, the study identified agribusiness activities undertaken by the youth, determined the level of youth participation, challenges to youth participation in agribusiness and examined the relationship between the socioeconomic characteristics of the youths and their participation in agribusiness activities.

## Study hypothesis

There is no significant relationship between the socioeconomic characteristics of the youths and their participation in agribusiness activities.

## METHODOLOGY

The study was conducted in Imo State, Nigeria. The state is among the five states in southeastern Nigeria. It lies within latitudes 4°45' and 7°15N and longitudes 6°50'E and 7°25'E with an area of around 5100 km<sup>2</sup> (Vanguard, 2014). It has boundaries with Abia State in the East, River Niger and Delta State in the West, Anambra State in the North and Rivers State in the West, Anambra State in the North and Rivers State in the South (http://www.wikipedia.org/imo.gov). The state has a population of 4.7 million people (NPC, 2016). According to NPC (2016), youth occupy 56.4% of the total population of the state. It is bordered by Abia State in the west, in the south and east by Rivers State and Anambra State in the North (www.researchgate.net/figure/Map-of-Nigeria-showing-the-36-states-and-Federal-Capital-Territory-FCT-

Abuja\_fig1\_260023562). The state is divided into three agricultural zones namely Okigwe (6 LGAs), Orlu (9 LGAs) and Owerri (12 LGAs) (Figure 1).

Agriculture is the dominant occupation of the people with crop and livestock production being the main activities. The state is currently experiencing a youth bulge which is vital for agricultural development (Oluwasola and Abraham, 2017). According to the National Bureau of Statistics and the Federal Ministry of Youth Development 2012 National Baseline Youth Survey, a total of 99,149 youths participated in agriculture in Imo State. Of this figure, 16,397 males and 53,015 females participated in crop production whereas 11,381 males and 18,356 females participated in livestock production.

The population for the study comprised all youths in the state. A multistage sampling procedure was used to select the sample for the study. The first stage involved the proportionate selection of



Figure 1. Map of Imo State, Nigeria.

73% of the LGAs in each agricultural zone giving 4, 7 and 9 LGAs for Okigwe, Orlu and Owerri agricultural zones respectively. In the second stage, three (3) communities were selected from each of the selected LGAs using a simple random sampling technique to give sixty (60) communities. In the third stage, five (5) youths were selected from each community using a simple random sampling technique to give a total of 300 youths.

Data were obtained from the respondents using an interview schedule. Variables from the objectives were analyzed using percentages and mean scores. The relationship between socioeconomic characteristics of the youth and their level of participation in agribusiness activities was tested using a multiple regression model expressed mathematically as:

 $Y = f(X_1, X_2, X_3, X_4, X_5, X_6, X_7, X_8, X_9, X_{10}, X_{11}, X_{12} + e)$ 

Where Y = Participation in agricultural businesses (Measured on 5-point Likert scale)

 $X_1 = Sex (male = 1, female = 2)$ 

X<sub>2</sub>= Age (Years)

 $X_3$  = Marital status (Single = 1, Married = 2, Separated/divorced = 3, Widowed = 4)

X<sub>4</sub> = Educational level (Number of years spent in school)

 $X_5 =$  Income level (Naira)

- X<sub>6</sub> = Household size (Number of persons)
- $X_7$  = Membership of social organizations (member = 1, Nonmember = 2)

 $X_8$  = Experience in agribusiness (Years)

 $X_9$  = Extension contact (Yes = 1, Yes = 2)

 $X_{10}$ = sources of funds (formal sources = 1, Informal sources = 2) e = error term

#### **RESULTS AND DISCUSSION**

#### Socioeconomic characteristics of the youths

#### Age

Table 1 shows that a greater proportion (34%) of the youths were aged 36 to 40 years. The average age of the youths was about 30 years. This suggests that the youths studied have exceeded the age range of youths acceptable in Nigeria (18 to 35 years). This can result in their exclusion from agricultural youth programmes in the country. Dayat et al. (2020) reported that the average age of rural youths who participated in agribusiness in Indonesia was about 31 years.

Table 1. Distribution of respondents by age.

Age (years)	Frequency	Percentage	$\overline{X}$
< 20	23	7.7	
21 – 25	46	15.3	30.3
26 – 30	67	22.3	
31 – 35	62	20.7	
36 – 40	102	34.0	

Source: Field survey, 2021.

#### Marital status

Figure 2 reveals that the majority (76.3%) of the youth were single. However, 20% were married while 10% were separated/divorced. The result suggests the dominance of single youths in agribusiness activities. Singleness can enable the youths to save some money for investment in agribusiness. Similarly, responsibilities associated with marriage could raise youth's financial dependence, thus lowering their investment in agribusiness. Ashaolu et al. (2015) argued that physical, psychological, emotional and economic needs vary across individuals and it depends largely on their marital status.

#### Household size

Table 2 shows that 70.7% of the respondents had 1-4 persons/household, 17.3% had 5-8 persons/household, 9.2% had 9-12 persons/household while, 2.3% had more than 13 persons/household. The mean household size was 4 persons/household. This suggests a moderate

household size among the youths. A large household size might discourage investment in agribusiness because of the competing demand for money. Contrarily, it could be a source of agricultural information and labour thus minimizing cost.

#### Educational qualification

Table 3 shows that the majority (60%) of the youths spent 7 to 12 years in school (WASSCE), 34% of the youths possessed first and second degrees. The youths spent an average of 12 years in school. It can be inferred from the mean that the youths had an average secondary school education. Education is important in business as it enhances decision making and risk aversion. This finding reveals that the youths surpassed the adult literacy rate in Nigeria which is 56.6% (UNESCO, 2012). Education enhances the likelihood of adopting innovations while promoting successful agribusiness undertaking. Adoption of innovations is expected to increase productivity (Appleton and Balihuta, 1996).



Figure 2. Distribution of the youths by marital status.

Table 2. Distribution of youths by household size.

Household size (No. of persons)	F	%	$\overline{X}$
1 – 4	212	70.7	
5 – 8	52	17.3	4 persons
9 – 12	29	9.7	
≥ 13	7	2.3	

Source: Field Survey, 2021.

**Table 3.** Educational qualification of the youths.

Level of education (No. of years spent in schools)		%	$\overline{X}$
1 – 6 (primary school)	12	4.0	
7 – 12 (secondary school)	180	60.0	11
13 – 18 (tertiary institution)	103	34.3	
<u>&gt;</u> 19 (Masters, Ph.D. etc.)	5	1.7	

Source: Field Survey, 2021.

#### Membership of the social organization

Figure 3 shows that the majority (69.3%) of the youths were not members of any social organizations whereas 30.7% were members. This suggests a lack of awareness of the importance of social networks by the youths. However, non-membership of social organizations may have side effects on the youth's investment capacity in agriculture such as limited access to useful information and credit. Social networks can enhance farmers' access to credit and even reduce transaction costs (Wolz and Klaus, 2005).

#### **Extension contacts**

Figure 4 shows that 57% of the youths sampled had access to extension services whereas 43% did not. This is an indication that extension coverage among the youths is still low. This might limit the flow of useful

information which will ultimately reduce the productivity and profitability of agribusiness enterprises. Lack of information have remained the major constraint to youth's participation in agriculture.

#### Agribusiness experience

Table 4 indicates that 34.3% of the youths had been into an agribusiness for a period of 9 to 11 years, 27.0% for 12 to 14 years while 16% had an experience of over 15 years. The result shows further that the youths spent an average of 11 years in agribusiness. This implies that the youths have spent a reasonable length of time in agribusiness. The number of years in agribusiness is considered human capital in that it enables farmers to acquire knowledge and experiences that could promote their enterprises. Ndour (2017) reported that human capital promoted agricultural productivity in Senegal.



Figure 3. Membership of social organizations.

# Monthly income

Table 5 indicate that about 37% of the youths earned

between \$151,000 - \$200,000 monthly while 24% earned \$101,000 - \$150,000 monthly. The average monthly income of youths was \$147,560. This suggests



Figure 4. Extension contact.

Agribusiness experience (years)	F	%	$\overline{X}$
≤ 5	27	9.0	
6 – 8	40	13.3	
9 – 11	103	34.3	10.55
12 – 14	81	27.0	
≥ 15	49	16.4	

Table 4. The number of years in agribusiness.

Source: Field Survey Data, 2021.

Table 5. Income from agribusiness enterprises.

Monthly income ( <del>N</del> '000)	F	%	$\overline{X}$
< 50	24	8.0	
51 – 100	40	13.3	
101 – 150	73	24.0	₦147,560
151 – 200	112	37.3	
201 – 250	43	14.4	
≥ 251	9	3.0	

Source: Field Survey Data, 2021.

that the youths earned well above the minimum wage in Nigeria (\\$30,000). The result further suggests that agribusiness provides a better alternative for 'white-collar' jobs. This could reduce the massive out-migration of youth from rural areas in search of better jobs.

#### Sources fund

Figure 5 indicates that respondents obtained funds from

a variety of sources. However, the most prominent sources included friends/relatives (65.7%), communitybased associations (48.3%), microfinance banks (36.3%), thrift associations (27.0%) and personal savings (21.0%). Only a small proportion, 4.3% of the respondents obtained funds from commercial banks. This result depicts the near insignificant role formal sources of credit play in boosting agricultural production and agribusiness in Nigeria. Studies have shown that the stringent conditions given by commercial banks make it difficult for agribusiness investors to access loans/credits (Oyelade, 2019; Okoro and Nwali, 2017). Drisu et al. (2019) stated that the availability of collateral security discourages farmers from obtaining loans. This is expected to be more among young farmers who have little or nothing to tender as collateral for such loans.

#### Agribusiness activities participated in by the youths

Table 6 shows that the youths participated in three agribusiness activities out of the eight activities listed. This result suggests low participation in agribusiness activities by the youths. Crop production ( $\bar{X} = 4.1$ ), sale produce ( $\bar{X} = 3.7$ ) and livestock ( $\bar{X} = 3.5$ ) were the major agricultural activities undertaken by the youths. This suggests the dominance of primary production activities among the youths which might be due to the low requirement for resources to undertake such ventures. IITA (n.d.) reported that youths across Nigeria are deeply involved in crop production, cultivating such crops as cassava, okra, cauliflower, sweet corn, lettuce, spinach, cucumber, watermelon and green beans. It also reported that they engaged in the sale of produce. Igbolekwu (2020) found that livestock and crop production were the



Figure 5. Youths' sources of funds.

Table 6. Participation	of youths	in agribusiness	activities.
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Agribusiness activities	$\overline{X}$	S.D.
Crop production	4.1*	0.3
Livestock production	3.5*	0.4
Fish production	2.7	0.7
Dairy	1.9	0.7
Sale of inputs	2.0	0.5
Sale of produce	3.7*	0.3
Agroforestry	2.0	0.7
Grand mean	2.2	0.5

Source: Field Survey Data, 2021.

major agricultural activities undertaken by youths in Southwest, Nigeria.

#### Level of youth participation in agribusiness activities

Table 7 reveals that 42.7% of the youths participated in 1 to 2 agribusiness activities while 32.3% participated in 3 to 4 agribusiness activities. The youth participated in an average of three agribusiness activities. This suggests diversification in the youths' sources of livelihood perhaps to cushion the effects of possible risks. Diversification is one of the strategies for avoiding or reducing risks associated with agriculture. Ebi (2011) reported that farmers in Africa have long adapted to climatic change and other risks by diversifying their farming activities which might increase their ability to cope with the change.

This can happen by spreading the risk among different crop and livestock enterprises (Antwi-Agyei et al., 2014), income diversification (Block and Webb, 2001) or by increasing the range of agricultural products for market or subsistence (McCord et al., 2015). This secures the investments of the youth against any uncertainties associated with agriculture.

#### Challenges to participation in agribusiness

Table 8 shows that access to information and knowledge  $(\bar{X} = 3.7)$ , access to ICT  $(\bar{X} = 3.1)$ , markets availability  $(\bar{X} = 3.1)$ , agribusiness close relationship with agriculture  $(\bar{X} = 3.0)$ , lack of specialized skills in agribusiness interest areas  $(\bar{X} = 3.0)$  and non-supportive legislative framework  $(\bar{X} = 3.0)$  were the constraints to involvement in agribusiness by the youths. This finding suggests that numerous constraints limit participation in agribusiness activities.

Access to information and knowledge is vital for a successful engagement in agribusiness ventures. Information guides decision-making in agriculture. Information contributes significantly to agricultural production. Through agricultural information, farmers adopt new technologies or farming systems, know when to plant and harvest, which crop to produce and which animal to rear and when to sell (Adio et al., 2016). Lack of information can lead to a poor decision which can ruin investments in agribusiness ventures. Also, information and communication transmission. ICTs help in the

**Table 7.** Level of participation of youth in agribusiness activities.

Level of participation (No. of agribusiness activities participated in)	F	%	$\overline{X}$
1 – 2	128	42.7	
3 – 4	97	32.3	3
5 - 6	42	14.0	
7 – 8	20	6.7	
9 – 10	13	4.3	

Source: Field Survey Data, 2021.

 Table 8. Challenges to participation in agribusiness.

Challenges to youth participation in agribusiness	$\overline{X}$	S.D.
Access to information & knowledge	3.7*	0.6
Access to information & communication technology tools	3.1*	0.5
Markets availability	3.1*	0.5
Agribusiness close relationship with agriculture	3.1*	0.2
Educational qualification	3.0*	0.7
Lack of specialized skills in agribusiness interest areas	3.0*	0.3
Non-supportive legislative framework	3.0*	0.4
Motivation & reward system for youths	2.9	0.4
Access to modern technologies	2.8	0.3
Organized skill enhancement training	2.8	0.4
Organizational (co-operative approach)	2.8	1.0
Access to extension services	2.7	0.4
Cost of inputs	2.7	0.4
Government policies	2.7	0.3
Access to price information	2.7	0.2
Introduction of public private partnership approach	2.7	0.5
Access to financial services	2.6	0.4

Source: Field Survey, 2021.

dissemination of agricultural technologies, improve access to credit and enhance access to advisory services (Hiremath et al., 2015). According to the World Bank (2017), the use of mobile phones in agriculture reduces farmers' time and cost burden. However, lack of access to ICTs can increase farmers' cost and time and in worstcase scenarios discourage investment in agriculture. The lack of a supportive legislative framework has hindered agricultural development greatly developing in economies. Policies are important for the development of the agricultural sector. This is because they promote access to resources such as land, capital and advisory services. They also regulate the market and the behaviour of the operators. Policies lead to the development of programmes and projects that would aid agriculture.

Iwuchukwu and Igbokwe (2012) observed that the Nigerian agricultural sector has witnessed numerous policies changes. Yet the sector has not seen the expected improvement. The policies are mere changes of nomenclature and have not achieved any meaningful changes. For instance, the inadequacy of the policy framework has hindered advisory and extension services in Nigeria. According to Iwuchukwu and Igbokwe (2012), certain gaps which include non-interaction between and among stakeholders, role conflict between different programmes and projects, inconsistency of the programmes and short duration of programmes have made agricultural policies unworkable.

# Determinants of participation in agribusiness activities by the youths

Table 9 shows that the Double-Log Function emerged as the lead equation. This is because it produced the largest F-value of 102.78, the largest  $R^2$  value of 76% and the highest number of significant independent variables, six.

Socioeconomic characteristics	Linear	Semi-log	Double-log	Exponential
Constant	325.4609	218.4913	146.9106	136.0334
No. of observations	300	300	300	300
R <sup>2</sup>	0.4859	0.3933	0.7613	0.6132
F-value	30.4506	20.8891	102.7812	51.0745
Sex (X <sub>1</sub> )	1.1104	1.1307	1.4319	1.4848
Age (X <sub>2</sub> )	- 1.0738	- 1.2787	- 3.3689	- 1.1739
Marital status (X <sub>3</sub> )	1.0738	1.2613	1.5362	2.5484
Household size (X <sub>4</sub> )	1.1228	1.2822	2.4545	1.3529
Educational level (X5)	2.7026	4.5637	4.0048	1.1644
Membership of social organizations (X <sub>6</sub> )	3.4128	3.4921	1.2101	4.1538
Sources of fund (X7)	4.4539	1.0884	2.8824	3.5833
Monthly income (X <sub>8</sub> )	1.0648	1.0966	3.5892	3.2778
Years of experience (X <sub>9</sub> )	1.0899	1.2178	3.0958	4.0833

Table 9. Relationship between socioeconomic characteristics of the youths and their participation in agribusiness activities.

 $P \le 0.05$ . Source: Field Survey Data, 2020.

The result revealed that age (t = - 3.4), household size (t = 2.5), educational level (t = 4.0), sources of fund (t = 3.6) and monthly income (t = 3.1) determined youth's participation in agribusiness activities. Therefore, the null hypothesis which stated that there was no significant relationship between the socioeconomic characteristics of the youths and their participation is rejected.

The age of the youths had a negative but significant relationship with the participation in agribusiness, implying that the older the youths are the less likely they participate in agribusiness activities and the ability to take risks in any business declines with age. This finding is in line with Akinwekomi et al. (2017) who reported that the age of youths sampled in Ogun State, Nigeria had a negative relationship with their participation in agribusiness activities.

The household size of youths was positively related to their participation in agribusiness activities. This implies that the larger the household the higher the participation of youths in agribusiness activities. The youths' relatives can serve as helping hands in their enterprise thus providing cheap labour which can boost the scale of operation. Adesina and Eforuoku (2020) found that household size determined youths' participation in agricultural programmes in Ondo State, Nigeria.

Educational level as well had a positive and direct relationship with participation in agribusiness activities. This means that the more educated the youths are the higher their participation in agribusiness activities. Educated youths are more likely to engage in agribusiness than uneducated ones. This is because education widens their sources of information on agriculture. Akinwekomi et al. (2017) found education as among the determinants of youths' participation in agribusiness in Ondo State, Nigeria.

Monthly income and sources of funds were other determinants of youths' participation in agribusiness activities. According to the result, the higher the monthly income of the youths the more likely they are to participate in agribusiness activities. Sources of the fund and monthly income are the key factors that influence youth's decisions to participate in agribusiness activities. Diversification of agricultural enterprises requires money and this will increase with an increasing income.

## CONCLUSION

The findings of the study showed that youth's participation in agribusiness in Imo State is low. They participated more in crop and livestock production. They diversified their agribusiness ventures as a way of reducing the uncertainties associated with agriculture. A lot of challenges constrained youth's participation in agribusiness but they are mostly institutional. The result found that the socioeconomic characteristics of the youth influenced their participation in agribusiness.

It is therefore recommended that extension and advisory services be improved to enable access to timely and relevant agricultural information. This can be achieved by adequately funding extension services. Capacity building programmes should be organized to boost the skills of the youth in agricultural businesses. This can be done through the organization of workshops, conferences and seminars. Robust agricultural policies should be formulated and implemented. This can be achieved by ensuring adequate interaction with all the relevant stakeholders.

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