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# CHALLENGES OF YOUTH PARTICIPATION IN AGRICULTURAL ACTIVITIES IN ONDO STATE, NIGERIA

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#### **ABSTRACT**

Youth are one of the most important sectors in any society. Apart from being a major source of manpower for socioeconomic development of the society, youth serve as channels for the transmission of culture and the perpetration of a people's recognizable identity. This study examined the challenges of youth participation in agricultural activities in Ondo state, Nigeria. Multistage sampling procedure was used to select 128 youths. Primary data were collected from the youths through the use of interview schedule. Data were analysed using descriptive (frequency, chart, percentage, mean statistic). The results revealed that, youth participated more in crop production (65.6%) and vegetable farming (50.8%). Majority (98.0%) of the youth had favourable attitude towards agriculture. The major challenges youth faced while participating in agricultural activities were ease of starting small scale agriculture as a career ( $\overline{x} = 2.26$ ) and income derived from agriculture ( $\overline{x} = 2.25$ ). The study recommended that, to improve youth participation in agricultural activities, government and non-governmental organisations should vigorously pursue sensitization and reorientation of youth on market information available for agricultural products and also the prospects abound in agriculture.

**Keywords:** Challenges; youth; participation; agricultural activities

#### INTRODUCTION

Agriculture remains the base of the Nigerian economy irrespective of the Nation's concentration on oil, providing the main source of livelihood for most Nigerians. It employs two-thirds of the entire labour force (FAO, 2018). Agriculture is an important sector in economy of the most developing countries in the world. It is essential for the survival of both man and animal races. Apart from providing food for mankind, agriculture plays important roles in nation building, which include: source of livelihood, role in foreign trade, capital/savings transfers and its role in industrial development.

In many countries youth integration in agricultural activities is important for the development of the agricultural sector. In the rural sector, youths provide opportunities for generating farming entrepreneurs and other rural professions (Chikezie et al., 2012). This is due to the fact that the youths have the potential to overcome some major constraints to expand agriculture production sequel to their openness to new ideas and practices than their co-adult farmers (Daudu, 2009). Many countries in Africa and Sub-Saharan regions for instance Nigeria have realized that in order to reduce food insecurity there must be policies for youth integration in agricultural activities. This is through providing incentives to young people who are engaged in agriculture, availing fair market opportunities for youth, providing training opportunities in new technology and presenting agriculture as profitable venture (Ommani, 2011).

The youths have great role to play in achieving the sustainable development in agriculture which is a road map for achieving national development (vision 2020). Nigeria's multiple problems of food scarcity and insecurity can never be ameliorated by leaving the

responsibility of farming and agriculture into the hands of the ageing smallholder farmers who tends not to adopt innovations. Hence, there is the need for the youth as successor generation of agriculture in Nigeria to participate and get involved in agriculture. The efforts of the government and other stakeholders in the country to stimulate the interest of the youths in been involved in the agriculture as a prospect to reduction of unemployment rate is commendable, but little or no change is observed. However, many researchers have been targeted at identifying strategies for ensuring the participation of youths in agriculture without much consideration for the determinants of their participation.

The main objective of this study was to examine the challenges of youths in agricultural activities in Ondo state, Nigeria. Specifically, the study sought to:

- 1. ascertain the socioeconomic characteristics of the youth participating in agricultural activities in Ondo State;
- 2. determine the types of agricultural activities in which youth participate;
- 3. ascertain the attitude of youth towards agricultural activities; and
- 4. ascertain the challenges of youth participation in agricultural activities.

It was hypothesised that there is no significant relationship between the socio economic characteristics of the youth and level of participation in agricultural activities.

#### **METHODOLOGY**

The study was carried out in Ondo State, which is located in the South West region of Nigeria. It lies between latitude 5°45' and 7°52'N and longitudes 4°20' and 6°05'E. Its land area is



about 15,500km<sup>2</sup>. It is bounded by Kwara and Kogi States to the North, Edo State to East, Delta State to the Southeast, Osun and Ogun States to the West and the Atlantic Ocean to the South. All youth in Ondo State constituted the population for the study. A multistage sampling technique was used to select the respondents. In the first stage, four (4) Local Government Areas (LGAs) were randomly selected out of the eighteen (18) LGAs in the state, using simple random sampling technique. In the second stage, four villages/town were purposively selected from each LGAs because of the agricultural activities in the areas. In the third stage, eight youths (4male and 4 female) were purposively selected from each village because of their participation in agricultural activities. In all, thirty two (32) youth (16 male and 16 female) per LGAs were selected. Thus, a total of one hundred and twenty eight (128) respondents constituted the sample size for the study. Interview schedule was used for data collection.

To determine the agricultural activities in which the youth are involved, a Yes and No option was used to indicate youth participation in various agricultural activities. The level of youth participation was measured on a 4-point Likerttype scale of highly involved = 3, involved = 2, slightly involved = 1 and not involved = 0. To ascertain the attitude of youth towards agricultural activities, attitudinal statements of both positive and negative statements were provided for them on a 5-point Likert type scale of strongly agree =5, agree = 4, undecided = 3, disagree = 2 and strongly disagree = 1. Also, the index of respondents towards agricultural activities was obtained. Twenty (20) statements were used with a maximum score of 100 (5 x 20) and a minimum score of 20 (1 x 20) based on the Likert scale. This gave a mid-point value of 60 (100+2/2). All scores below this mid-point (20

# Participation of the youth in agricultural activities

Table 2 shows the percentage distribution of respondents according to their participation in agricultural activities. Findings indicate the various agricultural activities in which young people are engaged in the study area which include poultry production, crop production, animal rearing, fish production, agribusiness, agro-processing, snail rearing and vegetable farming. Results show that (36.7%) engaged in poultry production, (65.6%) engaged in crop production, and the major crops

to 60) were tagged as the percentage of youth with unfavourable attitude (or less supportive) towards agricultural activities; while all scores above this mid-point (61 to 120) were tagged as the percentage of youth with favourable attitude (more supportive) towards agricultural activities. To ascertain the challenges of youth participation in agricultural activities, respondents were required to indicate their responses on a 4-point Likert type scale of: to a very great extent = 3, to a great extent = 2, to some extent = 1 and to no extent = 0 was used. The cut-off point of 1.5 was obtained.

# **RESULTS AND DISCUSSION Socioeconomic characteristics**

Table 1 revealed that about 59% of the respondents were within 24-29 years. The average age of the respondents was 27.5 years. This implies that the age bracket categorized to be youths in Nigeria was captured for the study. The result also revealed that half (50%) of them were male, while the remaining 50% were female. This is in line with the stipulated methodology of the study aimed at ensuring an unbiased data. The result further revealed that 54.7% of the respondents were married. This is in agreement with the findings of Adesina and Eforuoku (2017) who found that majority of youths in a similar study in Ondo State were married. About 73.4% of the youth practice Christianity. The mean household size of the respondents was 5 persons. Data in Table 1 revealed that most of the rural youth that participated in agriculture had one form of education or the other. This is in congruent with the findings of Adesina and Eforuoku (2017) who asserted that majority (99.2%) of the youths engaged in agricultural activities in Ondo State had formal education.

that are being planted include cassava, banana, plantain, yam and maize. About 31% engaged in animal rearing, 25% engaged in fish production, 38.8% engaged in agribusiness, 34.4% engaged in agro-processing, 15.6% engaged in snail farming and 50.8% engaged in vegetable farming. It can be concluded that the youth in the study area participate more in crop production than any other agricultural activities, which could be due to the low rate of risk and failure associated with crop production unlike livestock farming.



Table 1: Socioeconomic characteristics of respondents

Variables	Frequency	Percentage	Mean
Age (years)	-		
18-23	48	37.5	
24-29	75	58.6	27.5
30-35	5	3.9	
Sex			
Male	64	50.0	
Female	64	50.0	
Marital status			
Married	70	45.3	
Single	58	54.7	
Religion			
Christianity	94	73.4	
Muslim	29	22.7	
Traditional	5	3.9	
Household size			
1-4	48	37.5	
5-8	75	58.6	5 persons
>8	5	3.9	•
<b>Educational level</b>			
No formal education	15	11.7	
Primary education attempted	4	3.1	
Primary school completed	17	13.3	
Secondary education attempted	15	11.7	
Secondary school completed	27	21.1	
Vocational training	28	21.9	
Higher education	22	17.2	

Source: Field survey, 2016

Table 2: Percentage distribution of youth participation in agricultural activities

Farming Activities	Frequency	Percentage	
Poultry production	47	36.7	
Crop production	84	65.6	
Animal production	40	31.3	
Fish production	32	25.0	
Agribusiness	51	39.8	
Agro-processing	44	34.4	
Snail farming	20	15.6	
Vegetable farming	65	50.8	

Source: Field survey, 2016

#### Level of participation in agricultural activities

Data on Table 3 reveal the respondents' level of participation in agricultural practices. The respondents were highly involved and participated in crop production ( $\overline{x}$  =1.73). This is in congruent with the finding of Nwaogwu and Obele (2017) who found that crop farming ranked highest among all agricultural activities in which youths were engaged in Niger Delta region of Nigeria. Participation in crop production is high because of the relative ease of starting the crop production enterprise. Furthermore, results showed the respondents' level of participation in the following agricultural activities: vegetable farming ( $\overline{x}$ =1.26), agribusiness ( $\overline{x}$ =0.81), poultry production ( $\overline{x}$ = 0.82) and agro-processing ( $\overline{x}$ =0.75). This implies that the

respondents' levels of participation in these agricultural activities are not high. This could be because of the stress that is involved some of these activities and the capital intensive nature of the activities.

Table 3 further revealed the low level of participation in animal rearing ( $\overline{x}$ =0.60), fish production ( $\overline{x}$  = 0.56) and snail farming ( $\overline{x}$  = 0.29). Few of the respondents that rear animals are for domestic purposes. The youth involvement is also very low in fish production because it requires a large capital to start. Gwary, *et al.* (2008) in their study reported that youths were more interested in crop production than livestock, probably due to the short gestation period of the crop varieties produced, which ensures quick turnover. In



addition, livestock production could be more capital intensive than crop production, hence the

preference for crop production by most youths.

Table 3: Level of participation of respondents in agricultural activities

Agricultural activities	Not participated	Slightly participated	Participated	Highly participated	Mean
	%	%	%	%	
Poultry production	62.5	86.0	13.3	15.6	0.82
Crop production	33.6	7.0	11.7	47.7	1.73*
Animal Rearing	69.5	10.9	9.4	10.2	0.60
Fish Production	75.8	4.7	7.0	12.5	0.56
Agribusiness	60.9	3.9	28.1	7.0	0.81
Agro-processing	66.4	3.1	19.5	11.0	0.75
Snail farming	85.2	5.5	4.7	4.7	0.29
Vegetable Farming	50.0	6.3	11.7	32.1	1.26

Mean ≥ 1.5 \* highly involved Source: Field survey, 2016

# Attitude of the youth towards agricultural activities

Table 4 show the respondents' attitude towards agricultural activities. The youth strongly agree (72%) that involvement in agricultural activities is profitable, 57.0% strongly agree that engaging in agricultural activities is lucrative and 49.2% strongly agree that agriculture can help provide for socioeconomic needs. This implies that the rural youth see agricultural activities as a profitable business which everyone can be involved in whether literate or illiterate in which it can help to meet their socio economics needs. This finding collaborate the findings of Kimaro, Towo, Moshi (2015) that rural youth believe that they can get their socioeconomic needs through participation in agricultural activities.

The youth also strongly agree (55.5%), that some agricultural activities doesn't require a large capital to invest, 49.2% of the youth agree that inclusion of agriculture in all levels of education can motivate youth to participate in agriculture, while 51.6% also agree that agriculture is a major employer of labour in rural areas. Also, 52.3% agree that incentives serve a good motivator for participating in agricultural activities, 70.0% agree that recognising youth as stakeholders in agriculture can help to bring out the great ideas they possess, 37.5% agree that involvement of youth in agriculture can lead to reduction in social vices and disturbance, 46.1% agree that practicing agriculture takes time and transcends generation. This implies that rural youth believe that the inclusion of agriculture as a subject in all levels of will positively influence education participation in agricultural activities and that agriculture can provide employments but the government support is a significant factor for the improvement of the sector.

The result in Table 4 further revealed that 70.3% of the youth strongly disagree that agriculture is meant for the school drop-outs and

illiterates, 55.5% strongly disagree that agricultural activities are for the old people, 52.3% strongly disagree that agricultural activities tarnishes ones status in the society. This implies that majority of the respondents have negative disposition towards farming as a way of employment/profession. The youth sees the practicing of agriculture for those that are old and illiterates. This result disagree with of the findings of Girei *et al* (2016) that 44% of the respondents disagree that farming is for school drop-outs.

Also, 60.2% of the respondents disagree that engaging in agricultural activities tends to waste resources, 52.3% agree that practicing agriculture do not alleviate poverty in the society. 39.8% disagree that involvement in agricultural activities is risky, 43.8% of the youth agree that the yield of some agricultural activities tends to be low and discouraging, 43.8% agree that participating in agriculture is time consuming, and 38.3% of the youth agree that marketing of agricultural produce is stressful. In the same vein, 50.8% of the youth agree that agricultural activities are tasking in term of energy and power. From these results, youth regard investment in agriculture as risky, time consuming, waste of resources, and do not help in reducing poverty in the society.

Succinctly, analysis as indicated in Figure 1 revealed that majority (98%) of the respondents had favourable attitude towards agricultural activities in Ondo state, Nigeria while the remaining 2.0% of the respondents unfavourable attitude towards agricultural activities. This means that rural youth who participated in agricultural activities had positive attitude towards agriculture. The finding is similar to that of Abdullah (2013), who found that the attitude of rural youths towards agriculture in Nigeria is favourable and a factor which significantly influence the youth interest in agriculture. The result is also in tandem with the finding of Adesina and Eforuoku (2017) who found



that youths in Ondo state were favourably disposed to the Youth-in-Agriculture Programme (YIAP) in

Ondo State, Nigeria.

Table 4: Percentage distribution of youth attitude towards agricultural activities

Statements	Strongly	Agree	Undecided	Disagree	Strongly
	Agree	0/	0/	0/	disagree %
Engaging in agricultural activities is	<b>%</b> 57.0	<b>%</b> 36.7	3.1	3.1	0.0
lucrative	37.0	30.7	3.1	3.1	0.0
Involvement in agricultural activities is	72.7	25.8	0.8	0.8	0.0
profitable					
Agricultural activities help to provide for socio economic needs	49.2	49.2	0.8	0.8	0.0
Involvement of youth in agriculture can lead to reduction in social vices and disturbance	27.3	37.5	20.3	12.5	2.3
Inclusion of agriculture in all levels of education can motivate youth to participate in agriculture	35.9	49.2	5.5	7.8	1.6
Agriculture is a major employer of labour	25.8	51.6	10.2	11.7	0.8
Incentives is a good motivator for	27.3	52.3	5.5	10.9	3.9
participating in agricultural activities					
Practicing agriculture takes time and transcends generation	10.2	46.1	14.8	22.7	6.3
Some agricultural activities doesn't require	55.5	33.6	3.9	2.3	4.7
a large capital to invest Recognizing youth as stakeholders in agriculture because of the great ideas they	18.8	70.0	8.6	9.4	2.3
possess	0.0	( )	4.7	(0.2	20.0
Engaging in agricultural activities tends to waste resources	0.0	6.3	4.7	60.2	28.9
Agricultural activities tarnishes one's status in the society	1.6	0.8	5.5	39.8	52.3
Participating in agricultural activities is time consuming	18.8	43.8	4.7	22.7	10.2
Agriculture is meant for the school droppers and illiterates	3.1	1.6	1.6	23.4	70.3
Involvement in agricultural activities is risky	7.8	36.7	3.1	39.8	12.5
Practicing agriculture do not alleviate	27.3	52.3	8.6	3.9	7.8
poverty Marketing of agricultural produce is stressful	21.9	38.3	9.4	23.4	7.0
Yield of some agricultural activities tend to	12.5	43.8	11.7	22.7	9.4
be slow and discouraging	12.5	ں.ر⊤	11./	44.1	J. <del>T</del>
Agricultural activities are for the old people	3.9	1.6	1.6	37.5	55.5
Agricultural activities are tasking in terms	35.2	50.8	4.7	7.0	23.1
of energy and manpower					
Source: Field survey 2016					

Source: Field survey, 2016



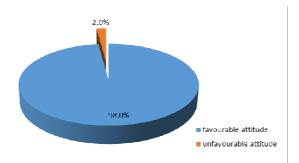


Figure 1: Respondents Attitudinal Index towards Agricultural Activities

# Challenges of youth participation in agricultural activities

Table 5 show the challenges of youth participation in agricultural activities. The major challenges were; ease of starting agriculture as small scale business ( $\bar{x}$  2.26), income derived from agricultural produce ( $\bar{x}$ =2.25), perception towards agriculture as income generating activities  $(\bar{x}=2.15)$ , favourable attitude towards agriculture as a career ( $\bar{x}$ = 1.89) and availability of land to practice agricultural activities ( $\bar{x}=1.77$ ). This that majority of the respondent implies participation is dependent on the fact that income can be derived from practicing agriculture to meet their livelihood. Therefore it can be also concluded that participation of rural youth in agricultural activities depends on the availability and access of land in rural areas. Rural youth who can access land are the one who participate in agricultural activities. The result is also in support of Kising'u (2016) findings that majority (60%) of the youth indicated that, their perceptions towards agriculture influenced their participation in agricultural activities. This study is in support of the findings of Nwaogwugwu and Obele (2017) that poor income from agriculture based lively\hood dissuade youth involvement in farming.

Other challenges youth faced while participating in agricultural activities are; availability of fund to participate in agricultural activities ( $\overline{x}$ =1.73), motivation from other colleagues ( $\overline{x}$ =1.63), possession of agricultural skills and knowledge ( $\overline{x}$ =1.62), job opportunities available in agriculture ( $\overline{x}$ =1.50) and parental influence on the choice of agriculture as a business ( $\overline{x}$ =1.50).

This result is in support of Kwenye and Sichone (2018) that lack of access to capital was the major factor constraining youth participation in agriculture. Results also indicate that knowledge about agriculture has influence the respondent participation in agricultural activities and also parent has influence their participation by helping their parent on the farm.

The following variables were considered as challenges affecting youth participation in agricultural activities. include; availability of farm labour to work and assist on farm  $(\bar{x} \ 1.43)$ , accessibility to and availability of credit facilities for agricultural related activities (x1.42), future prospects in agriculture as a business ( $\bar{x} = 1.38$ ), increased agricultural research opportunities ( $\overline{x}=1.20$ ) and various competitors from other sectors of the economy ( $\bar{x} = 1.17$ ). This implies the accessibility of the respondent to where they can borrow money in other to invest into agriculture is not a challenge to some extent in participating in agricultural activities. Others are: seasonal shifts in prices of agricultural produce ( $\bar{x}=1.10$ ), availability of incentives from the government for participation in agricultural activities  $(\bar{x}=1.06),$ favourable government policies ( $\overline{x}=1.06$ ), availability of extension services to handle problems on the farm  $(\bar{x}=1.02)$  and risks and uncertainty associated with agriculture ( $\bar{x}$ =0.83).

#### CONCLUSION

The study assessed the challenges of youth participation in agricultural activities, ascertained the youth's level of participation in agricultural activities and also determined youth attitude towards participation in the agricultural activities in Ondo State, Nigeria. The level of participation of respondents were very high in crop production and vegetable farming. It was found that respondents had positive and favourable attitude towards agriculture. In the same vein the study highlighted; ease of starting agriculture as a small scale business, income derived from agricultural produce, perception towards agriculture as income generating activities and possession of agricultural skills as the major challenges of youth participation in agricultural activities. The study therefore the recommends provision of adequate sensitization, resources and platforms for the youths to participate more in agricultural activities since they are favourably disposed to it.



Table 5: Challenges affecting youth participation in agricultural activities

Determinant factors	To no	To	To a	To a very	Mean	SD
	extent	some	great	great		
		extent	extent	extent		
	<b>%</b>	%	<b>%</b>	%		
Possession of agricultural skills and knowledge	17.2	26.6	33.6	22.7	1.62*	1.02
Availability of land to practice agricultural activities	7.0	38.3	25.0	29.7	1.77*	0.96
Availability of fund to participate in agricultural activities	6.3	38.3	32.0	23.4	1.72*	0.89
Availability of farm labour to work and assist on farm	31.3	15.6	32.0	21.1	1.43	1.14
Increased agricultural research opportunities	39.1	19.5	23.4	18.0	1.20	1.14
Income derived from agricultural Produce	4.7	10.2	40.6	44.5	2.25*	0.82
Motivation from other colleagues and friends	14.8	26.6	39.1	19.5	1.63*	0.96
Availability of incentives from the government	46.1	16.4	23.4	14.1	1.06	1.12
for participant in agricultural activities						
Favorable Government policies	50.0	11.7	21.1	17.2	1.06	1.18
Accessibility to and availability of credit facilities	29.7	23.4	21.9	25.0	1.42	1.16
for agricultural related activities						
Job opportunities available in agriculture	22.7	30.5	26.6	20.3	1.50*	1.06
Risks and uncertainty associated with agriculture	52.3	22.7	14.8	10.2	0.83	1.03
Parental influence on the choice of agriculture as a business	23.4	24.2	32.0	20.3	1.50*	1.06
Attitude towards agriculture as a career	9.4	20.3	42.2	28.1	1.89*	0.92
Seasonal shifts in prices of agriculture Produce	39.1	27.3	18.0	15.6	1.10	1.09
Perception towards agriculture as income	1.6	17.2	45.3	35.9	2.15*	0.76
generating activities						
Various competitors from other sectors of the	38.3	21.9	24.2	15.6	1.17	1.10
economy						
Ease of starting agricultural small scale as a	0.8	16.4	39.1	43.8	2.26*	0.76
business						
Future prospects in agriculture as a business	25.0	30.5	26.6	18.0	1.38	1.04
Availability of extension services to handle	45.3	19.5	23.4	11.7	1.02	1.08
problems on the farm						

\*Major challenges

Source: Field survey, 2016

#### REFERENCES

Abdullah, F. A. (2013). Inclination toward Agriculture among Rural Youth in Malaysia: *Journal of Basic and Applied Scientific Research*, *2 (11)*, 892-898.

Adesina, K. T. and Eforuoku F. (2017).

Determinants of Participation in Youth-in-Agriculture Programme in Ondo State,
Nigeria, *Journal of Agricultural Extension*, 20(2),104-117,
doi.org/10.4314/jae.v20i2.8.

Chikezie, N. P., Chikaire J., Osuagwu, C.O., Ihenacho, R.A., Ejiogu, N., Oguegbuchulam, M. N. and Obi K.U. (2012). Factors Constraining Rural Youths Involvement in Cassava Production in Onu – Imo Local Government Area of Imo State, Nigeria. Global Advanced Research Journal of Agricultural Science, 1(8), 223-232.

Daudu, S. (2009). Roles of Youths in Agricultural Development in Makurdi local Government Area of Benue State in Nigeria: *Journal of Agricultural Extension*, 13 (2), 107-109.

FAO (2018). Food and Agriculture Organisation in Nigeria: *Nigeria at a glance*. Food and Agricultural Organisation of the United Nations. Retrieved from http://www.fao.org/nigeria/fao-in-nigeria/nigeria-at-a-glance/en/.

Girei, A. A. Saingbe N. D., Ohen, S. B., Gimba E. A. (2016). Youth Involvement in Agricultural Production in Obi Local Government Area, Nasarawa State, Nigeria. International Journal of Environment, Agriculture and Biotechnology. 1(4): 1016-1023. Retrieved from: http://dx.doi.org/10.22161/ijeab/1.4.54



- Gwary, M.M., Pur, J. T. and Bawa, D. B. (2008). Socioeconomic Determinants of Youths Involvement in Agricultural Activities in Askira-uba Local Government Area of Borno state. Proceedings of the 17th Annual Conference of Nigeria Rural Sociological Association held at National Root Research Institute, Umudike 19th 22nd August. 2008. 15-21.
- Kimaro, P. J., Towo, N. N., Moshi B. H. (2015). Determinants of Rural Youth's Participation in Agricultural Activities: The Case of Kahe East Ward in Moshi Rural District, Tanzania, *International Journal of Economics, Commerce and Management*, 3(2): 1-47.
- Kising'u J. M. (2016). Factors Influencing Youth Participation In Agricultural Value Chain Projects In Kenya: A Case Of Kathiani Subcounty, Machakos County, Kenya. A Research Project Report Submitted in Partial Fulfilment of the Requirements for the Award of Degree of Master of Arts in Project Planning and Management of the University of Nairobi, pp. 80
- Kwenye, J. M. and Sichone T. (2018). Rural Youth Participation in Agriculture in Zambia, Journal of Agricultural Extension, 22(2): 51-61, https://dx.doi.org/10.4314/jae.v22i2.5
- Nwaogwugwu O.N, Obele K.N (2017). Factors Limiting Youth Participation In Agriculture-Based Livelihoods in Eleme

- Local Government Area of the Niger Delta, Nigeria, *Scientia Agriculturae*, 17 (3): 105-111
- Nwaogwugwu, O. N. and Obele, K. N. (2017). Factors limiting youth participation in agriculture-based livelihoods in Eleme Local Government area of the Niger Delta, Nigeria, *Scientia Agriculturae*, 17(3), 105-111.
- Ommani, M. A. (2011). Assessment the Socioeconomic Factors Affecting Rural Youth Attitude to Occupation in Agricultural (Case of Kohgiluyeh and Boyer- Ahmad Province, Iran). International. Journal of Agriculture Management and Development, 1(1), 15-19.
- Sunday B.A., Inimfon V. P., Samuel U. J., Damian I. A. (2015). Determinants of Decision and Participation of Rural Youth in Agricultural Production: A Case Study of Youth in Southern Region of Nigeria.Russian Journal of Agricultural and Socioeconomic Sciences (RJOAS), 7(43): 35-48, DOI: http://dx.doi.org/10.18551/rjoas.2015-07.05
- Tijani, A. S., Eforuoku F. (2016). Determinants of Participation in Youth-in-Agriculture Programme in Ondo State, Nigeria, *Journal of Agricultural Extension*, 20(2): 104-117, http://dx.doi.org/10.4314/jae.v20i2.8