Determinants of Youth Participation in Agribusiness: Evidence from Osun State, Nigeria

Alabi, D.L., M. Famakinwa* and A.S. Ogunmokun

Department of Agricultural Extension and Rural Development,
Obafemi Awolowo University, Ile-Ife, Nigeria

*Corresponding author e-mail: *mfamakinwa@oauife.edu.ng*

Abstract

The study was focused on determinants of youth participation in agribusinesses in Osun State, Nigeria. Quantitative data were collected from 150 respondents through the use of questionnaires across the study area. Data collected were analysed through descriptive and inferential statistics. Results revealed that more than half of the youths were male and the majority were single and low-income earners. Youths engaged in multiple agribusiness enterprises where they participated most in marketing of agricultural products and arable crop production. More than half (58%) of the youth had a favourable disposition towards agribusiness activities. The study also revealed that the respondents faced several constraints that limit their participation. The result showed that income (β =0.474), years of experience (β = 0.256), gender (β=0.198) and attitude (β=0.219) were the determinants of youth participation in agribusiness. The study concluded that majority of respondents were involved in agribusiness activities for less than 8 hours daily. To enhance sustainable youth participation in agribusiness activities and reduce unemployment, youths should be supported through creation of enabling environment, formulation of favourable policies and provision of infrastructure. Also, they should be encouraged with the provision of institutional supports such as provision of credit facilities and capacity building to make agribusiness more attractive to youths to reduce high rate of unemployment among youths in Nigeria.

Keywords: Agribusiness, attitude, youth, socio-economics, sustainable development, constraints

Introduction

The United Nations cited in High Level Panel of Experts on Food Security and Nutrition (HLPE) (2021) regarded youth as a person whose age falls between 15 – 24 years, while the World Health Organization (WHO) (2019) describes youth as a person between the age of 10 and 24 years. It is a period of transition to adulthood independence from the dependence of childhood. Bahaman *et al.* (2010) refers to youth as men and women that are young with an abundance of energy and strength both mentally and physically. According to African Youth Charter (2006), youths comprise all young male and female citizens aged between 15-35 years. Africa Economic Outlook (2012) estimated about 364 million Africans to be between the ages of 15-35, and projected that by the year 2045, the number of African youths is expected to double, with an estimated 10-12 million new young workers seeking employment every year. Urbanization with delayed industrialization will lead to growth in the number of jobless people with 60% of unemployed Africans being young adults (Alliance for a Green Revolution in Africa (AGRA), 2015). This expectation may be because African youths are well educated but many lack business skills. They constitute the major resource base for meaningful agricultural and rural development in the continent.

Sanginga (2015) also reiterated that Africa has the largest proportion of the youngest population in the world and each year about 10-12 million young people seek to enter the continent's workforce without significant success. The alarming statistics of youth unemployment in Africa reflect the magnitude of the problem across the continent. It is the most challenging socio-economic problem confronting Nigeria. According to Nigerian

Bureau of Statistics (NBS) (2019), about 34% of the Nigerian population are youths with around 64 million and 1.6 million of them unemployed and under-employed. Ojo *et al.* (2014) and Obot *et al.* (2022) affirmed that the aftermath effects of this high rate of unemployment among the youth in Nigeria were the increase in youth migration, terrorism, cultism, kidnapping, prostitution, and cyber fraud, among others. It is believed that increased youth employment could play an essential role in addressing these problems. This observation reveals the great challenge youth unemployment poses to the Nigerian economy but also serves as an eye-opener in realising the opportunity for youths to become the engine for driving new agriculture and agribusiness enterprises as well as rural transformation.

Alabi and Famakinwa (2016) asserted that youth possess innovative proneness as one of their special qualities while HLPE (2021) indicated that youth are agents of change and are supposed to be in front in a sustainable food system; the rate of unemployment among the youth is three times higher than that of adults all over the world particularly in Nigeria. This is because they lack knowledge that agricultural production is a profitable venture. Besides, youth are not interested in agriculture because it has not been seen to be able to deliver the types of dividends, status and lifestyles that youths desire and expect (Udemezue, 2019). However, Ikenwa *et al.* (2017), and Success and Munonye (2017) opined that the only way of transforming the Nigerian agricultural sector into an agribusiness model and creating sustainability in agribusiness development is through increased youth engagement in agribusiness activities. According to Investopedia (2023), agribusiness is a business of agriculture that covers all aspects of agricultural enterprises which include production, processing, distribution and marketing of agricultural products. It also focuses on the entire value chain activities of the food system starting from inputs supply, production, processing, marketing and distribution of agricultural products. In this study, agribusiness is conceptualized as all agricultural related that youth can engage in as a means of livelihood. These include on-farm activities like arable crop production, rearing of poultry and fishery production; off-farm activities such as agro-processing, value addition and sales of agricultural products; and lastly non-farm activities which include supply and sales of agricultural inputs like fertilizers and agrochemicals.

Rural transformation requires that new and profitable ventures be initiated with the available proven models for rapid youth engagement in agribusiness enterprises (AGRA, 2015). It is crucial to support job creation in food-related service, processing and other agribusiness activities. With a more vibrant entrepreneurial culture, new skills and access to capital, young people should be able to create their jobs. Re-engaging youth in agriculture also requires addressing limited access to resources, inadequate access to financial services; limited access to markets and low levels of involvement in decision-making processes (Brussels Policy Briefing, 2017).

World Bank (2019) has identified the agricultural sector as the only sector that possess the needed capacity to provide employment opportunities to the youth in the areas of agribusiness and value chain activities. Youth participation in agribusiness activities will enhance sustainable livelihood, mitigate the high rate of unemployment among youth, as well as reduce the crime rate. However, the low participation of young people in agriculture and agricultural-related activities is a threat to the future of agriculture, food security, succession, and economic transformation in Nigeria because most of the farmers that engage in agricultural activities are ageing (Adisa *et al.* 2017 and Ayodele *et al.* 2020) and the younger generation needed to replace them to ensure maximum agricultural production to meet its ever-increasing demand for food security are not interested. For this to take place, agribusiness must be made attractive to youth who are always ready and willing to exploit innovations and opportunities. Despite worrying accounts about the lack of youth interest in agriculture and the high rate of youth unemployment, there is a dearth of empirical evidence on determinants of youth participation in agribusiness. Hence, this study was designed to fill the existing research gap by identifying

the factors influencing youth participation in agribusiness activities with a view to reducing ever-increasing youth unemployment among youths in Osun State Nigeria. The study profiled socio-economic characteristics of youths that are participating in agribusiness activities in the study area; identified the types of agribusiness activities; examined their attitude towards agribusiness activities; determined the level of youth participation in agribusiness activities; and identified the constraints limiting youth participation in agribusiness activities.

Materials and Method

Sampling and Sampling Procedure

The study was carried out in Osun State, Nigeria. The population for the study are youths that engage in agribusiness. A multistage sampling procedure was adopted for the sample. In the first stage, Osun State was purposively selected for the study because of the teeming population of youth and the history of youth participation in the past agricultural transformation agenda. At the second stage, the purposive sampling technique was used in selecting Ife administrative zone because of the presence of a large number of entrepreneurially oriented youths. Ife Administrative zone has four Local Gvernment Areas (LGAs). Namely: Ife Central, Ife East, Ife South and Ife North LGAs. The third stage involves random selection of three out of four LGAs from the zone. At the fourth stage, proportionate sampling of 15 communities across the selected LGAs. The selected communities are Ajebandele, Opa, OAU campus, Parakin, Lagere, Eleweran, Aba Iya Gani, Ede Road, Tonkere, Aserifa, Akinola, Erefe, Moro, Iptetumodu, Ajegunle and Mayfare. At the final stage, a simple random sampling technique was used to select 10 youths from each community, making a total of 150 respondents. A structured questionnaire was used to collect quantitative information from the respondents. Closed-ended questions were used to elicit quantitative from the respondents. IBM-SPSS statistics software version 23 was used for data processing. Percentages, means and standard deviation were used to summarise data collected while multiple Linear Regression analysis was used to determine the factors.

Measurement of Variables

The dependent variable for this study was youth participation in agribusiness activities. Youth participation was conceptualised as the number of hours spent participating in agribusiness activities per week (that is, seven days) as used by Ojubanire *et al.* (2020). The number of hours indicated by the respondents were added together to form the total participation score, which was later categorised into two using the mean participation score as low and high. Respondents with participation scores above the mean score were ranked high, and those with scores within a mean score and below were ranked low. The type of agribusiness activities was measured by asking the respondents to tick "Yes" (1 point) for participating and "No" (0 point) for not participating in various agribusiness activities. Attitude of the youth was determined by asking the respondents to respond to 12 attitudinal statements using a 5-point Likert scale ranging from Strongly agree (5 points), agree (4 points), undeciced (3 p0ints) disagree (2 points) strongly disagree (1 point) for positive statement and reverse for negative statement. The aggregate attitudinal score was categorised into two using a mean score of 47.59. Any respondent with an attitudinal score from the mean score below was regarded as unfavourable attitude while respondents with a mean score above were regarded as favourable attitude. Constraints were measured by asking the respondents to indicate problems militating against their participation in agribusiness using a three-point scale of not a problem (0 point), minor problem (1 point) and major problem (2 points).

Results and Discussion

Socio-economic characteristics of respondents

Results in Table 1 show that almost half (48.7%) of the respondents were between the age of 21 years and 25 years, with a mean age of 25 ± 4.76 years. The finding suggests that the majority of the youth were in their productive age when their energies could be harnessed and utilized for productive ventures in agribusiness enterprises. Above half (56%) were male while 44% were female. This concurs with the previous findings of Thomas and Eforuoku (2016) and Ayinde

Table 1: Socio-economic characteristics of respondents (n=150)

Variables	Frequency	%	Mean	S.D
Age (years)				
≤ 20.00	23	15.3		
21.00 - 25.00	73	48.7	24.85	4.76
26.00 - 30.00	33	22.0		
31.00 ≥	21	14.0		
Sex				
Male	84	56.0		
Female	66	44.0		
Marital status				
Single	111	74.0		
Married	39	26.0		
Years of residence				
≤ 10.00	80	53.3		
11.00 - 20.00	35	23.3		
21.00 - 30.00	29	19.3		
31.00 ≥	6	4.0		
Indigenous status				
Non indigene	85	56.7		
Indigene	65	43.3		
Educational level				
Primary education	2	1.3		
Secondary education	20	13.3		
Technical education	18	12.0		
Tertiary education	110	73.3		
Years of education				
≤6 years	2	1.4		
7-12 years	38	25.3	15.3	2.4
≥ 13	110	73.3		
Monthly income (₦) (US $1 = N 520) exchange rate				
< 30000	58	38.7		
30000 60,000	72	48	31,300.33	11.920.08
> 60000	2	1.3		
Years of experience				
< 5	102	68		
5-10	37	24.7	4.8	1.9
>10	11	7.3		

Table 1: Socio-economic characteristics .....

Variables	Frequency	%	Mean	S.D
Form of participation.				
Apprentice	20	13.3		
Employee		18	12.0	
self-employed	91	60.7		
Employer	21	14.0		

et al. (2020) who reported male dominance of youth in agriculture. However, with the recent gender awareness programmes on agribusiness, there has been an increase in the participation of females in agribusiness. The majority (74%) of the respondents were single, this is because singles have little or no family responsibilities and can concentrate on the enterprise without any distractions. This is in line with the findings of Mibey (2015) and Enugwu *et al.* (2022) who reported that a larger percentage of youth that engaged in agribusiness were singles. Results also show that the mean years of residence was 12.8 ± 8.7 years showing that respondents have been living in the study area for a long time. Also, more than half (56.7%) of the respondents were non-indigenes while 43.3 percent were indigenes. All (100%) of the respondents had one form of education or the other with a mean of 15.1 ± 2.4 years of formal education. It is obvious that most respondents have high educational qualifications and ultimately there is a high level of literacy among the youths in the study area. This result implies that the respondents stand better chances of accessing agribusiness information. This is based on the submission of Bezu *et al.* (2014) that education improves youths' access to information about opportunities outside of their immediate surroundings, thus raising expectations and encouraging youths to explore these opportunities. At N520 Nigerian Naira (NGN) to $1 United State Dollar (USD), respondents realised a mean monthly income of $60.19 ± $22.92 (N 31,300 ± N 11,920) from agribusiness enterprises. Although this result indicated that youth earned more than the national minimum wage of N 30,000 per month, this income is still low. This finding is in line with the report of Alabi and Famakinwa (2016) which established that the majority of youth agripreneurs are low-income earners but contradicts the findings of Enugwu *et al.* (2022) that youth earned better income from agribusiness that make it to provide better alternative to white collar job. This is an implication that there is a need for scaling up the income potentials of agribusinesses by the policymakers to make them more attractive to unemployed youths. The majority (68%) had less than 5 years of experience in agribusiness with a mean year of experience of 4.8±1.9 years, indicating that respondents were relatively new in the business. Experience is a form of human capital through which an individual could acquire skills to make managerial sound decisions that can affect his enterprise. The low experience of the respondents in agribusiness may have serious implications on their ability to make sound decisions as regards resource allocation and management of their agribusiness enterprises. This contradicts the findings of Enugwu *et al.* (2022) who established that the mean years of experience in agribusiness activities was 11 years. The results also show that most respondents participated in agribusiness activities as self-employed youth (60.7%), followed by employers (14%), apprentices (13.3%) and employees (12.0%). This suggests that the majority of youth were owners of the agribusiness enterprises.

Types of agribusiness activities

The results in Table 2 show that youths participated in multiple agribusiness activities, participation in the marketing of agricultural products (50%) taking the lead, this might be because it is less strenuous and requires less capital with a high rate of returns, this is in line with the submission of Enugwu *et al.* (2022) and Mulema *et al.* (2021) who reported that many of the youth in their studies engaged in sales of agricultural products. This is followed

by arable crop production (35.3%), processing of agricultural produce (32.7%), packaging of agricultural products (32%), poultry production (31.3%), and fishery and aquaculture production (28.7%) among others. It is evident from this observation that off-farm agribusiness activities are more popular among the youth in the study area than on-farm activities like livestock and cash crops production, which might be due to lack of access to productive resources (land and capital) and high risk involved in primary production activities. The finding implies that the agricultural sector of the economy has a lot of agribusiness opportunities that could absorb the teeming population of unemployed youths if well-focused by the three tiers of government in Nigeria. This is similar to the submission of Nwaogwugwu and Obele (2017) and Enugwu *et al.* (2022) who reported that crop production, agricultural marketing, livestock farming and processing were the dominant agribusiness activities among youth in Nigeria.

4.57), and youth participation in agribusiness will increase agricultural productivity (mean = 4.51) while the respondents disagreed with the following negative statements: agribusiness does not benefit youths (mean = 4.44), agribusiness is not for the youths (mean = 4.37), and agreed with agribusiness is a lucrative business (mean = 4.05), agribusiness strengthens the link between agricultural stakeholders (mean=3.93), they disagree that agribusiness cannot increase the standard of living of participants (mean = 4.03). Furthermore, Table 5 reveals that the respondents strongly disagreed that there is no steady employment in agribusiness (mean = 3.77), they disagree that agribusiness is concentrated in agrarian communities (mean = 2.61), they agreed that most of the agribusiness is capital intensive (mean = 1.74). It is evident from this finding that the majority of the respondents had a positive disposition that agricultural entrepreneurial activities can provide steady job opportunities, reduce poverty, provide a

Table 2: Type of agribusiness activities (n=150)

*Agribusiness activities	Frequency	Percentage
Marketing of agricultural products	75	50.0
Arable crop production	53	35.3
Processing of agricultural products	49	32.7
Packaging of agricultural products	48	32.0
Poultry	47	31.3
Fishery and aquaculture	43	28.7
Cash crop production	33	22.0
Sales of agricultural input	26	17.3
Sheep and goat	18	12.0
Piggery	17	11.3
Cattle production	7	4.7

** Multiple responses*

Attitude of Youths towards agribusiness activities

Results in Table 3 reveal that respondents strongly agreed with the following positive attitudinal statement that agribusiness can help reduce the rate of unemployment (mean=4.74) agribusiness activities is a way to reduce poverty and hunger (mean = 4.69), agribusiness can solve the problem of food shortage (mean = stable income for them as well as a reduction in food insecurity as reported by Mulema *et al.* (2021). Evidence in Figure 1 shows that a larger proportion (58%) of the youth had a favourable attitude towards agribusiness activities while 42 percent indicated an unfavourable attitude. The fact that a larger percentage of the youth had a positive disposition to agribusiness activities suggests that there is high potential

in agribusiness activities in providing job opportunities and stable income as well as reducing food insecurity if they can be harnessed by relevant stakeholders and government to sustain the interest of the youth through the creation of enabling environment and building their capacity building. This is similar to the findings Mulema *et al.* (2021) who submitted that the majority of youths in Zambia had a positive disposition that the agricultural sector had high potential in contributing to their livelihoods but contradict the findings of Udemezue (2019) that the majority of the youth in In Africa had an indecisive attitude to agricultural sectors.

Youth Participation in agribusiness activities

Youth participation in agribusiness activities was measured as the number of hours youth spent in agribusiness activities. Results in Table 4 indicated majority (72.7%) of the respondents spent between 21 to 60 hours per week in agribusiness activities with a mean participating hour of 47.1 ± 19.7, which translated to 6.7 ± 2.8 hours per day. This implies that the majority of the respondents spent less than 8 hours in agribusiness activities per day that is, they were participating in agribusiness activities on a part-time basis. It can be deduced that although many of the youths in agribusiness activities were owners of their businesses they engaged in it on a part-time basis, implying that they could be engaging in other livelihood and income-generating activities. This conforms to the findings of Kising'U (2016) who reported that the majority of the respondents did not consider agricultural value chain as a full-time occupation but contradicts the findings of Mulema *et al.* (2021) who reported that the majority of the youth who engaged in agribusiness activities in Zambia and Vietnam took them as their primary occupations.

Table 3: The attitude of youths towards agribusiness activities

Variables	Ranked mean
Agribusiness can help reduce the rate of unemployment	4.74
Agribusiness activities are a way to reduce poverty and hunger	4.69
Agribusiness can solve the problem of food shortage	4.57
Youth participation in agribusiness will increase agricultural productivity	4.51
Agribusiness does not benefit youths	4.44
Agribusiness is not for the youths	4.37
Agribusiness is a lucrative business	4.05
Agribusiness cannot increase the standard of living of participants	4.03
Agribusiness strengthens the link between agricultural stakeholders	3.93
There is no steady employment in agribusiness	3.77
Agribusiness is concentrated in agrarian communities	2.61
Agribusiness is capital intensive	1.74

Scale of measurement: Strongly agree=5, agree=4, undecided=3, disagree=2and strongly disagree= 1

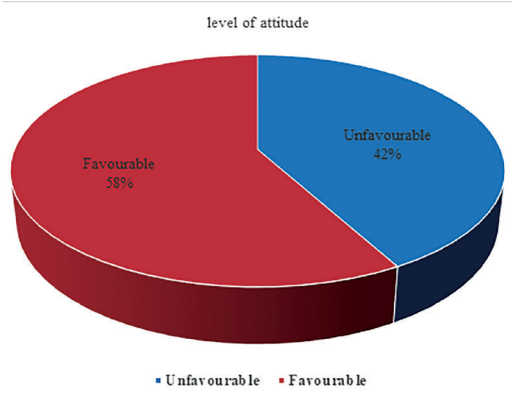

Figure 1: Level of attitude of youth towards participation in agribusiness activities

Constraints Associated with youth participation in agribusinesses activities

Results in Table 5 show that lack of credit

Table 4: Youth participation in agribusiness

Hours of Participation	Frequency	Percentage	Central tendency
≤ 20	2	4	
21 – 40	48	32	47.1 ± 19.7
41 – 60	61	40.7	
< 60	35	23.3	

facilities (mean = 1.85) was the prime constraint facing youth participation in agribusiness activities, this is because youths are poor and do not have access to credit facilities to invest in agribusiness because many of them depend on their saving as a main source of credits. This conforms to the reports of Mulema *et al.* (2021) that lack of access to credits was a prime limiting challenge to youth participation in agribusiness in Nigeria and Zambia respectively. The high cost of transportation (mean = 1.66) is another major constraint due to the poor condition of rural roads linking many farms and villages where most agribusiness activities take place to urban centres, which make it difficult for transporting agricultural products. This is similar to the finding of Thomas and Eforuoku (2016) who identified poor transportation as one of the major problems confronting youth participation in processing enterprise. Lack of storage facilities (mean = 1.65) is also considered since most of the agricultural products are perishable. Other major constraints include the unavailability of required technology (mean = 1.64), lack of proper policy (mean = 1.61), lack of adequate technology (mean = 1.60) and poor access to extension services (mean=1.58) among others. It is evident that all these major challenges centred

Table 5: Constraints affecting youth participation in agribusiness activities (n=150)

Constraints	Mean	Remark
Lack of credit facilities	1.85	Major
High cost of transportation	1.66	Major
Lack of storage facilities	1.65	Major
Unavailability of required technology	1.64	Major
Lack of proper policies	1.61	Major
Lack of adequate technology	1.60	Major
Poor access to extension services	1.58	Major
Poor transport amenities	1.58	Major
High cost of inputs	1.56	Major
The uncaring attitude of the government to agribusiness	1.55	Major
Poor land tenure system	1.51	Major
Inadequate government support for youth entrepreneurs	1.50	Major
High cost of labour	1.47	Minor
Lack of irrigation facilities	1.45	Minor
Preference for imported goods	1.44	Minor
Unavailability of market	1.41	Minor
High rate of corruption	1.31	Minor
Low level of education	1.19	Minor
Bad foreign trade policy	1.18	Minor
Low level of external orientation	1.05	Minor

Scale of measurement: Major constraint (2 points), minor constraint (1 point) and not a constraint (0 point)

around access to institutional support, access to appropriate technology, availability of the right knowledge, access to production resources and lack of infrastructure; their absence is very critical to youth engagement in agribusiness. This is similar to the findings of Enugwu *et al.* (2022) and Geza *et al.* (2021) that repoted that youth participation in agribusiness were mostly constrained by institutional problems, inadequate appropriate techonologies, and lack of access to information. Hence, these identified constraints should be addressed by relevant government agencies and other stakeholders to promote the optimum participation of youth in agribusiness activities.

Determinants of youth participation in agribusiness activities

To determine the variables that best-predicted youth participation, multiple linear regression analysis was carried out as shown in Table 6. The result indicates that only four variables, namely gender (β=0.198; $p<0.05$), years of experience (β=0.256; $p<0.01$), income (β =0.474, $p<0.01$) and attitude of youth (β=0.219; $P<0.05$) positively and significantly contributed to the youth participation in agribusiness activities, hence, they were the determinants in predicting youth participation in agribusiness the study area. Based on the regression co-efficient, income is the main predictor of youth participation in agribusiness activities Also, the observed F-ratio of 162.27 is significant ($P<0.01$) indicating that the effectiveness of a combination of the predictor variables in predicting youth participation in agribusiness activities and could not therefore have occurred by chance. The result also revealed the R^2 value is 0.348%, this indicates that the independent variables in the regression model explain 34.8% of the contribution to the dependent variable.

This suggests that an increase in the years of experience in agribusiness and an increase in the income realized from the enterprises would lead to high youth participation in agribusiness activities. This suggests that income realised from agribusiness and other sources is a driving force of youth participation in agribusiness activities, this is in line with the findings of Enugwu *et al.* (2022) who reported that monthly income determined youth participation in agribusiness activities in Nigeria. Besides, gender and attitude of the youth towards agribusiness activities predicted youth participation in agribusiness activities. Sex could be due to the prevailing socio-cultural values and norms in the study area that attach more roles to the male gender in agriculture than females. This is similar to the findings of Kimaro *et al.* (2015) that gender significantly contributed to rural youth's participation in agricultural activities. Similarly, a favourable attitude of youth could translate to a high level of participation among the respondents, this concurs with the submission of Thomas and Eforuoku (2016), which found that the attitude of youth significantly influenced youth participation in agriculture.

Table 6: Determinants of youth participation in agribusiness activities

Variable	Beta coefficient	T	p-value
Age of respondents	0.026	0.894	0.348
Sex	0.198	1.779*	0.021
Marital status	0.032	0.512	0.614
Years of experience	0.256	2.477**	0.000
Monthly Income	0.474	2.296**	0.000
Attitude	0.219	2.016*	0.035
Constraints	0.134	1.166	0.112
Constant		9.266	0.001

** Significant at p<0.05; ** significant at p<0.0, R=0.590; R-squared=0.348; F = 162.27, P=0.000*

Conclusions and recommendations

Based on the findings of this study, it was concluded that majority of the youth participated in agribusiness for less than eight hours daily. In addition, years of experience, sex, income and attitude of youths are significant predictors indicating that youth start to participate in agribusiness when they are forced by the urgent need to raise income for their survival; and when they have better access to productive resources such as capital/property, land and credits and favourable disposition to participation in agribusiness activities. It could also be deduced that more than half the youth had positive disposition to agribusiness activities. It is therefore recommended that to enhance sustainable youth interest and participation in agribusiness activities and reduce unemployment among youths, youths should be supported through creation of enabling environment, formulation of favourable policies and provision of infrastructure (especially storage and processing facilities, good roads and appropriate technologies) by relevant stakeholders. Besides, the provision of institutional support such as functional credits facilities and capacity building to enhance their participation, extension and advisory services should be improved through better funding of extension organisations and employment of more extension workers to make agribusiness more attractive to youths and to reduce the high rate of unemployment among the youths in Nigeria.

Conflict of Interest

The authors declared no conflicts of interest concerning the research, authorship and publication of this article.

Author Contributions

The first author took the lead in conceptualisation, research design, instrument development, methodology and writing the manuscript while the corresponding author was involved in data analysis, data management, interpretation and co-writing of the manuscript while the last author was involved in data collection and manuscript preparation.

Funding

The authors received no financial support for the research of this article.

Data Availability

All data are available in the main text or in the supporting materials, whereas raw data can be obtained from the corresponding author upon request.

References

Adisa, B.O., Ojerinde, O.A. & Famakinwa, M. (2017). Factors Influencing Youths'utilization of Underutilized Indigenous Vegetable Innovations as a Livelihood Strategy in Southwestern Nigeria. Tropical Agricultural Research and Extension 20(3 & 4), 105 – 11.

Africa Economic Outlook. (2012). Promoting Youth Employment. Retrieved from www.africaneconomicoutlook.org/en

African Youth Charter, (2006). https://www.youthpolicy.org/wp-content/uploads/library/2006_African_Youth_Charter_Eng.pdf .

Alabi, D.L., & Famakinwa, M. (2016). Assessment of Financial Resource Allocation of rural youth Entrepreneurs in Osun State, Nigeria. Proceedings of the 13th International Research and Development Network of Children and Youth in Agriculture Programme in Nigeria (CYIAP network), pp. 8-17.

Alliance for a Green Revolution in Africa (AGRA), (2015). Africa Agriculture Status Report: Youth in agriculture in Sub-Saharan Africa. Nairobi, Kenya. Issue No. 3.

Ayinde, J.O., Famakinwa, M., & Akeredolu, B.O., (2020). Youths' Involvement in Oil Palm (Elaeis guineensis) Fruit Processing Activities. Cercetări Agronomice in Moldova 53(4) (184) / 384-399.

Ayodele, O.O., Aboaba, K.O. & Oladeji, S.O., & Tolorunju, E. T. (2020). Factors affecting productivity and intensity of market participation of leafy vegetable growers. International Journal of Vegetable Science, 27(1), 96–101. https://doi.org/10.1080/19315260.2020.1718820 .

Bahaman. A.S., Jeffrey L.S., Hayrol, A. & Jegak, U. (2010). Acceptance, Attitude and

knowledge Towards Agriculture Economic Activity between Rural and urban Youth: The Case of Contract Farming, *Journal of Applied Sciences*,10 (19): 2310-2315.

Bezu, S., & Holden, S. (2014). Are Rural Youth in Ethiopia Abandoning Agriculture? World Development. 64, 259–272.

Brussels Policy Briefing, (2017). Youth in Agribusiness: Shaping the future of Agriculture Organised by CTA, ACP Secretariat, European Commission (DG DEVCO), Concord, PAFO, AgriCord, 18th Development. 64, 259–272. Retrieved from http://brusselsbriefings.net

Enugwu, J.O., Ani, A.O., Anaeto, F.C., Umunakwe, P.C., Okereke-Ejiogu, E.N., Chibundu, S.N, (2022). Determinants of youths' participation in agribusiness activities in Imo State, Nigeria. *Net Journal of Agricultural Science,* 10(1): 20-29.

Geza, W., Ngidi, M., Ojo T. Adetoro, A.A. Slotow, R. & Mabhaudhi, T. (2021).Youth Participation in Agriculture: A Scoping Review. Sustainability 2021, 13, 9120. https://doi.org/10.3390/su131691

High Level Panel of Experts on Food Security and Nutrition (HLPE), (2021). Promoting youth engagement and employment in agriculture and food systems. A report by the High-Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome.

Investopedia (2023). Agribusiness Explained: What It Is, Challenges, and Examples https://www.investopedia.com/terms/a/agribusiness.asp

Ikenwa, K., Sulaimon, A. & Kuye, L.O. (2017). Transforming the Nigerian Agricultural Sector into an Agribusiness Model – the Role of Government, Business, and Society Acta Universitatis Sapientiae, Economics and Business. 5. 10.1515/auseb-2017-0005.

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,* III (2); 1-47 Retrieved from http://ijecm.co.uk/

Kising'U, M.J., (2016). Factors Influencing Youth Participation in Agricultural Value Chain Projects in Kenya: A Case of Kathiani Sub-County, Machakos County, Kenya. Published M.Sc Thesis of University of Nairobi, Kenya. Pp56.

Mibey, M.C. (2015). Factors Influencing Youth Involvement in Agribusiness Projects in Bomet Central Sub-County, Kenya. Published M.Sc Thesis of University of Nairobi, Kenya. Pp. 30.

Mulema, J., Mugambi, I., Kansiime, M., Chan, H.T., Chimalizeni, M., Pham, T.X. & Oduor. G. (2021). Barriers and opportunities for the youth engagement in agribusiness: empirical evidence from Zambia and Vietnam, Development in Practice, 31:5, 690-706, DOI: 10.1080/09614524.2021.191194

Nigerian Bureau of Statistics (NBS), (2019). Unemployment and underemployment by state; Quarter 3, 2018 Report. Abuja, Nigeria: National Bureau of Statistics

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. *Journal of Scientia Agriculture* 17 (3): 105-111.

Obot, A., Antiaobong, E. & Agube, E. (2022). Determinants of Youths Participation in Agribusiness in Akwa Ibom State, *Nigeria. International Journal of Pure Agricultural Advances,* 6(1): 1-8.

Ojo, L.B., Abayomi, A.A., & Odozi, A.F. (2014). Entrepreneurship education: A viable tool for youth empowerment in Nigeria. Academic *Journal of Interdisciplinary Studies*, 3(4), 11–20.

Ojubanire, M.O., Deji, O.F. & Famakinwa, M., (2020). Involvement of Rural Secondary School Students in Vocational Activities in Ondo State, Nigeria. Annals of Child and Youth Studies 10(1):126-134.

Sanginga, N. (2015). Youth in Agribusiness within an African Agricultural Transformation Agenda. IITA.Feeding Africa. Retrieved from https://www.afdb.org/fileadmin/uploads/afdb/Documents/Events/DakAgri2015/Youth_inAgribusiness_within_an_African_

Agricultural_Transformation_Agenda.pdf .

Success, E. & Munonye, J.O. (2017). Sustainability and Agribusiness Development in Nigeria. *Journal of Culture, Society and Development,* 7(2): 40-44

Thomas, K.A., & Eforuoku, F., (2016). Determinants of Participation in Youth-in-Agriculture Programme in Ondo State, Nigeria. *Journal of Agricultural Extension* 20(2):106-117.

Udemezue, J.C. (2019). Agriculture for all; Constraints to youth participation in Africa. Curr Invest Res, 7(2). Doi:10.32474/ CIACR.2019.07.000256.

World Bank, (2019). Youth employment in Sub-Saharan Africa. Washington, DC, USA.