Journal of Agripreneurship and Sustainable Development (JASD)
Volume 2, Number 1, June, 2019
ISSN (Print): 2651-6144; ISSN (Online): 2651-6365

ANALYSIS OF RURAL YOUTH PARTICIPATION IN AGRICULTURAL ACTIVITIES IN CHIKUN LOCAL GOVERNMENT AREA OF KADUNA STATE, NIGERIA

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ABSTRACT
The study analysed rural youth participation in agricultural activities in Chikun Local Government Area of Kaduna State, Nigeria. Simple random sampling techniques was used to select 60 youth in the study area and data was obtained with the aid of structured questionnaire and analysed using descriptive and inferential statistics. The result revealed 48% of the respondent fall within the age limit of 20-25 and 12% fall within 15-19 years. The study also revealed that 52% of the respondents were married and 33% had a household size of 2-5 people and majority (63%) attended secondary school. About 48% of the respondent had 0.1-3 hectares of land. Majority (65%) had contact with extension agent and 68% are member of different cooperative groups. Majority of the youths interviewed participated in all the farm activities from land clearing to harvesting. The result from the logit regression revealed that household size has a positive relationship and significant at 0.1%, age and years of experience were also significant 0.1% but negatively influenced youth participation. Farm size and education level were also significant and positively influence participation at 0.5% level. The major constraints affecting youth participation were inadequate capital, unaffordable input, inadequate storage facilities and inadequate modern tools. The study concluded that despite the constraints affecting youth in the study area, they still put more effort and participated in the farming activities in the study area. The study recommended adequate credit facilities, modern tools and farm inputs such as fertilizer, improved seeds and agro-chemicals should be made available at the right time and at subsidized rate.

Keywords: Agricultural Development, Agricultural Activities, Participation and Youth.

INTRODUCTION
Agriculture used to be the mainstay of Nigerian economy before the discovery of crude oil. The country's economy rested highly on agricultural export which represented 66% of foreign exchange and later increased to 73.4% in 1968. In the 1960s, agriculture sector was the most important in terms of contributions to domestic production, employment and foreign exchange earnings. The situation remained the same three decades later with the exception that it was no longer the principal foreign exchange earner, a role now played by oil (NBS, 2012). Agriculture remains a family enterprise in Nigeria as youth, women and men of all ages are involved one way or the other in the agricultural production processes.

The reliance on agriculture for food production and food security at domestic, regional and global level depends on youth productive force. According to reports from World Bank (2010) about 50 percent of the developing world population is youths estimated at about 1.2 billion of age between 15 and 24 years. These statistics indicate that youths constitute a serious development opportunity as well as a challenge particularly in developing countries. This is the generation which is expected to rise in the coming years for food production and food

security (Proctor and Lucchese, 2012). Umeh and Odom (2011) argue that, the contribution of agriculture to farmers' income and rural development depends on the active participation of youth who are the potential labour force.

Youth constitute the most important sector in any society and they serve as channels for the transmission of recognizable identity and prone to new ideas (Onuekwusi and Effiong, 2007). Youth also provide the man power for the socio-economic development of the society as well as providing opportunities for disseminating new ideas to other farmers and generating the farming entrepreneurship and other rural transformation (Ajayi, 2006).

The potentials of youth in contributing to agricultural development and attaining food security are not adequately utilized. According to Olujide (2011) peasant farmers, produce the bulk of the food with the help of their children (most of who are at their youthful age) who participate in agricultural production activities such as weeding, clearing, planting, harvesting, and processing among others. In Nigeria as observed by Aphunu and Natoma (2010), the younger generation is not interested in farming even though youth have been identified as constituting the major resource base. Emergence of petroleum industry as the main foreign exchange, coupled with other social-economic constraints has resulted in youth not actively participating in agricultural development. Most of the young people in Nigeria would rather work in an oil company than in the farm which is considered as a dirty and non-rewarding job.

However, there has been a gradual but consistent drift of the rural youth to the urban cities looking for white collar job and despite the fast growing opportunities in this sector; it is alarming and quite incredible to see many rural youths opting out of farming in search of non-existed white-collar jobs in the cities, leading to unprecedented level of rural-urban migration. This is obviously a potent threat to the aspiration of government to achieve food security. There is therefore, a compelling need to boost and sustain youth's interest and participation in agricultural production activities. This is as a result of the increasing urbanization brought about by the oil boom in early 70s and inflationary tendencies coupled with other socio-political and economic factors .The consequence of this is the reduction of the youth population who are gainfully employed in agricultural production activities (Olujide, 2011). It is alarming and quite incredible to see many rural youths opting out of farming in search of non-existed white-collar jobs in the cities, leading to unprecedented level of rural-urban migration. This is obviously a potent threat to the aspiration of government to achieve food security by 2010.

The over-all effect of this scenario is that more Nigerians are going hungry by today and resources that could be used to improve on our infrastructures are spent on importation of food into the country. There is therefore a compelling need to boost and sustain youth's interest and participation in agricultural production activities. A study of the constraints faced by youths in agriculture is a step is thus expedient.

The broad objective of the study was analysis of rural youth participation in agricultural activities in Chikun Local Government Area of Kaduna State, Nigeria. The specific objectives were to:

i. describe the socio-economic characteristics of youths in the study area;
ii. identify the agricultural activities involved by the youths in Chikun LGA,
iii. determine the socio-economic factors affecting youths participation in agriculture activities in Chikun LGA,
iv. ascertain the constraints to youth's participation in agricultural activities in Chikun LGA.

Despite the government effort in trying to diversify the economy into local mining and agricultural practices, Nigerians still patronise foreign agricultural products to meet up with their daily consumptions. Nigeria once a large net exporter of food, now imports a large

quantity of food (Wikipedia.org, 2015). Between 1970s and 2009, the sector grew at about 1.7% per annum on the average, a growth rate that is not commensurate with a population growth rate of 2.7% (Sunday, 2010).

In the pre independence era, many Africa communities including Nigeria witness a vibrant community development process through the participation of youths in agricultural activities. For agriculture in Nigeria to regain its past glory the youths must be encouraged to actively participate in agricultural activities, youths possess unique capabilities, dynamism, strength, adventure, ambition, hilarity etc. (Nandi and Akwiwu, 2008).

This study is intended to serve as a guide to policy makers, extension workers in designing programs aimed at rural youth's empowerment and development of agricultural activities. The study intends to contribute vital information in Chikun Local Government Area of Kaduna State as regards to the contribution of rural youths in agricultural activities.

MATERIALS AND METHODS

The Study Area

The study was conducted at Chikun LGA Local Government Area (LGA) which is situated in the southern part of Kaduna state, Nigeria. Its geographical coordinate are 10° 16' 0'' North, 7° 6' 0'' East. It has an area of 4,645km² and a population of 368,250 according to 2006 census. Gbagyi ethnic group is the dominant in the area. The wet season usually begins in April/ May to October, while the dry season starts from November/ December to March / April. Annual rainfall in the area ranges from 1,000mm to 1,300mm with the average rainfall of 1.100mm and crops usually grown in the area includes; Maize, Rice, Groundnut and cowpea (Kaduna state local government and chieftaincy affairs, 2006).

Sampling procedure and sampling size

The population of this study consists of all youth's farmer in the study area. Random sampling technique was used to select six (6) villages in Chikun LGA of Kaduna state and ten youth were selected at random from each of the selected villages thus given a total number of sixty (60) youths in the study area.

Method of Data collection

Primary data was used for the study; Data was collected through the use of structured questionnaire administered to the respondents by the researcher.

Analytical Techniques

Descriptive statistics such as frequency counts and percentage was used to achieve objectives i, ii, iv. Logit regression model was used to achieve objective iii and also to test the hypothesis of the study.

The logit regression model is expressed as follows:

$$Y=a+b_1x_1+b_2x_2+b_3x_3+b_4x_4+b_5x_5+b_6x_6+b_7x_7+b_8x_8+e \quad \ldots (1)$$

where;

Y = Participation (0) and Non-participation (1)
X_1 = Age of youth (years)
X_2 = Marital status
X_3 = House hold size
X_4 = level of formal education
X_5 = Parent occupation
X_6 = Farm size
X_7 = Membership of cooperative
X_8 = Extension contact
e = error term

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a = constant
b_1-b_8 = regression coefficient.

RESULTS AND DISCUSSION

Socio-Economic Characteristics of the Respondents

Table 1 show that, majority of the respondents 71.8% was male while 28.2% are female. This indicate that male participate in farming more than the female in the study area. This goes in line with the findings by Adewale *et al*. (2003) that examined the economic contributions of farm children to farming activities in Nigeria and observed that more than half of the farm children were males.

One of the socio-economic characteristics this study investigated is the age of the respondents. The study result revealed that 48.3% of the youths interviewed were between 20 and 25years, 21.7% were between 26 and 30 years, 18.3% were between 31-35 years while the remaining 11.7% of the total respondents were between 15-19 years. This is in line with the finding by Nwaogwugwu and Obele (2013) that majority of his respondent falls within the age bracket 26-30 year. During the survey, some respondents stated that they began agricultural activities as early as at the age of 7 years.

The marital status of the respondents shows that 51.7% of the youth were single while 48.3% are married. This indicates that about half of the total respondents interviewed were married. This is in line with findings by Nwaogwugwu and Obele (2013) that the gap between single and married respondents is not significant.

Result in Table 1 further indicate that 33.3% of the respondents had a household size of 2-5 persons and 26.7% of the youths had a household size of 6-10 persons. Another 23.3% had a household size of 11-20 persons while 11.7% had household size 21-30 persons and lastly only 5.0% of the respondents had a household size 31- 40 members. The smaller household indicates that most youths in the study area when they get married, they move out of their parents houses and start their own households while the larger households are of the single youths that are still leaving with their parents.

Majority of the youth (63.3%) attended secondary school or had secondary school education while 23.3% had primary school education. Those with formal education accounted for 6.7% and also those with tertiary education (6.7%). This implies that all the sampled respondents could either read or write which will enhance their level of understanding and it is likely for such people to accept new technology at a very fast rate. This is in line with the finding by Aphanu and Atoma (2010).

The study investigated the farming experience of the respondents, and it was observed that 35% of the youths had between 6-10 years of experience while 31.7% had between 11-15 years and 18.5% had between 11-15 years of farming experience. About 18.3% had 15 years of experience while those with 1-5 years of farming experience accounted for 15% of the respondents. As number of years in farming increases, experience also increases. This result shows that the respondents had gained a considerable amount of experience in their agricultural activities. This result contradicts with the findings from Agboola *et al.* (2015) that majority of his respondent had less than 10 years of experience.

The size of a farmer's farmland is an important factor in determining the output derived. It was observed that 48.3% of the respondents had farms ranging from 1-3ha, 25% of the youths had farms of 3-5ha, and 23.3% had farm size of above 5ha, while 3.3% had farm size of less than 1 ha. This result indicates that most of the youths engage in farming activities on a small scale, basically for house hold consumption, while the little surplus is sold to generate income to meet other needs.

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Table 1: Distribution of Respondents based on Socio-economic Characteristics (n= 60)

Variables	Frequency	Percentage
Age		
15-19	7	11.70
20-25	29	48.30
26-30	13	21.70
31-35	11	18.30
Sex		
Male	51	85.0
Female	9	15.0
Marital status		
Married	29	48.30
Single	31	51.70
Household size		
2-5	20	33.30
6-10	16	26.70
11-20	14	23.30
21-30	7	11.70
Above 30	3	5.00
Educational Background		
Informal educational	4	6.70
Primary	14	23.30
Secondary	38	63.30
Tertiary	4	6.70
Farming Experience (years)		
1-5	9	15.00
6-10	21	35.00
11-15	19	31.70
Above 15	11	18.30
Farm Size (ha)		
Less than 1	9	3.30
1-3	29	48.30
3-5	15	25.00
Above 5	14	23.30

Source: Field survey, 2017

Membership Cooperative, Access to Extension Contact and Parent's Occupation

The result on membership of cooperative in Table 2 shows that majority of the youths (78.3%) were not members of any cooperative group while the remaining 21.7% are members of cooperative group. This may likely have negative effects on the youths performance in agricultural activities as membership of cooperative contributes to the dissemination of new ideas, practices and products as well as in sourcing loans and farm inputs.

Agricultural extension service constitutes a driving force for any agricultural development. From the study it was discovered that 39 of the respondents (65.0%) reported not to have had access to any form of extension contact, while 35.0% reported to have had access to extension contact. This result shows that more needs to be done in providing the necessary extension service in the area of study.

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The results of Table 2 also revealed that majority (96.7%) of the youths that had parents who were involved in agricultural production while 30.0% have parents who run a business enterprise while 10.0% of the youths have parents who are civil servants. This confirmed that farming is the predominant occupation in rural areas. This is in line with the finding by Adefalu *et al.* (2009) that the parent occupation was farming.

Table 2: Distribution of Respondents according to Membership of Cooperative, Access to Extension Contact and Parent Occupation (n = 60)

Variables	Frequency	Percentage
Membership of cooperative		
Yes	13	21.70
No	47	78.30
Access to extension contact		
Yes	21	
No	3935.00	
Parent's occupation	65.00	
Farming	58	96.70
Civil servant	5	10.00
Other business	18	30.00

Source: Field survey, 2017

Participation of Respondents in Farming Activities

Farming involves different and multiple tasks; and as presented in Table 3, the youth were involved in many farming operations, especially fertilizer/chemical application (81.7%), bush clearing (78.3%), harvesting (73.3%), while planting, weeding and ridging were 75%, 75% and 60%, respectively. This is in line with the findings of Adesope (1999) and Roy (2003) who both reported active involvement of youths in agricultural activities and also Angba *et al*. (2009) who stated that youths make up a significant proportion of the workforce in both rural and urban communities.

Table 3: Distribution of Respondents by their Participation in Farming Activities

Farming activity	Frequency*	Percentage
Bush clearing	47	78.30
Ridging	36	60.00
Planting	45	75.00
Weeding	45	81.70
Fertilizer/chemical application	49	73.30
Harvesting	44	

* Multiple responses existed
Source: Field survey, 2017

Socio-Economic Factors Affecting Rural Youth Participation in Agricultural Activities

The regression analysis shows the socio-economic factors affecting rural youth participation in agricultural activities in Chikun local government of Kaduna State. As presented in Table 4, four out of eight variables were found to have negative relationship with the youths' participation in agricultural activities; these are age, marital status and Parent

occupation. This indicates that rural youth participation in agricultural has an inverse relationship them. Membership of cooperative and extension contact were not significant.

The variables such as educational level, farm size and household size were found to be significantly related to the rural youth's participation in agricultural activities. The coefficient of educational level (0.058), farm size (0.022), and household size (0.000) were positive and significantly influence youth involvement in agricultural activities. This means that increase in these variables implies an increase in the youth's participation in agricultural activities. The coefficient of multiple determinations (R^2) was 64%. This implies that about 64% of variability in the dependent variable was due to the independent variables considered in the regression model while the rest 36% of the variation were due to error.

This result proved the null hypothesis which stated that, there is no significant relationship between some selected socio-economic variable of youths and their participation in agricultural activities and was rejected while the alternative hypothesis, H_1, that there is a significant relationship between selected socio-economic variable of the youths and their participation in agricultural activities was accepted. This was because the result of the regression analysis showed that socio-economic variables such as education, farm size and household size had significant influence on youth participation in agricultural activities.

Table 4: Socio-economic Factors affecting Rural Youth Participation in Agriculture

Variable	Coefficient	Standard error	Z-ratio
a = Constant	1.720	0.389	4.426
X_1 = Age	-0.001***	0.015	-0.133
X_2 = Marital status	-0.051*	0.238	-0.214
X_3 = Household size	0.001***	0.010	0.000
X_4 = Educational background	0.058*	0.017	3.412
X_5 = Parent occupation	-0.011*	0.014	-0.788
X_6 = Farm size	0.022*	0.010	2.200
X_7 = Membership of cooperative	0.430	0.180	2.390
X_8 = Extension contact	0.792	0.402	1.9
R^2 = 0.638			
F =2.842			

* = significant at 5%; ***=significant at 1%; NS=not significant
Source: Field survey (2017)

Constraints Faced by the Youths in Agricultural Activities

The result in Table 5 shows the constraints encountered in the study area. Inadequate capital is a major constraint to agricultural activities as perceived by majority of the respondents (76.7%). This result is expected as none of the respondents reported have had access to credit facilities. 73.3% of the respondents indicated unaffordability of inputs such as improved seeds, fertilizer and chemicals. In addition, 60% indicated inadequate modern tools as another constraint to farming. This because the respondents can hardly afford to hire implements like cattle-drawn ridgers let alone own the necessary equipment for modern agricultural practices. About 21.7% of the respondents had problem of poor yield. Other problems identified by the respondents are pest and diseases, poor soil condition, theft, bad roads leading to the farm, lack of storage facilities, weed, inadequate market, and unfavourable prices of agricultural produce.

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Table 5: Distribution of Respondents according to Constraints

Constraints	Frequency*	Percentage
Inadequate modern tools	36	60.00
Inadequate capital	46	76.70
Unaffordable inputs	44	73.30
Poor yield	13	21.70
Pests and disease	21	35.00
Poor soil conditions	4	6.70
Theft	7	11.70
Weed	15	25.00
Inadequate marketing channels	24	40.00
Inadequate storage facilities	38	63.30
Bad roads	26	43.30
Unfavourable price	12	20.00

*Multiple responses existed
Source: Field survey (2017)

CONCLUSION AND RECOMMENDATIONS

This study captured the relationship between the socio-economic characteristics of rural youths and their years in farming experience in agricultural activities. From this study, educational background, farm size, membership of cooperative and extension contact were seen to have significant effect on the participation of youths in agricultural activities in the study area. Age, marital status, house hold size and parent occupation had no effect on the youth's participation in agricultural activities. The study also found that despite the constraints youths experienced in the study area, they still contributed greatly to farming activities and were willing to continue with agriculture as profession. The following recommendations were made:

i. Adequate credit facilities, modern inputs and regular extension visits among others should be provided to the youths so as to motivate and encourage their efforts in farming activities.
ii. Government should enhance the social life of the youths by construction of storage facilities, roads, markets, water supply, and rural electrification to encourage them to remain in the rural area and continue with their farming activities.
iii. Farm inputs such as fertilizer, improved seeds and agro-chemicals should be made available at the right time and at subsidized rates. More efforts should be made by the government in monitoring the activities of the distribution of inputs at all level.

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