



## RESEARCH PAPER

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## Assessment of youth Perception and Participation in Agriculture in Delta State, Nigeria

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### Abstract

The youth constitute an important and dynamic segment of any nation. Hence, their roles in agriculture are very important. This study ascertained youth perception and participation in agriculture in Delta State, Nigeria. The specific objectives were to determine the youth's perception of farming as an occupation, ascertain the level of youth participation in farming activities, and identify the various constraints to youth participation in agriculture. The multi-stage sampling procedure was used to select a sample size of 256 with the aid of a questionnaire. Various descriptive statistics and logit regression were used for data analysis. Results showed that generally, the youth had a negative view of agriculture, which invariably leads to their poor participation in agricultural activities; only 24.22% of the youth were engaged in agriculture, and of these, 70.97% were involved in the fishery sub-sector, 58.06% in livestock and 25.81% in crop production; no youth was involved in the forestry sub-sector. Several constraints were responsible for the non-participation of youth in agriculture. Insufficient funds (mean 4.77) was the most serious constraint militating against youths' participation in farming activities. The logit regression result showed that education, white-collar jobs, extension, land availability and income were significant in determining youth participation in agriculture at a 5% level. The study recommends, among others, that the Government should stimulate youth participation in agriculture through several means, especially by giving them financial assistance.

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## Introduction

Agriculture, which is often synonymous with farming, is the production of food, fodder and other industrial materials for the utility of man, and, as asserted by Egbule (2016), is the mother and nurse of other Arts, Science and Technology; and has acted as a key development ingredient in the rise of sedentary and human civilization, whereby farming of domesticated species created food surpluses that nurtured the development of civilization. According to Aphunu and Atoma (2010), Nigeria, with a population of over 140 million people currently estimated to be over 173 million (National Bureau of Statistics, 2013), has abundant human and natural resources for agricultural production. UNICEF (2008) reported that 76% of Nigeria's population lives in rural areas, and about 90% of the rural dwellers are engaged in agricultural production.

Agriculture is crucial to the development of any nation, and Nigeria is no exception. The world over, the youth are three times more likely to be unemployed than adults, and there are an estimated 300 million youths who are part of the global working poor (Paul, 2010). Development in the sector must include the youth of the country. As such, the Ministry of Agriculture and Government at various levels seeks to encourage the participation of youth in the agricultural sector. For example, the Nigerian Government has attempted to stimulate youth's interest in agricultural activities since the late 1980s. In 1986, the Federal Government set up the National Directorate of Employment (NDE) to provide vocational training to the youth. In 1987, the Better Life Programme was established to empower women, especially female youths in rural areas, through skills acquisition and healthcare training.

The People's Bank and the Community Banks were established in 1989 and 1990, respectively, to make credit facilities available to low-income earners involved in agricultural production and other micro-enterprises, with special consideration to youth engaged in agricultural production (Akpan, 2010). In 2008, the Akwa Ibom state government set up an

integrated farming scheme for newly graduated agricultural students, mainly youths, and established a micro-credit scheme for youths engaged in agricultural production and processing (Akpan, 2010). In 1992, the Fadama program was initiated to enhance food self-sufficiency, reduce poverty, and create opportunities for employment for youths in rural areas. This effort will require changing the negative perceptions youths have of the major participants in agriculture, farmers, from that of uneducated, unskilled, physical labour with extremely low economic return. Although the youths are a formidable force in the agricultural production process, constituting a sizeable proportion of future progressive farmers and better citizens, especially in rural areas (Aphunu and Atoma, 2010), their contribution towards improved farming and attaining food security cannot be underestimated.

According to Hailu (2013), there is a lot of concern about engaging youth in agriculture. In many ways, young people are not very interested in continuing in agriculture because they don't see it as an active profession in the long run, so many of the small-holder farmers are quite aged. Consequently, the number of able youths with requisite education in agriculture, willing and able to enter farming to replace the aged farm operators, has remained a challenge. The fear is that Nigeria might face near extinction of its farming population resulting from the incapacitation of her farmers by age, lack of agricultural knowledge/technology and death (Egbule, 1999; Okeke, 2004; Olaitan, 1988).

Therefore, Shireesha and Sathyagopal (2016) asserted that attracting and retaining youth in agriculture is critical for farming to thrive. This is so because they believed that a lot of new ideas (whether technical or institutional) require a skilled agricultural workforce. For example, the promotion of high-value agriculture, organic cultivation, precision farming, Hi-Tech horticulture, Post-Harvest Management, micro-propagation, Integrated Pest/ Disease Control and Nutrients Management, development of backward and forward linkages and other innovations require

well-trained young farmers with interest and passion for agriculture and willingness to take risks (Shireesha and Sathyagopal, 2016). The youth could be the best target for skill training in these new technologies in agriculture, and to achieve this effectively, there is a need to mobilize the youth. Organized groups of youth will be effective in introducing new production technologies and organizing viable input and output markets.

Youths are the strength of any nation. They are the greatest assets that any nation can have. They have desirable qualities that can promote farming activities such as fish production, livestock rearing and crop production (Umaru, 1992). Some of these desirable qualities of youths who are favourable to farming activities include tirelessness, activeness, restlessness, creativeness, energy, adventure, curiosity and risk-bearing. In spite of all these qualities, most youths are seen as untapped resources (Torimiro, 1998). More so, youths' strong apathy toward farming has resulted in an unprecedented level of rural-urban migration, thereby resulting in mass unemployment and a lack of sustainable livelihood activities among the youths (Breitenbach, 2006).

On the other hand, Youths are the most active demographic and the force behind society's highest levels of productivity (Adesope, 1996). Despite the truth that they may be the main source of resources for any nation looking to start any significant agricultural and rural development projects, they typically exhibit a disinclination to engage in farming activities and a negative attitude towards agriculture (Van den Ban and Hawkins, 1996). The Government must stimulate agricultural production by providing environmental services directed at youths to improve perception, Participation and Participation in farming activities. This could be achieved through bringing to the knowledge of youths relevant and timely agricultural innovations and training them on the methods of utilizing these technologies. Egbule (2016) asserted that agricultural education programmes are rooted in sound philosophical foundations with economic and sociological

justifications and, as such, should be developed and implemented as part of the overall educational system that is in harmony with a nation's philosophy of education for the welfare of the individual and the society. In accordance with this, youth empowerment advertisements should be strengthened, and a unified framework to increase youth engagement in agricultural activities should also be stressed.

One of the major constraints facing Nigeria is the shortage of a visible institutional framework for mobilizing, developing and channelling the unique abilities, experiences and aspirations of youths towards farming. According to Nwachukwu (2008), "One of the problems for non-realization of our goal for food sufficiency is the condition of the Nigeria farmer and the farming environment". The Nigerian farmer is ageing with an average age of 50 years (Egbule, 2016). An average Nigerian farmer's age and poor level of education are correlated with their resistance to taking risks connected with adopting innovations and, as a result, their extremely low productive capacity. Many believe that encouraging young people to start farming could be the solution to the issue. (Aphunu and Atoma, 2010). Many young people today are unable to obtain employment because of a shortage of employment options and an increase in population. With the economic downturn, the situation got worse. Technical innovation, creativity, entrepreneurial training, opportunity recognition, and infrastructure development all contribute to job creation, which improves economic prospects and lowers unemployment rates in a nation. (Eromedoghene, Owigho, Ovwigho & Ofuoku, 2023; Odoh and Eme, 2014). According to Jibowo and Sotomi (1996), it is expected that with a higher level of education, innovation proneness, minimal risk aversion, greater physical strength and less conservativeness, youths would adopt farming as an occupation and, thus, help to ensure adequate food production, resulting in minimal, if not zero unemployment rate in Nigeria.

Youth involvement in agriculture has recently become a source of debate. The concern that young people are

losing interest in agriculture is spreading around the world, which has increased the urgency of the development agenda. About 85% of young people live in third-world nations, where agriculture is likely to be their primary source of income. Young people must be involved in agriculture (Statistics on Youth, 2012).

We are currently experiencing a period of rapid urbanisation around the world, which has caused a fall in rural populations and resulted in the majority of the world's population living in cities for the first time. (Nsiah-Gyabaah, 2003). In 1990, the population of people living in urban areas was 2.4 billion, two-thirds of which are in developing countries. According to Nsiah-Gyabaah (2003), the United Nations report estimates that by 2025, the world population will more than double to 5.5 billion.

The source further stated that much of this growth would be in developing countries like Nigeria, Ghana and Niger, which will contain 4.4 billion people or 80 percent of the world's urban population by the year 2025. Over half of the world's population, estimated at 3.3 billion people, was reported to be living in urban areas in 2000, and it is estimated that the population inhabiting urban areas would rise to 65 per cent by the year 2020 (UNFPA, 1991).

With this predicted concentration of the global population in urban areas, it is easier to understand why the number of young farmers is in decline. Youths are an extremely important segment of the farming population as they are the ones who will perpetuate agriculture in the future. The youth population in the world is around 1.8 billion (United Nations Population Fund, 2014), which is about 25% of the total global population. According to FAO (2014), rural youth participation in agriculture is the future of food security. Yet, worldwide, fewer youth see a bright future for themselves in agriculture. So how do we stimulate these teeming young people to develop a love for farming when the trend is to live in cities and towns? More so, farm hazards, poor farm inputs, poor infrastructure, lack of storage facilities,

inadequate extension services, processing facilities and marketing facilities for their produce from farming are among the reasons why youths' interest in farming has waned (Farinde, 1999). Given the above scenario, it is therefore deemed necessary for a study of this nature to be carried out.

This will enable us to diagnose the problems of youth participation in agriculture properly so that the right intervention strategies can be instituted.

Data on youth participation in agriculture in Delta State is available (Egbule, 2016). One would now ask: since the Buhari administration is currently emphasizing agriculture, has this figure changed? What is the current attitude of youth toward agriculture? It is, therefore, appropriate for the youth's perception of agriculture and factors affecting the participation of youth in Agriculture in Delta State to be examined in the light of the current administration's agricultural drive. It then becomes imperative that youth perception and the extent of their participation in agriculture be examined. Thus, this study seeks to provide answers to the following research questions:

1. What are the socio-economic characteristics of the youths in Delta State?
2. What is the perception of youths on farming as an occupation?
3. What is the level of youth participation or participation in agriculture?
4. What are the problems militating against youth's participation in farming?

The general objective of the study is to examine the perception and participation of youths in farming in Delta State, Nigeria. The specific objectives were to:

- i. identify the socio-economic characteristics of the Respondents
- ii. determine the youths' perception of farming as an occupation
- iii. ascertain the level of youths participation in farming activities
- iv. identify the constraints to youths' participation in farming.

The following hypothesis, stated in the null form, was tested: Ho: There is no significant relationship between youth participation in farming and some socio-economic variables.

#### *Conceptual framework*

The Conceptual Framework for the study portrayed the independent, intervening and dependent variables and the relationship that exists among them. The independent variables consist of sex, marital status, education, white-collar jobs, extension contact and income size. The intervening variables include government policy, communal social structure, land tenure systems and physical environment, while the dependent variables are Perception and Participation. The nexus between the independent and dependent variables are represented with a thick one-way moving arrow from the independent variable box to the dependent. The Perception and Participation components of the dependent variable are interwoven; hence, the boxes are joined. This shows the strong link between perception and participation; generally positive perception of youth of agriculture will encourage them to participate in agriculture. However, the intervening variables are not measured in this work but can influence the perception and participation of youths in agriculture (Figure 1).

#### *The study area*

The study was done in Delta State, Nigeria. The State shares common boundaries with Edo, Ondo, Imo, Anambra, Rivers and Bayelsa states. In the South and South-West, it has over 120 kilometres of coastline bounded by the Bight of Benin on the Atlantic Ocean. According to Nwajei (1993), Delta State is positioned roughly between latitude 5° and 6°30' North and longitude 0° and 6°45' East. According to the NPC (2006), it has a total land area of 18,050 square kilometres and a population estimate of 4098291 people. The average monthly temperature is 32°C, with relative humidity ranging from 60 to 90 percent annually. The average annual rainfall is approximately 2000mm. Delta State is divided geographically into three regions: Delta South, Delta

North, and Delta North. Several crops like cassava, maize, plantain/banana, citrus, yam, mango, pawpaw, rubber, oil palm and cocoyam are grown; livestock and fishery activities are also carried out.

#### *Sampling technique and sample size*

A multi-stage sampling procedure was employed to compose a sample size of 640 respondents. In the first stage, two local government areas were randomly selected from each of the three zones in the State. Three communities were then randomly selected from each of the selected local government areas. About 10% of the youth in each community were chosen. Thus, the expected sample size was 261 respondents. However, since five copies of the questionnaire were either improperly filled or never returned, 256 were used for data analysis. The procedure for the selection of sample size is presented in Table 1.

#### *Data collection*

Data for this study were collected from primary sources, which is through the use of the questionnaire. The questionnaire which was used in measuring variables were carefully structured and subjected to content validity and reliability test. The structured questionnaire was divided into four (4) sections; the first section sought information about the socio-economic characteristics of the respondents.

The second section contained questions relating to the perception of farming as an occupation, and the third section ascertained the level of youth participation in farming activities. In contrast, the last section contained a list of constraints peculiar to farming activities.

#### *Measurement of variables*

In this study, the perception/participation of youth in agriculture was the dependent variable, while the age, occupation, educational level and others were the independent variables. These variables and respondents' attitudes toward agriculture were measured as follows:

- (1) The age of respondents was measured in years
- (2) Occupation of respondents was measured by asking them what their occupations are (for example, Farming = 1, Trading = 2, Civil servant=3, Oil worker =4).
- (3) The level of education of respondents was measured by asking the level of education they have attained example, no formal education = 1, primary education = 2, secondary education = 3, tertiary education = 4.
- (4) Respondent attitudes toward farming activities and their responses were measured by using the Likert attitude scale as follows: Strongly agree = 5, Agreed = 4, undecided = 3, Disagree = 2, Strongly disagree = 1. The cut-off point is 3.00.

Perception was measured by asking the respondents to state their opinions on some statements about agriculture. These statements were evaluated on a Likert scale.

#### Method of data analysis

In analyzing the data, descriptive statistics (simple percentages, frequency counts, mean, frequency tables) and inferential statistics were used. A 5-point Likert scale of strongly agree = 5, agree = 4, undecided = 3, disagree = 2, and strongly disagree = 1 was used to determine their responses to perceived statements on farming. The inferential statistics that was used to test the stated hypotheses was the logit regression model.

#### Specification of model

The study used a logistic regression with a dependent variable of a dichotomous nature. The youths are classified as either participants or non-participants in agriculture based on whether they are engaged in any aspect of agriculture or not. The explanatory variables are a set of socio-economic variables. The logistic regression model can be explained implicitly by the equation:

$$Y_i = f(X_{1i}, X_{2i}, \dots, X_{ni}) \dots \dots \dots (1)$$

$Y_i$  is the dependent variable representing the youth participation or non-participation in agriculture, and  $X_s$  are the various youths' level socio-economic

variables that determine the participation of the youth in agriculture. The logistic regression model employed in the study is specified explicitly as follows:

$$\ln Y = \ln (P/1-P)$$

$$\ln (P/1-P) = b_0 + b_1 X_1 + b_2 X_2 + \dots + b_8 X_8 + e \dots \dots (2)$$

Where  $Y$  = participation in agriculture (Participation, 1; 0 otherwise)

$P$  = probability of youth participation in farming

$\ln$  = Natural logarithm function

$b_0$  = Constant

$b_1 - b_7$  = Logistic regression coefficients

$X_1 - X_7$  = independent variable

$X_1$  = Sex (male, 1; female 0)

$X_2$  = Marital status (married 1 ; 0 otherwise)

$X_3$  = Level of education

$X_4$  = white collar job (Agricultural job = 1; 0, otherwise)

$X_5$  = Extension contact (visits)

$X_6$  = Availability of land (Available of enough land = 1; 0, otherwise)

$X_6$  = Household size (Number of persons)

$X_7$  = income (naira)

#### Results and discussion

##### *Socio-economic Characteristics of Respondents*

The socio-economic variables of the respondents are presented in Table 2. The result portrayed that the majority (55.5%) of the respondents were males. The results of marital status indicated that most of the youths (79.7%) were never married (i.e. single). The reason for this was perhaps because most of them were still too young to marry and unprepared to take up family responsibilities. The level of education of the respondents indicated that most of the youths had one form of formal education or the other; 19.5% had primary education, 46.9% had secondary education, and 26.6% acquired higher education. Only about 7.0% had no formal education. The results of the occupational distribution of the youths showed that only 22.2% of the sampled youths were actively involved in agriculture; 13.3% were involved in trading, 39.8% were civil servants, 10.9% worked in oil firms, and 11.7% were engaged in other forms of employment.

**Table 1.** Procedure for sample size selection.

Zone	LGA	Community	Youth population	Number of Selected respondents (10%)	
Delta south	Isoko north	Egbahe	51	5	
		Akiewhe	107	11	
		Ekiugbo Iyede	101	10	
	Patani	Oduroba	168	17	
		Koloware	121	12	
Delta central	Ughelli south	Ovwodokpokpo	59	6	
		Arhavbarien	173	17	
		Ogiribo	198	20	
	Udu	Eketete	157	16	
		Asagba	178	18	
		Okolo	189	19	
	Delta north	Aniocha north	Uburubu	141	14
			Idumuje Unor	153	15
Ezi			122	12	
Ika south		Agbor-Nta	167	17	
		Aliagwa	201	20	
		Alifekede	179	18	
Total			142	14	
				261	

Thus, most of the respondents were civil servants. The finding implies that most youths in the area are not interested in farming. Most of the youth had no extension contact on agricultural information; as high as about 60.9% of the youth had no extension contact; 33.6% had only one or two contacts monthly, while a minute 5.5% of the respondents had above three

contacts. The finding implies that there is poor extension contact among the youth.

The household sizes of the majority of the youths were small; in fact, 92.9% of the youths had between 1-5 members in their homes. This is probably because most of them were single.

**Table 2.** Socio-economic characteristics of respondents.

Variable	Frequency (256)	Percentage (100)
Gender		
Male	142	55.5
Female	114	44.5
Marital Status		
Never Married	204	79.7
Married	32	12.5
Divorce	12	4.7
Separated/widow	8	3.1
Educational Level		
No Formal Education	18	7.0
Primary Education	50	19.5
Secondary Education	120	46.9
Higher education	68	26.6
Occupation		
Farming	62	24.2
Trading	34	13.3
Civil servant	102	39.8
Oil worker	28	10.9
Others	30	11.7
Extension contact (monthly)		
No contact	156	60.9
1-3	86	33.6
More than 3	14	5.5
Household Size		
5 and below	238	92.9
6-10	14	5.5
More than 10	4	1.6
Monthly income (naira)		
20000 and below	154	60.1
21000-40000	84	32.8
Above 40000	18	7.0

Source: Survey data 2019



The results on monthly income indicated that a vast number of the respondents were low-income earners, as 92.9% of the respondents do not earn more than

N40, 000 per month. This earning is grossly inadequate considering the present economic situation in Nigeria.

**Table 3.** Youth perception of agriculture.

Statement	Youth perception mean score	Standard Deviation	Perception remark
Farming is not for youths	4.62	0.23	Negative
Farming is for school dropouts	4.27	0.38	Negative
Farming is stressful	4.56	0.71	Negative
Only graduates go into farming	2.44	0.54	Positive
Farming is capital-intensive	2.33	0.71	Negative
Farming reduces one's status	4.65	0.32	Negative
Farming generates low income	4.52	0.78	Negative
Illiterate youths should farm	3.89	0.53	Negative
Farming promotes poverty	4.32	0.66	Negative
The agricultural product attracts low prices	4.42	0.43	Negative
Farming is a primary occupation	4.17	0.71	Positive
Farming is a bad business	4.21	0.41	Negative
Farming is educative	2.30	0.39	Negative
No prestige in farming	3.9	0.58	Negative
It involves a lot of risks	4.81	0.47	Negative
Farming cannot make one rich	4.03	0.38	Negative
Requires a great degree of labour	4.00	0.62	Positive
No incentive for Participation	4.76	0.55	Negative
Public opinion influences the perception	4.11	0.44	Positive
Farming is old-fashioned	4.23	0.81	Negative

Source: Survey data, 2019.

#### *Perception of Farming by Youths*

The opinions of youth on farming are presented in Table 3. The results presented in Table 3 showed that, on average, the youths had a negative view of farming. For instance, the youths had the negative perception that farming is not meant for the youth (Mean = 4.62), farming is for school dropouts (mean = 4.27), and farming is stressful (mean = 4.56). However, the youths had a positive perception of three statements. These statements are: they disagreed that only graduates should go into agriculture (mean = 2.44), farming is a primary occupation (mean = 4.17) and requires a great deal of labour (mean = 4.00). This perception of the youth is in agreement with the opinion of Hailu (2013), who asserted that young people are not very much interested in continuing in agriculture because they fail to regard it as an active profession in the long run. Ovwigho and Ifie (2009) found that most youths had negative attitudes towards agricultural activities. Shireesha and Sathyagopal (2016) also reported that agriculture was

perceived as having no bright future in Nigeria and that the youth interviewed expressed low interest in studying agricultural disciplines. Consequently, the number of able youths with requisite education in agriculture, willing and able to enter farming to replace the aged farm operators has remained a challenge, and Nigeria might face near extinction of its farming population resulting from incapacitation of her farmers by age, lack of agricultural knowledge/technology and death (Egbule, 1998; Okeke, 2004; Olaitan, 1988).

#### *Levels of youth participation in agriculture*

The participation of the youths in the various sectors of agriculture is shown in Table 4. Out of the 256 youth studied, only 62 (24.22%) were actively involved in agriculture. The results in Table 5 showed that out of these 62 youth involved in agriculture, 25.81% were involved in crop production sub-sector, 58.06% in livestock and 70.97% in fishery sub-sector; no youth was involved in the forestry sub-sector.



**Table 4.** Level of youth participation in agriculture.

Farming activity	Frequency (62)	Percentage (100)
Crop production	16	25.81
Livestock	36	58.06
Fishery	44	70.97
Forestry	0	0.00

Source: Survey data, 2019.

\*Number greater than 62 because of multiple responses.

**Table 5.** Mean Distribution of Respondents' constraints to farming.

S/N	Constraint	Mean	Stand. Dev.	Rank
1.	Insufficient funds	4.77	0.38	1 <sup>st</sup>
2.	Lack of access to land	4.75	0.44	2 <sup>nd</sup>
3.	Poor processing facilities	4.64	0.45	3 <sup>rd</sup>
4.	Poor marketing system	4.58	0.50	4 <sup>th</sup>
5.	Stigmatization	4.09	0.55	5 <sup>th</sup>
6.	Ineffective extension service	4.03	0.47	6 <sup>th</sup>
7.	Inconsistent youth empowerment	3.59	0.33	7 <sup>th</sup>
8.	The strenuous nature of farming	3.51	0.50	8 <sup>th</sup>

Source: Survey data, 2019.

This is in contrast with the result of Egbule (2016), who asserted that about 11.2% of the youths in Delta state were engaged in the forestry sub-sector. Generally speaking, the level of youth participation in agriculture is quite low; as much as 75.78% of the respondents were not engaged in any form of agricultural activity.

This could be related to the perception of the youth of agriculture, as from the previous section, it was

deduced that the youth, strictly speaking, had a negative view of agriculture. It is, therefore, little wonder that this negative perception translates to their low participation in agriculture. This finding is in accordance with that of Ovwigho and Ifie (2009), who reported that most Nigerian youths are not interested in agricultural activities. Alakpa and Onemolease (2009) also asserted that the youths who are expected to replace aged farmers are either withdrawing or reluctant to venture into agriculture.

**Table 6.** Relationship between some variables and Youth Participation in Agriculture.

Variable /statistics	Logistic coefficient	Standard error	Beta coefficient	Z value
Sex (X <sub>1</sub> )	0.52	0.88	2.02	0.59
Marital status (X <sub>2</sub> )	1.83	1.58	0.06	1.16
Education (X <sub>3</sub> )	-21.95	6.79	1.77	3.23**
White collar job (X <sub>4</sub> )	-11.99	4.03	2.94	2.98**
Extension contact (X <sub>5</sub> )	3.72	1.05	0.83	3.54**
Land availability (X <sub>6</sub> )	5.43	1.66	0.59	3.27**
Household size (X <sub>7</sub> )	0.79	0.64	1.52	1.23
Income (X <sub>8</sub> )	5.66	1.95	0.96	2.90**
Constant	-16.66	6.05	-	2.75**
Log likelihood	10.01			
Pseudo R <sup>2</sup>	0.61			
Pearson Chi square	26.44			
Correct classification	82.89%			

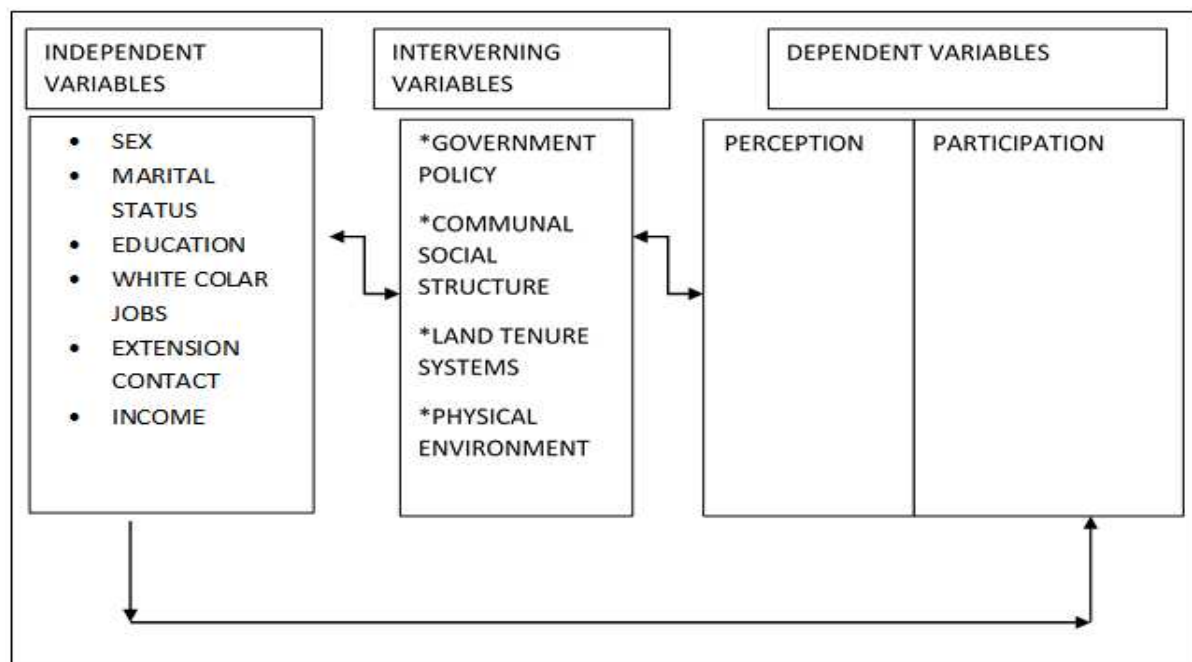
Source: Computed from survey data, 2019

\*\*Significant at 5% level

### Constraints to Youths participation in agriculture

Several constraints were identified as hampering the youths from participating in agricultural activities, as depicted in Table 5. The most serious constraints identified in this regard were insufficient funds (mean = 4.77), inaccessibility to land (mean = 4.75), poor processing facilities (mean = 4.64) and poor

marketing system for agricultural products (mean = 4.58). Other notable constraints included stigmatization against those involved in farming (mean = 4.09), ineffective extension delivery services (mean = 4.03), inconsistent youth empowerment (mean = 3.59) and the strenuous nature of farming (mean = 3.51).



**Fig. 1.** Conceptual Framework for youth perception and participation in the study.

### Effect of selected variables on the probability of youth participation in agriculture

The regression results of the estimation of the factors influencing Youths' Participation are presented in Table 6. The relevant statistics of the model, as shown in Table 6, indicated that the log-likelihood ratio of 10.01 is significant at 5% probability level. This means that the explanatory power of the specified logit model was strong. The pseudo  $R^2$  of 0.61 implies that about 61 % of the variations in the dependent variable were explained by the independent variables in the model. Furthermore, the model correctly explained 82.89% of the data. All the estimated coefficients carried the expected signs; all the explanatory variables except sex, marital status, and household size were statistically significant at 5% probability level. The logistic regression model shows that those with low education have a high probability of participating in agriculture. The coefficient for

education was accordingly negative (-21.95), which implies that those with higher levels of education are less likely to participate in agriculture. Moreover, a unit increase in education will decrease participation in agriculture by 177%, as reflected by the marginal effect (i.e. Beta coefficient).

The availability of white-collar jobs was also negatively related to respondents' participation in agriculture, especially those engaged in non-agricultural activities. Income was significant and had the potential to increase participation by 96%. Technologies developed which are needed for agricultural production are capital intensive, and farmers with large income can purchase inputs and find agriculture interesting. This result agrees with that of Yunusa and Giroh (2017), that larger income increases the probability of youth participation in agriculture.

### Conclusion and recommendations

From the results of the study, it can be concluded that the respondents had a negative perception of farming. Strictly speaking, the negative perception the youths had for agriculture translated into their low level of participation in agriculture. However, it was evident that some of the respondents were involved in various sectors of agriculture but participated mostly in the fishery sub-sector. The most significant barrier to youth participation in agricultural activities was a lack of funding. The study's findings were used to support the following recommendations.

1. The Government should encourage youth participation in agricultural production through youth-focused extension programs, educating them about agricultural advancements and teaching them how to use technology.
2. Youth farmers should be given special attention by the Government so as to make their occupation more rewarding and encouraging.
3. Youths that go into farming should be allowed easy access to loans and credit facilities. This will curb financial problems and encourage more youths to go into farming
4. The Government should create more dynamic and consistent agricultural programmes that will encourage the youth to go into agriculture. For instance, there should be land reforms in such a way that anyone who desires land for farming can have access to it.

### References

**Adesope OM.** 1996. Evaluation of Youths' Participation in Community Development Projects in River State, Nigeria. Unpublished M.Sc. Thesis, Department of Agricultural Economics and Extension, Federal University of Technology, Owerri.

**Akpan SB.** 2010. Encouraging Youth Participation in Agricultural Production and Processing. Nigeria Strategy Support Programme, International Food Policy Research Institute Policy note No. 29.

**Alakpa SO, Onemolease EA.** 2009. Determinants of Adoption of Decisions of Rural Youths in the Niger Delta Region of Nigeria. *Journal of Social Science*, **20** (1), 61- 66.

**Aphunu A, Atoma CN.** 2010. Rural Youth's Participation in Agricultural Production in Delta Central Agricultural Zone: Challenge to Agricultural Extension Development in Delta State. *Journal of Agricultural Extension* **14**(2), 46 – 47.

**Breitenbach MC.** 2006. A Model for Rural Participation in Local Government: A South African Case Study, *Annals of Child and Youth Studies*.

**Egbule PE.** 1999. Perceived Performance Abilities of Senior Secondary School Agricultural Science Students in Delta State. *Journal of Agriculture, Technology and Education* **4**(1), 27 – 32

**Egbule PE.** 2016. Farms without youths - making Gamblers future farmers. Inaugural Lecture of the Delta State University, Abraka. March, 2016.

**Eromedoghene EO, Owigho O, Owigho BO Ofuoku AU.** 2023. Socio-economic- Impact of Youth Agricultural Entrepreneurial Programme (Yagep) of Delta State Government on Beneficiaries. *Journal of Xidian University* **17**(5), 720–748.

<https://doi.org/10.37896/Jxu17.5/073>

**Farinde B.** 1999. Assessment of youth participation in agricultural activities in Owerri West LGA of Imo state.

<http://www.scholarsworks.com>.

**FAO.** 2014. Youth and agriculture: Key challenges and concrete solutions. Published by Food and Agriculture Organization of the United Nations (FAO), in collaboration with The Technical Centre for Agricultural and Rural Cooperation (CTA) and the International Fund for Agricultural Development (IFAD) 128 p.

- Hailu M.** 2013. Engaging Youths in Agriculture – The Key to a Food Secure Future. Assessed 7/12/2015.  
[www.Farmingfirst.org](http://www.Farmingfirst.org).
- Jibowo AA, Sotomi AO.** 1996. The youths in sustainable Rural Development. A study of Youth Programmes in Oredo Local Government Area of Ogun State. In: Ladele, A.A. *et al* (eds). Policy Advocacy Role in Agricultural and Rural Transformation in Nigeria. Proceedings, 17<sup>th</sup> Annual Congress of the Nigerian Rural Sociological Association (NRSA), NRCRI, Umudike, 19<sup>th</sup>-22<sup>nd</sup> August. 54-57 p.
- National Bureau of Statistics. (NBS).** 2008, 2010, 2012, 2013 and 2015. Publications.
- National Population Commission (NPC).** 2006. National Population Estimates, Abuja, Nigeria.
- Nsiah-Gyabaah K.** 2003. Urbanization, Environmental Degradation and Food Security in Africa Prepared For Poster Presentation at the Open Meeting of the Global Environmental Change Research Community, Montreal, Canada, 16-18 October 2003.
- Nwachukwu I.** 2008. Youth Development for Agriculture and Rural Transformation in Nigeria. Proceedings of NRSA, 11–14 p.
- Okeke LB.** 2004. Nigeria's Food Bill. The Trumpet, 11<sup>th</sup> May.
- Olaitan SO.** 1988. Training Students for Agricultural Occupations. A paper presented at NEPA Conference, Benin, November 5–8.
- Ovwigbo BO, Ifie PA.** 2009. Attitude of Youth towards Agricultural Development Programmes in Ughelli South Local Government Area of Delta State, Nigeria. Journal of Agricultural Extension **13(2)**, 67–69.
- Paul B.** 2010. Investing in the Future: Creating Opportunities for Young Rural People. International Fund for Agricultural Development, Rome, Italy.
- Shireesha K, Sathyagopal PV.** 2016. A Review on Youth Involved in Farming. Advances in Life Sciences **5(20)**, 8948–8953.
- Statistics on Youth.** 2012.  
<http://www.unesco.org/new/en/unesco/events/prizes-and-celebrations/celebrations/international-days/world-radio-day-2013/statistics-on-youth>.
- Torimiro DO, Lawal BO.** 1998. Rural Children's Socialization into Farming. (Nkpolu, Port Harcourt, Nigeria).
- Umaru M.** 1992. "Extension Strategies for Reaching Rural Youths" Proceedings of the National Workshops, NAERLS, Zaria, Nigeria, 20<sup>th</sup> – 24<sup>th</sup> July, 1992.
- UNICEF.** 2008. Draft Country Programme document, Nigeria. E/ICEF/2008/P/L.7. UNICEF, Enugu.
- United Nation Population Fund.** 2014. The Power of 1.8 Billion: Adolescents, Youth and the Transformation of the Future.
- Van den Ban AW, Hawkins HS.** 1996. Agricultural Extension (2<sup>nd</sup> Ed). London: Blackwell Science Ltd.
- Yunusa PM, Giroh DY.** 2017. Determinants of Youth Participation in Food Crops Production in Song Local Government Area of Adamawa State, Nigeria. Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development, **17(3)**, 427–434.