ID: 202

Assessment of Youth's Perception and Participation in Agricultural-Based Livelihoods in Shendam Local Government Area of Plateau State, Nigeria

Samuel Keghter Vihi [1*], Birma Jesse [1], Francis Malel Markwin [2], Peter Musa Selzing [3] and Blessing Ochelle [3]

[1]Department of Agricultural Extension & Management, Federal College of Forestry, Jos Plateau State, Nigeria
[2]Department of Agricultural Economics and Extension, University of Jos, Plateau State, Nigeria
[3]Montane Forest Research Station Jos, Plateau State, Nigeria

Abstract

This study assessed youths' perception and participation in agricultural-based livelihoods in Shendam Local Government area of Plateau State. Multistage sampling technique was used to select 180 respondents for the study. Descriptive statistics, four point Likert scale and Logit regression were used to achieve the objectives of the study. Findings from the study showed the youths were 27 years on average. About 59% of the youths were males and 80% of them married. 44% of the youths had secondary education and a mean farming experience of 8 years. About 74% of the youths participated in agricultural livelihoods as majority (72%) of them reside in the rural areas. Majority of the youths had positive perception of agricultural-based livelihoods. The agriculture-based activities the youths participated in were; crop farming (54%), livestock farming (32%), agricultural product marketing (12%), agricultural products processing (9.4%), fish farming (7%) nursery raising (3.3%) and honey making (2%). Age, educational status, marital status and parents' occupation were significant factors that influenced youths' participation in agricultural-based livelihoods. The major constraints to youths' participation in agricultural-based livelihoods included inadequate credit facilities (43.3%), lack of effective agricultural insurance policy (39.4%), insufficient initial capital (36%) among others. The study recommends an urgent need to stimulate the interest of the youths in agriculture early in life through career guidance. Grants should be provided to agriculture graduates who want to embark on commercial agriculture shortly after graduation. Incentives such as input supply, good market outlet and attractive price of agricultural produce should be put in place to encourage youth and make them know that agriculture can be profitable. Policies should be designed to encourage suitable access to credit facility since it was found to be a strong factor that prevents youth from embarking on large scale agricultural production.

Key words: *Assessment, youths', perception, participation, agricultural-based, livelihoods.*

Introduction

Agriculture is an important sector for the economic sustainability and social wellbeing of all developing countries across the globe (Alawa *et al.*, 2020; Kwenye and Sichone, 2016). It remains a vital sector in many African countries to promote food security and to alleviate poverty (Diao *et al.*, 2010; Dercon and Gollin, 2014; Sakketa and Gerber, 2020). According to the Food and Agriculture Organisation of the United Nations (FAO, 2019), the sector provides for over 85% of all rural revenue streams, generates over 70% of rural employment, and accounts for nearly 25% of Nigeria's GDP. Therefore, if properly utilised, agriculture could play a significant role in supplying stable employment and income for the continent of Africa's rapidly increasing youth population, especially in Nigeria, where approximately 69 percent of the youth live in rural areas and depend on agriculture as their main source of subsistence. However, in most developing countries bulk of the agricultural production efforts are still left in the hands of aged farmers who presently constitute the major farming population (Adefalu *et al.*, 2009). It is worrisome that the agricultural productivity level of older people cannot meet the speedily growing population's food and fibre needs (Kwenye and Sichone, 2016). Additionally, the new ideas and techniques used to improve agricultural production are not user- friendly for older people most of whom are not learned. As a result, encouraging adolescent participation in agriculture becomes essential to economic development in the majority of emerging nations. The youth continue to be a crucial and significant component of the human resources that can shoulder the burden of development, including agriculture, and get over some of the major obstacles to increasing agricultural productivity in emerging nations (Adeogun, 2015; Isaac, *et al*., 2014)
Although the United Nations defines youth as individuals aged between 15 and 24 years old, the Federal Government of Nigeria and the National Youth Policy (NYP, 2009) defines youth as Nigerian citizens between 18 and 35 years old. For the purposes of this study, a youth is defined as an individual within the age range of 18 to 35 years. United Nations Department of Economic and Social Affairs (UDESA, 2011) indicates that population around the globe is projected to reach 9 billion by 2050. Population for young people (aged 15 to 24 years) is also expected to increase to 1.3 billion, accounting for almost 14 per cent of the projected global population. According

Turkish Journal of Agriculture - Food Science and Technology
Türk Tarım - Gıda Bilim ve Teknoloji Dergisi
International Peer-Reviewed Journal | ISSN: 2148-127X
www.agrifoodscience.com
Turkish Science and Technology Publishing (TURSTEP)

to Food and Agriculture Organization (FAO, 2014) and the International Fund for Agricultural Development (IFAD, 2014), rural youth are the future of food security, yet around the world, few young people see a future for themselves in agriculture. Africa is faced with the problem of inadequate involvement of rural youth in agricultural-based livelihoods (Leavy & Smith, 2010; Anyidoho *et al*., 2012). Young people and mainly the rural youth face many challenges in trying to earn a livelihood yet agriculture offers a lot of opportunities. The low participation of rural youth in agricultural livelihoods raises concerns for the future of agriculture (Mapila, 2014). IFAD (2011) attributes this to lack of lucrative incentives in smallholder subsistence farming in many third world countries. Amadi (2012) opined that the rapid decline in agricultural production is connected to the continuous decline in agricultural labour which he attributed to the continued efflux of the youth and school leavers from the rural farming communities in search of employment in fields other than agriculture. Alliance for Green Revolution in Africa (AGRA, 2015) specifies limited access to arable land, credit, markets, and many other productive resources necessary for agriculture as major problems worldwide. Older farmers are less likely to adopt the new agricultural technologies, and ultimately feed the growing world population while sustainably utilizing the environment (Mapila, 2014). Hence, there's need to engage youth in agriculture. According to International Labour Organization (ILO, 2021), the observed global increase in the youth population and unemployment have become a source of concern and currently attracts considerable attention in many discussions on international development. With a national population of about 200 million, Nigeria is the most populated country in Africa and has a high proportion of young people and an increasing rate of youth underemployment and unemployment (Adesugba and Mavrotas, 2016). According to the National Bureau of Statistics (NBS, 2012), the youth population (15–35 years of age) in Nigeria is approximately 64 million. More than half (54 percent) of youth are unemployed, with more females being unemployed (52 percent) than males (48 percent). More importantly, many of these youth are also highly educated, and some are graduates of higher institutions. It is reported that about 1.5 million youth graduate every year (Adesugba and Mavrotas, 2016). The NBS (2012) reported that a sizeable percentage of young adults who graduate each year and are unemployed typically choose employment that increase their likelihood of being underemployed. The Federal Government of Nigeria's recent agricultural policy agenda has therefore made addressing young unemployment a top priority in order to find a long-term solution to this issue. The key sector to rely on to address these difficulties, according to the numerous continuing discussions regarding youth unemployment, is agriculture. As a result, youngsters must find enough incentives to enable their active involvement in the sector as part of any plans to resuscitate the agricultural sector in Sub-Saharan Africa.

Statement of the Problem

Nigeria's economy, just like in many developing countries, is predominantly agricultural. One of the key limitations to the attainment of improved agricultural productivity and food security in the country is inadequate involvement and consideration of youth in the agricultural sector. According to Naamwintome and Bagson (2013), youths are a very valuable resource for all countries, particularly for maintaining agricultural output which is a crucial industry for development. The average age of farmers in the nation is a significant hindrance to the nation's efforts to achieve food security since ageing farmers have a negative impact on the agricultural industry, which has seen a recent fall in crop yield. The youths were once heavily active in agriculture as a source of income though the type of agriculture practice was small scale agriculture which deals with crop production and livestock production on a small piece of land without using advanced or expensive technologies. However, in recent years, youth participation in agriculture has decreased nationwide, particularly in rural areas, leaving farming to the elderly. Despite government initiatives to increase youth participation in agriculture through policy assistance, only a small number of young people actively engage in this sector. As a result, farming is now performed by elderly and young individuals who seldom have the energy to complete difficult tasks. Cook (1996) stated that because these elderly farmers are expected to be phased out due to advancing age, their production level is insufficient to meet the population's fast rising needs for food and fibre. According to Ovwigho and Ifie (2009), Nigerian young have the potential to promote agriculture, but the majority of them are not motivated to venture in to it. Given their increased aptitude and willingness to accept innovations and technology which are crucial to altering the agricultural sector, the youths' are the ideal catalysts for agricultural transformation and developmental change compared to the elderly population (Kwenye and Sichone, 2016).Youths in Shendam Local Government Area of Plateau State are not an exception as majority of them are at the periphery of the agricultural value chain participating as primary producers whose main aim is subsistence. The rural youth do not fully exploit the investment opportunities that exist along the agricultural value chain. The low participation of rural youth in agricultural livelihoods raises concerns for the future of agriculture since the youth form more than fifty percent of Nigeria's population. Kimaro *et al.* (2015) suggested that to foster a country's economic development, youth should be encouraged to participate in agricultural activities because they constitute an important component in society and are the greatest assets of any country globally. According to Kwenye and Sichone (2016), in order to

Turkish Journal of Agriculture - Food Science and Technology
Türk Tarım - Gıda Bilim ve Teknoloji Dergisi
International Peer-Reviewed Journal | ISSN: 2148-127X
www.agrifoodscience.com
Turkish Science and Technology Publishing (TURSTEP)

maintain growth and avert danger in the industry, the majority of agricultural production efforts shouldn't be left in the hands of elderly subsistence farmers who currently make up the majority of the farming community.
Agriculture has huge and diverse opportunities potentials that cannot only transform the national economy but also, tremendous impact on the personal lives of the farmer, particularly the youths. Although, the participation of youths in agriculture is fundamental for economic development and poverty reduction, the factors influencing the willingness of youths to participate in agricultural activities are not clearly comprehended in Nigeria and particularly in Shendam Local Government Area of Plateau State. Consequently, to address this knowledge gap, an investigation to determine the factors influencing the participation of youths in agriculture becomes pertinent. The broad objective of the study is to assess the youth's perception and participation in agricultural-based livelihoods in Shendam Local Government Area of Plateau State, Nigeria. The specific objectives are to;

- describe the socio- economic characteristics of the youths in the study area;
- examine youths perception of agricultural-based livelihoods in the study area;
- access youths participation in agricultural-based livelihoods in the study area;
- identify the various agricultural-based livelihoods engaged in by the youths in the study area;
- determine the factors influencing youths participation in agricultural-based livelihoods in the study area and
- identify the constraints to youth participation in agricultural-based livelihoods in the study area.

Materials And Methods

Shendam Local Government is one of the seventeen local government areas of Plateau State. It has four districts namely: Dorok, Derteng, Dokan Tofa and Shendam. The LGA occupies a total land area of 2,477km2 with a population of 208,017 people consisting of 109,519 males and 98,498 females (NPC, 2006). It lies on latitude 8053´N and longitude 9032´E with mean annual rainfall of 57in and annual average temperature of 220C. Shendam LGA is bounded in the north by Mikang LGA, Quan Pan LGA in the west, Langtang South in the east and Taraba State in the south. The hottest months are normally March and September while the coldest months occur between December and January with a lot of harmattan haze. The rainy season is normally between the months of May to October while the other months remain dry. The population within the LGA is majorly agrarian. Rice and yam form the major food crops produced within this lower Benue basin having soils ranging from rich silt deposits to a sandy-loamy texture.

Sampling Technique

Multi-stage sampling technique was used to select the sample size for this study. The first stage involved the selection of the three districts in the Local Government for the study. They are Shendam, Dakan Tofa and Dorok districts. The second stage involved a purposive selection of three communities from each of the districts giving a total of nine communities for the study. The communities in Shendam districts are Derlit, Guras and Dungba. In Dakan Tofa district, the communities selected are Katai, Kirgangan and Tok Doka while in Dorok district, the communities selected are Gonvel, Kuka and Makera. The purposive selection is based on high volume of agricultural production in the areas. The third stage will involve random selection of twenty (20) youths from each of the communities selected. This will give a total of one hundred and eighty (180) respondents for the study. Data for this study was obtained through primary source. The primary data was generated through the administration of structured questionnaire designed in line with the objectives of the study.

Method of Data Analysis

Both descriptive and inferential statistics were used to analyze the data. Descriptive statistics such as frequency counts, percentages and mean was used to achieve objective i, ii, iii and vi. Four point Likert scale was used to achieve objective iv while Logit regression was used to achieve objective v.

Four point Likert Scale

Youths perception of agricultural livelihoods was measured using a 4-point rating scale of: Strongly Agree (SA) = 4; Agree (A) = 3; Strongly Disagree (SD) = 2 and Disagree (D) = 1. Based on the 4- point scale, a mid-point of 2.50 was established thus: 4+3+2+1 ÷ 4 =2.5. Decision rule was therefore made that any mean score greater than or equal to 2.50 suggests a positive perception of agriculture as a veritable means of livelihood amongst the youths, while any mean score less than 2.50 suggests negative perception.

Logit Regression Specification

The logit regression model is a unit or multivariate technique which allows for estimating the probability that an event occurs or not by predicting a binary dependent outcome from a set of independent variables. The logit model

Turkish Journal of Agriculture - Food Science and Technology
Türk Tarım - Gıda Bilim ve Teknoloji Dergisi
International Peer-Reviewed Journal | ISSN: 2148-127X
www.agrifoodscience.com
Turkish Science and Technology Publishing (TURSTEP)

is based on cumulative logistic probability function and it is computationally tractable. According to Gujarati and Porter (2009), it is expressed as:

$$P_i = E(Y = 1\|Xi) = B_1 + B_2X_2 \ldots \ldots + B_3X_3 \ldots \ldots \ldots B_nX_n \quad (1)$$

For ease of estimation, equation (1) is further expressed as:

$$Pi = \frac{1}{1 + e^{-zi}} = \frac{e^{-z}}{1 + e^{-zi}} \quad (2)$$

Where:
P_i = probability of an event occurring
$P_i = B_i + B_2 X_i$

The empirical model of the logistic regression for study assumed that the probability of the farmers' participation in Agricultural livelihoods is expressed as:

$$Pi = \frac{e^{b}_0 + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5 + b_5 X_{5+} b_6 X_6 + b_7 X_7 + b_8 X_8}{_1 + e^{b}_0 + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5 + \ b_5 X_5 + b_6 X_6 + b_7 X_7 + b_8 X_8} \quad (3)$$

P_i ranges between zero and one and it is non-linearly related to Z_i, . Z_i is the stimulus index which ranges from minus infinity to plus infinity and it is expressed as:

$$Z_i = In \left(\frac{P_i}{1 - P_i} \right) = b_0 + b_1 X_1 + b_2 X_2 \ \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots + b_8 X_8 + u \quad (4)$$

To obtain the value of Z_i, the likelihood of observing the sample was formed by introducing a dichotomous response variable. The explicit logit model was expressed as:

$$Y = b_0 + b_1 X_1 + b_2 X_2 \ \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots + b_8 X_8 + u \quad \ldots \ldots \ldots \quad \ldots \ldots \ldots \quad \ldots \ldots \quad (5)$$

Where:
Y = dichotomous response variable (1 for farmers who participated in agricultural-based livelihoods, 0 otherwise)
X_1 = Age of respondent (Years)
X_2 = Gender (1 if male, 2 female)
X_3 = Marital status (Yes= 1, No= 0)
X_4 = Educational level (Years of formal education)
X_5 = Household size (number of persons)
X_6 = Participation experience (years)
X_7 = Parents occupation (1 if farming, 0 if otherwise)
X_8 = Locality (rural= 1, urban= 0)
b_1 – b_8 = Coefficients to be estimated
b_0 = Constant term
u = error term

Results And Discussion

Socio-economic Characteristics of Farmers

The result in Table 1 shows that 46% of the youths were within age category of 26-30 years, 22% were between 21-25 years, 20% were above 30 years while 12% were between 15-20 years. The mean age of the respondents was 27 years. This is an indication that most of the youths were within their prime and formative age where their energies could be harnessed for productive ventures. At this age, they have the strength needed for agricultural activities in which without proper orientation, they may develop the usual negative perception of agricultural-based livelihoods. This is consistent with the findings of Abebo and Sekumade (2013) who stated that this age group was an active, productive age that could be explored in the growth of the agricultural industry and the economy as a whole.

Turkish Journal of Agriculture - Food Science and Technology
Türk Tarım - Gıda Bilim ve Teknoloji Dergisi
International Peer-Reviewed Journal | ISSN: 2148-127X
www.agrifoodscience.com
Turkish Science and Technology Publishing (TURSTEP)

Gender of the respondents reveals that 59.0% of the youths were males while 41.0% were females. This shows a great deal of gender balance in which both sexes had opportunity of being selected for the study. This result conforms to the view of Chikezie *et al.* (2012) that gender is no barrier to active involvement in agriculture production activities. However, the result is contrary to the views of Akpan (2010), that males are often more energetic and could readily be available for energy demanding jobs/activities.

The result further reveals that 80% percentages of farmers in the study area were married, while 20% of respondents were single which shows the level at which people in this study area regard family and marriage ties. Being a married youth will increase the necessity to engage in one or more income generating activities so as to provide for the family and to ensure availability of food and shelter for the family. Married youths are more likely to farm than unmarried youths.

Farmer's educational attainment shows that 44% of the farmers had secondary education, 27% had primary education, 18% had tertiary education, while 11 % had no formal education. It is obvious that most of the respondent had low educational qualifications and ultimately there is a considerable level of illiteracy among the youths in the study area. The implication of this result is that the respondents stand low chances of accessing agricultural information than otherwise. Akpan, (2010) noted that education will likely enhance the adoption of modern farm technologies by youth and thereby sustain a strong farming population, but low level of education amongst these youth will likely result in low adoption of modern agricultural techniques and thereby causing a low level of output from their activities.

The result also revealed that 48% of the farmers had household size of 6-10 members, 24% had household size of 1- 5 persons, 20% had household size of 11-15 while the remaining 8% had household size above 15 persons. The mean household size of the respondents was nine (9) persons. These are peculiar situations in rural areas as most household heads especially farmers believe that it is better to have more children who would work on the farm than hiring external labour. This may influence participation in agricultural-based ventures since whoever may choose farming as a career may have family as a source of labour and encouragement.

The result indicated that 62% of the youths' parents were farmers, 24% were civil servant, while 14% were business people. The respondents were mostly from the farming background who should understand the value of agriculture as a means of livelihood. The background of these respondents' parents may thus influence the choice of agriculture-based ventures for self-employment.

Table 1. Socio-economic Characteristics of the Youths

	Frequency	Percentage	Mean
Age			
15-20	21	12.0	
21-25	40	22.0	
26-30	83	46.0	
>30	36	20.0	27
Sex			
Male	107	59.0	
Female	73	41.0	
Marital status			
Married	144	80.0	
Single	36	20.0	
Educational status			
Primary	44	27.0	
Secondary	70	44.0	
Tertiary	29	18.0	
Non formal	17	11.0	
Household size			
1-5	39	22.0	
6-10	77	43.0	
11-15	42	23.0	
>15	22	12.0	9
Occupation			
Farming	112	62.0	
Civil servant	43	24.0	
Business	25	14.0	
Locality			
Rural	129	72.0	
Semi urban	51	28.0	

Source: Field survey, 2023

The result also indicated that 72% of the youths' were residing in the rural areas where agriculture is predominantly practiced. The remaining 28% resides in semi urban communities within the study area. The study area is mostly rural and characterized with a heavy concentration of farming activities both for subsistence and commercial purposes. The locality of the respondents has direct influence on their occupational choice. It is usual that respondents residing in the rural areas will take to farming as their occupation since the major activity or occupation in the rural setting is farming.

Youths Perception of Agricultural-based Livelihoods

Youths perception of agricultural livelihoods was measured using a 4-point rating scale of: Strongly Agree (4), Agree (3), Strongly Disagree (2) and Disagree (1). From the result presented in Table 2, the youths unanimously agreed and perceived the following statements as true having scored above the weighted cut off mean of 2.5. They include: agriculture is an economically viable sector that can address the problem of youth unemployment and food security (3.0), agricultural activities can fulfill rural youth's socio-economic needs (2.76), better access to extension services could attract participation of youth in agriculture (2.76) and better access to production resources like land, credit and farm inputs could attract more youth in agriculture (3.17). The interpretation of this result is that majority of the youths viewed agricultural-based livelihoods in a positive manner and accepted that all these statements are true. On the other hand, the respondents also disagreed with the following statement having scored less than the cut off mean of 2.50: Agriculture as an occupation has less prestige (1.73), agriculture is an occupation characterized by low income and less economic returns (1.76), agriculture is an occupation for the elderly in rural areas and uneducated (1.83). By implication, majority of the respondents did not have a negative perception of agriculture. It is worthy to know that many youths have now realized the immense importance and contribution of agriculture as a veritable means of earning and have as can be seen by the massive involvement of youths into agriculture. The notion that agriculture is meant for the poor and old has been erased most especially amongst the youths who constitute the major workforce

Table 2. Distribution of Respondents based on perception of Agricultural-based livelihoods

Statement	Youth perception of agricultural-based livelihoods					
	SA(4)	A(3)	SD(2)	D(1)	Sum	Mean
Agricultural activities can fulfill rural youth's socio-economic needs	204	198	66	30	496	2.76*
Agriculture as an occupation has less prestige.	28	33	178	73	312	1.73
Better access to production resources like land, credit and farm inputs could attract more youth in agriculture	260	264	42	6	572	3.17*
Better access to extension services could attract participation of youth in agriculture	216	183	66	32	497	2.76*
Agriculture is an occupation characterized by low income and less economic returns	44	54	138	82	318	1.76
Agriculture is an occupation for the elderly in rural areas and uneducated	36	69	154	71	330	1.83
Agriculture is an economically viable sector that can address the problem of youth unemployment and food security	244	237	2142	19	542	3.0*

Note: SA=strongly agreed, A= agreed, SD= strongly disagree, D = disagree

Youths' Participation in Agricultural-based livelihoods

The result in Table 3 shows that majority (74%) of the respondents indicated that they participate in agricultural based enterprises while the remaining 26% do not participate in agricultural-based activities. The predominant rate of participation in agricultural-based ventures could be attributed for the availability of farmland and the dependence on land for existence by rural dwellers.

Table 3. Distribution of Farmers based on Participation in Agricultural-based livelihoods

Participation	Frequency	Percentage
Yes	133	74.0
No	47	26.0
Total	180	100

Source: Field survey, 2023

Years of Participation (Farming experience)

Farming experience as used in this study refers to the number of years spent in practicing farming. The more experienced a farmer is the more efficient his decision making processes and the more he will be willing to take risks associated with adoption of innovation to increase his production**.** Table 4 reveals that 61% of the respondents have been into farming for about 1-5 years. 31% have been into farming for 6-10 years, while 8% had farming

Turkish Journal of Agriculture - Food Science and Technology
Türk Tarım - Gıda Bilim ve Teknoloji Dergisi
International Peer-Reviewed Journal | ISSN: 2148-127X
www.agrifoodscience.com
Turkish Science and Technology Publishing (TURSTEP)

experience of 11-15 years. The mean years of farming experience was 8 years. This indicates that most of the youths have been practicing farming for moderate period. The accumulated years of experience may help farmers to be more efficient in the use of productive resources. This is in agreement with the findings of Bamire *et al.* (2010) and Mignouna *et al.* (2011) who asserted that, with adequate experience, farmers are expected to improve their skills in production and be able to evaluate the advantages of improved technologies.

Table 4. Distribution of Farmers based on their Years of Farming Experience

Years of farming	Frequency	Percentage
1-5	35	22.0
6-10	97	61.0
11-15	28	17.0
Total	160	100
Mean	8	

Source: Field survey, 2023

Agricultural-based Livelihood Activities Youth Participate in the Study Area

The results of the agriculture-based activities youth participate in are presented in Table 5. Crop farming ranked 1st with 54% followed by livestock farming (32%). This was followed by agricultural product marketing with 12%, agricultural products processing (9.4%), fish farming (7%) nursery raising (3.3%) and honey making (2%). Crop farming and livestock farming are the predominant agricultural-based activities being carried out by the youths in the study area. The overall result indicates that youths in the study area are significantly engaged in agriculture-based activities.

Table 5. Distribution of Farmers based on the Type of Agricultural-based livelihood practiced

Participation	Frequency	Percentage	Rank
Livestock Farming	57	32.0	2nd
Crop Farming	98	54.0	1st
Agricultural products marketing	21	12.0	3rd
Fish Farming	13	7.0	5th
Nursery raising	6	3.3	6th
Agricultural products processing	17	9.4	4th
Honey Production	3	2.0	7th

Source: Field survey, 2023

Determinants of Youths' Participation in Agricultural-Based Livelihoods.

The Logit model was used in estimating factors that influenced youths' participation in agricultural-based livelihoods in the study area. The log-likelihood function (-76.08) shows that the estimated model including a constant and the set of explanatory variable fit the data better. This implies that all the variables included in the Logit model are jointly significant in influencing youth participation in agricultural-based livelihoods. According to the results presented in Table 6, four out of eight predicators namely; age, educational status, marital status and parents' occupation were statistically significant factors that influenced youths' participation in agricultural-based livelihoods. The regression coefficients were all positive indicating that an increase in these variables holding others constant, will lead to an increase in youths 'participation in agricultural-based livelihoods.

Age (X_1) coefficient is significant and positive (8.6964) at 5% level of probability implying a direct relationship with youth participation in agricultural-based livelihoods. The result implies that a unit increase in ages of the youths increases the probability of participating in agricultural-based livelihoods by 8.69%. The higher the age of the youth the higher the predicted probability of participating in agricultural based enterprises. This could be attributed to increasing consciousness and self-realization of the importance of agriculture with age based on experience. This finding is in consonance with the finding of Sunday *et.al* (2015) and Akpan (2010). This indeed is the practical situation in Nigerian Agriculture. This trend does not portend a bright future for agriculture in Nigeria because agricultural production will remain in the hands of the ageing farmers whose productivity and efficiency are relatively low.

Coefficient of marital status (X_6) was positive (1.2086) and significant at 5% level. This implies a direct relationship with participation in agricultural-based livelihoods. The implication of this result is that an increase in the number of married youths will lead to more participation in agricultural-based livelihoods. The predicted probability of participating in agricultural based livelihoods is higher for married youths. This could be related to increasing concern for household welfare and food security following marital responsibilities.

Turkish Journal of Agriculture - Food Science and Technology
Türk Tarım - Gıda Bilim ve Teknoloji Dergisi
International Peer-Reviewed Journal | ISSN: 2148-127X
www.agrifoodscience.com
Turkish Science and Technology Publishing (TURSTEP)

The coefficient of educational status (X_4) was positive (.0958) and significant at 10% level of probability. This means that an increase in the years of formal education of the youths would lead to an increase in participation in agricultural-based livelihoods. This confirms the *a priori* expected sign.
Coefficient of parents occupation (X_7) was found to be positive (2.0490) and significant at 1%. This means that with a unit increase in parents' engagement in farming as an occupation, the probability of youths participating in agriculture increases by 2.04%. This supports the generalization that youths' whose parents are farmers have greater probability of participating in agriculture than youths whose parents are not farmers. The background and orientation of the youths by virtue of their parents' occupation would influence their desire and interests to participate in such occupation.

Table 6. Logit regression results on Factors Influencing Youth Participation in Agricultural-based Livelihoods

Variable	Coefficient	Std Error	Z	P value
Constant	16.8951	6.6256	2.55	0.011
Age (X_1)	8.6964	3.4680	2.51	0.012**
Gender (X_2)	-.3138	2302	-1.36	0.173
Marital status (X_3)	1.2086	5732	2.11	0.035**
Educational status (X_4)	.0958	.0562	1.70	0.088*
Household size (X_5)	.0107	.5669	0.02	0.985
Parents occupation (X_6)	2.0490	.6040	3.39	0.001***
Participation experience (X_7)	2.5581	1.6822	1.52	0.128
Locality (X_8)	.4421	.4351	1.02	0.310
No. of observations	=	180		
LR Chi2 (7)	=	30.17		
Log likelihood	=	-76.0870		
Pseudo R^2	=	0.1654.		

Note: ***, ** and * Significant at 1%, 5% and 10%

Constraints to Youth Participation in Agricultural Livelihoods

Constraints limiting youth participation in agricultural-based livelihood activities in the study area are presented in Table 7. The major constraints include, inadequate credit facilities (43.3%) followed by no agricultural insurance (39.4%), insufficient initial capital (36%), insufficient land (43.4), poor investment on return (28.3%), Inadequate credit facilities limit the involvement of youths in agriculture-based livelihood activities in the study area. Since majority of the youths have low formal education, they are most likely not aware of loan acquisition organization and process which may affect their productivity in the long run as they are limited to the level of production at which their capital can afford. Lack of agricultural insurance is another problem that hinders youth in venturing into agriculture due to it risky nature. The youths in the study area do not have any form of insurance covering their agricultural assets; this can also be linked to their low level of education. Table 7 further revealed insufficient initial capital is another limitation to youth's participation in agricultural-based livelihoods. This result shows that youths in the study area are limited by lack of capital to increase production which will enhance output and increase food security in the area. Land tenure system is another obstacle to youth participation in agriculture. The common means of land tenure is through inheritance and rent which is not sustainable for large scale production. Poor investment on returns also limits youth involvement in agriculture-based activities. This becomes pertinent in view of the low pricing of agricultural goods and services, after putting in so much efforts in production but the income generated from the sales of those goods marginally return profit and the profit is lesser compared to the efforts put into the production process.

Table 7: Constraints to Participation in Agricultural-based Livelihoods

Constraints	*Frequency	Percentage	Rank
Insufficient initial capital	65	36.0	3rd
Inadequate credit facility	78	43.3	1st
Poor returns to investment	51	28.3	5th
No agricultural insurance	71	39.4	2nd
Insufficient land	62	34.4	4th

*Multiple responses

Turkish Journal of Agriculture - Food Science and Technology
Türk Tarım - Gıda Bilim ve Teknoloji Dergisi
International Peer-Reviewed Journal | ISSN: 2148-127X
www.agrifoodscience.com
Turkish Science and Technology Publishing (TURSTEP)

Conclusion

Findings from the study revealed that majority of the farmers were young, married and had low level of formal education. They had many years of farming experience even though they operated on small scale holdings with low to moderate annual incomes. Many of the youths were involved in agricultural livelihoods such as crop farming, livestock farming, agricultural product marketing, agricultural products processing, fish farming, nursery raising and honey making. The youth's perception of agriculture was positive as majority of the youths expressed positive responses on their perception of agricultural-based livelihoods. Age, educational status, marital status and parents' occupation were statistically significant factors that influenced youths' participation in agricultural-based livelihoods. The regression coefficients were all positive indicating that an increase in these variables holding others constant will lead to an increase in youth's participation in agricultural-based livelihoods. Inadequate credit facilities, lack of agricultural insurance, insufficient initial capital, insufficient land and poor investment on return were the major constraints to youths' participation in agricultural-based livelihoods.

Recommendations

Base on the findings of this study, the following recommendations were made;

- There is an urgent need to stimulate the interest of the youths in agriculture early in life through career guidance.
- Agriculture should be made compulsory at the primary and secondary levels, to inculcate the importance of the profession, and the spirit of farming in youths. Scholarships should be awarded to students who indicate interest in pursuing agricultural profession in tertiary institutions.
- Grants should be provided to Agriculture graduates who want to embark on commercial agriculture shortly after graduation.
- Access to land by youth should be enhanced through government land acquisition and review of Land Use Decree of 1978.
- Incentives such as input supply, good market outlet and attractive price of agricultural produce should be put in place to encourage youth and make them know that agriculture can be profitable.
- Policies should be designed to encourage suitable access to credit facility since it was found to be a strong factor that prevents youth from embarking on large scale agricultural production.

References

Adebo GM. and AB. Sekumade. 2013. Determinants of career choice of Agricultural profession among the Students of the Faculty of Agricultural Sciences in Ekiti State University, Nigeria. Journal of Agricultural Extension and Rural Development Vol.5(11), pp. 249-255.8 (5), pp. 130-135, May 2020SN 2354-4147V

Adefalu FO, Adekunle OA Oladipo LL, Adisa RS and Fatoye AD. 2009. Constraints to Youth Involvement in Agricultural Production in Kwara State, Nigeria. Agricultural Extension, 13, 102-108. https://doi.org/10.4314/jae.v13i1.53885

Adeogun S.O. (2015) Participatory Diagnostic Survey of Constraints to Youth Involvement in Cocoa Production in Cross River State of Nigeria. Agricultural Sciences , 60, 211-225. *https://doi.org/10.2298/JAS1502211A*

Adesugba M and Mavrotas G. 2016. Youth Employment, Agricultural Transformation, and Rural Labor Dynamics in Nigeria. In IFPRI Discussion Paper 01579; IFPRI: Abuja, Nigeria, December 2016.

Akpan SB. 2010. Encouraging youth's involvement in agricultural production and processing. *International Food Policy Research Institute. Policy Note 29*. 1-4.

Alawa DA, Ajigo I, Unimna F, Udie EA and Adie J.B. 2020. Policies Initiatives for Improving the Contributions of University Agricultural Education and Extension Institutions to Environmental and Sustainable Development in Agriculture. *Educational Research and Reviews*, 15, 273-281. *https://doi.org/10.5897/ERR2020.3990*

Alliance for a Green Revolution in Africa (AGRA). 2015. *Africa Agriculture Status Report: Youth in Agriculture in Sub-Saharan Africa Issue No. 3.* Nairobi: Alliance for a Green Revolution in Africa (AGRA). Retrieved August 15, 2016, fromhttps://agra.org/AGRAOld/wp-content/uploads/2016/04/africa-agriculture-status-report-2015.pdf

Amadi PNU. 2012. Agricultural Entrepreneurship Development for Youth Empowerment in Nigeria: Constraints and Initiatives for Improvement. *Journal of Educational and Social Research. 2 (10).*

Anyidoho NA, Kayuni H, Ndungu J, Leavy J, Sall M. and Sumberg J. 2012. *Young People and Policy Narratives in Sub-Saharan Africa. FAC Working Paper 032.* Brighton, UK: The Future Agricultures Consortium.

Bamire, A. S., Abdoulaye, T., Sanogo, D., and Langyintuo, A. (2010). Characterization of maize producing households in the Dry Savanna of Nigeria. Country Report – Nigeria.: IITA Ibadan, Nigeria 46 pp

Chikezie N P, Omokore DF, Akpoko JG and Chikaire J. 2012. Factors Influencing Rural Youth Adoption of Cassava Recommended Production Practices in Onu-Imo Local Government Area of Imo State, Nigeria. *Greener Journal of Agricultural Sciences*, 259-268.

Cook YF. 1996. Summary of Paper on Extension and Rural Youth Programme in Selected Countries. Pris: RYP.

Dercon S and Gollin D (2014) Agriculture in African develop- ment: theories and strategies. Annual Review of Resource Eco- nomics 6: 471–492.

Diao, X., Hazell, P., and Thurlow, J. 2010. The Role of Agriculture in African Development. World Development, 38 (October): 1375-1383

FAO. 2019. The State of Food and Agriculture 2019. Moving forward on food loss and waste reduction. Rome. Licence: CC BY-NC-SA 3.0 IGO.

Food and Agriculture Organization of the United Nations (FAO). 2014. *Youth and Agriculture: Key Challenges and Concrete Solutions.* Rome.

International Fund for Agricultural Development (IFAD). 2011. *Feeding Future Generations: Young Rural People Today—Prosperous, Productive Farmers Tomorrow*. Retrieved March 12th, 2016, from ifad: https://www.ifad.org/documents/10180/feadfaf5-2f97-43fb-bf31-ad8e5a71549a

International Labor Organization (ILO). 2021. Global Employment Trends for Youth 2020: Technology and the Future of Jobs; International Labour Organization: Geneva, Switzerland, 2020. Available online: *https://www.ilo.org/wcmsp5/groups/public/dgreports/dcomm/publ/documents/publication/wcms_737648.pdf* (accessed on 13 November 2021).

Isaac FO, Obioma OD and Sallau R. 2014. Assessment of Youth Involvement in Agricultural Production: The Case of Sabon-Gari Local Government Area of Kaduna State, Nigeria. International Journal of Agricultural Science , Research and Technology in Extension and Education Systems , 4, 163-171.

Kimaro PJ, Towo NN and Moshi BH. 2015. Economics, Commerce and Management. Determinants of Rural Youth 's Participation in Agricultural Activities , 3, 1-47.

Kwenye JM and Sichone T. 2016. Rural Youth Participation in Agriculture: Exploring the Significance and Challenges in the Control of Agricultural Sector in Zambian. *RUFORUM Working Document Series (ISSN 1607-9345), XIV*(1), 473-477. Retrieved January 02, 2018, from https://repository.ruforum.org/

Leavy J and Smith S. 2010. *Future Farmers? Exploring Youth Aspirations for African Agriculture: Policy Brief 037*. Retrieved July 22, 2016, from Future Agricultures: *http://www.future-agricultures.org/*

Mapila MM. 2014. *Agricultural Policy Processes and the Youth in Malawi: IFPRI Discussion Paper 01335*. Retrieved March 12th, 2016, from IFPRI: *http://ebrary.ifpri.org/utils/getfile/collection/p15738coll2/id/128109/filename/128320.pdf*

Mignouna, B., Manyong, M., Rusike, J., Mutabazi, S., and Senkondo, M. (2011). Determinants of Adopting Imazapyr-Resistant Maize Technology and its Impact on Household Income in Western Kenya. AgBioforum, 14(3), 158-163.

Naamwintome BA and Bagson E. 2013. Youth in Agriculture: Prospects and Challenges in the Sissala Area of Ghana. *Net Journal of Agricultural Science*, 60-68.

National Bureau of Statistics (NBS). 2021. Annual Abstracts of Statistics; NBS: Abuja, Nigeria, 2012.

National Population Commission (2006). *National Population Census 2006 Provisional Results*, Abuja, Nigeria.

National Youth Policy (NYP). Second National Youth Policy Document of the Federal Republic of Nigeria 2009; National Youth Policy: Sejong, Korea, 2009. Available online: https://www.youthpolicy.org/national/Nigeria_2009_National_Youth_Policy.pdf (accessed on 25 March 2022).

Ovwigho BO and Ifie P.A. 2001. Principles of Youth Development: a Reference Manual for Developing Countries. Lagos: Excel publication.

Sakketa TG and Gerber N. 2020. "Rural Shadow Wages and Youth Agricultural Labor Supply in Ethiopia: Evidence from Farm Panel Data," Research in Labor Economics, in: Change at Home, in the Labor Market, and On the Job, volume 48, pages 61-105, Emerald Group Publishing Limited

The United Nations Development Programme (UNDP). 2015. *undp library corporate.* Retrieved from The United Nations Development Programme: http://www.undp.org/content/dam/undp/library/corporate/brochure/SDGs_Booklet_Web_En.pdf

United Nations Department of Economic Affairs (UNDESA). (2016). *Sustainable Development*. Retrieved July 22, 2016, from un.org: *https://sustainabledevelopment.un.org/post2015/transformingourworld*

United Nations Department of Economic and Social Affairs, Population Division (UNDESA). 2011. *World Population Prospects: the 2010 Revision, Highlights and Advance Tables: Working Paper No. ESA/WP. 220.* New York: UNDESA.

United Nations Program for Youth. 2010. *Youth Participation in development: Summary Guidelines for Development Partners.* New York: United Nations. Retrieved October 12, 2017, from https://social.un.org/youthyear/docs/policy%20guide.pdf