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ORIGINAL ARTICLE

CONSTRAINTS TO YOUTH PARTICIPATION IN ARABLE CROP FARMING ACTIVITIES IN AJAOKUTA LOCAL GOVERNMENT AREA, KOGI STATE, NIGERIA

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Abstract

The study analyzed the constraints to youth participation in arable crop farming activities in Ajaokuta Local Government Area of Kogi State. The specific objectives of the study were to describe the socioeconomic characteristics of the youths in the study area, ascertain the predominant arable crop farming activities that youths participate in and identify the constraints to youth participation in arable crop farming activities in the study area. Multi-stage sampling procedure was used, to select a sample size of 100 respondents. Data were collected with the use of structured questionnaire. Percentages, mean and frequency were used in data analysis. The results of the study showed that 57.0 per cent of the respondents were females, 36.0 per cent were between 26 and 30yrs; 35.0 per cent were singles, 43.0 per cent had secondary education, 39 per cent have trading as their primary occupation and 52.0 per cent have their income level between ₦51,000 and ₦100,000. The predominant arable crop farming activities among youths in the study area include weeding, harvesting, bush burning, site clearing, marketing of farm produce, processing of farm produce and making of ridges. The constraints to youth participation in arable crop farming activities are poor agricultural credit facilities ($\bar{x}$ = 3.10), poor attitude towards farming ($\bar{x}$ = 2.93), poor infrastructural facilities ($\bar{x}$ = 3.33), poor marketing structure ($\bar{x}$ = 2.91) and inadequate income from arable crop farming ($\bar{x}$ = 3.13). It was concluded that youth participation in arable crop farming activities in the study area was minimal. It was also recommended that adequate incentives and encouragement should be provided by the government to enhance youth participation in arable crop farming activities in the study area.

Key words: Agriculture, food production, livelihood, predominant crops, agricultural entrepreneurs

Introduction

Agriculture is an important sector of the Nigerian rural economy with high potentials for employment generation, food security and poverty eradication. The sector accounted for 41.8 per cent of the overall economy in 2006, followed by the non-oil industry (26.1%) while the crude oil only accounted for 21.9% (CBN, 2006). It is a general believe that agriculture is growing at a slower rate than the Nigerian population yet, it is considered dominant in Nigerian economic growth, because it will continue to contribute to the Gross Domestic Profit (GDP) for many years to come (World Bank, 2004). That Nigeria is still grappling with fundamental issues of food security and sustainable agriculture on a land mass that is about 80% arable is indefensible. According to Sowunmi and Akintola (2010), crop production alone contributes 85% to Nigeria's agricultural GDP. More than 90% of the agricultural output is accounted for by arable crop farmers with less than two hectares under cropping. It is estimated that about 75% (68 million hectares) of the total land area has potential for agricultural activities with about 33 million hectares under cultivation. Over the years, Nigeria has devoted large hectarage to the cultivation of arable crops, however, productivity has remained low, a phenomenon that has entangled the farmers in a vicious circle of poverty. Majority of the population in sub-Saharan African countries like Nigeria, live in rural areas and depend on arable crop production as their major source of livelihoods (Nwaogwugwu, 2017). Arable farming entails the production of wide range of food crops or annual crops. This entails crops whose life cycle is within one year, from germination to seed production and maturity. Arable crops include yam, maize, cocoyam, cassava, among others and these food crops constitute the staples in Nigeria.

The increase in food prices and food insecurity in various homes is not unconnected with the challenges facing arable crop production in the rural areas. Arable farming is central to ensuring food security; it provides job and livelihood for part of the populations in developing and emerging countries economies like Nigeria and it offers a channel especially, for arable crop farmers to escape poverty and increase income above subsistence levels (Dauda et al., 2015). Some arable crops are grown as forages for grazing animals rather than for grain. These include cereals such as oats and maize, and brassica, turnips, rape and kale. Other arable crops, such as potatoes, carrots and broccoli, are grown as vegetables for human consumption. In the past, arable crops like sugar beet have been used as biofuels. This application may become more important in the future, with renewed interest in alternative fuels. According to Marjanovic (2019), arable farms generally develop a crop rotation system, which help to control specific weeds, pests and diseases that are associated with particular crops. It also provides environmental benefits, such as improving the structure of the soil by sowing pasture, or increasing soil nitrogen levels by growing legume crops. Arable crop farming is subjected to various challenges ranging from scarcity of land and poor soil fertility, natural hazards, soil degradation, pests infestation and diseases, variations in rainfall and temperature, the use of obsolete cultural practices, scanty plant stands, poor weed control, non-usage of fertilizer, organic manures and other improved agricultural inputs including the management of the crop under degraded soil condition, among others. (Oni, 2019).

The reliance on agriculture for food production and food security at domestic, regional and global levels, depends on youth productive force. This is the generation which is expected to rise in the coming years for food production and food security (Proctor and Lucchese, 2012). Also, the contribution of agriculture to farmers' income and rural development, depends on the active participation of youths who are the potential labour force. They are characterized by innovative behaviour, minimal risk aversion, less fear of failure, less conservativeness, greater physical strength and greater knowledge acquisition propensity (Umeh and Odom, 2011). In many countries, youth integration in agricultural activities is important for the development of agricultural sector. This is because youth have the potential to overcome some major constraints in agriculture development because they are amenable to new ideas and practices than adult farmers (Babayemi and Dauda, 2009).

Nigeria's government has attempted to stimulate youth interest in agriculture since 1960s, through the introduction of agriculture as a core curricular subject in schools. This was intended to inculcate the positive attitude in youths toward agriculture as well as preparing them for rural life. Youths were directly involved in farming activities through planting, weeding, livestock keeping and harvesting. Though youth have desirable qualities that can promote agriculture, most of them have strong apathy towards it. This has resulted in mass unemployment and lack of sustainable livelihood among youth. With fewer youth into agriculture, the long-term future of agriculture sector is in question (Chikezie et al. 2012). Young people living in rural areas are forced to migrate to cities because they do not find enough incentives, profitable economic opportunities and attractive environments in rural areas. Poor policies coupled with poor performance of the sector itself have led to youths' disinterest in agriculture sector, despite its potential opportunities. Also, lack of rural credit, unemployment, rural poverty, weak profitability of the sector and capacity constraints are perceived to be the factors which hinder youth participation in agricultural activities in rural areas (Akpan, 2010). In view of the above background, this study was conducted to describe the socio-economic characteristics of youths, ascertain the predominant arable crop farming activities youths participate, and identify the constraints to youth participation in arable crop farming activities in the study area.

Methodology

The study was conducted in Ajaokuta Local Government Area of Kogi State, Nigeria. It is situated between latitude 7^0 33' 44.24^0North and longitude $6^0$39' 17.89^0 East. Ajaokuta Local Government Area is bounded in the North East by Lokoja Local Government Area, Bassa Local Government Area in the North West, Ofu Local Government Area in the East and South West by Okene and Adavi Local Government Areas, respectively.

The headquarters of Ajaokuta Local Government Area is in Ajaokuta native town, it has a land area of 1,362km^2 (526 sqm) and a total population of 122,321 (NBS, 2006). The major occupation in the study area is farming with maize and cassava as the predominant crops. The population of the study comprised all the youths involved in arable crop farming in Ajaokuta Local Government Area. Multi stage random sampling procedure was employed to select the sample size for the study. First stage involved a purposive selection of five communities out of the ten communities that make up Ajaokuta local government area in Kogi State which are Ganaja, Emi-woro, Jimbge, Eleite and Gida- Bassa. These five communities are majorly known for arable crop production. The second stage was the random selection of one village each from each of the five communities which are Wada, Ero, Gadumo, Geregu and Kporoko and finally a simple random selection of 20 respondents each from each of the selected villages to give a sample size of 100 respondents. The instrument used for data collection was a structured questionnaire, developed and validated by the researchers. The questionnaire was designed in two sections. Section A sought for responses on the socio-economic characteristics of the respondents. Section B was divided into two parts, Part 1 contained items on the various arable crop farming activities, while Part 2 contained cluster of items on likely constraints to youth participation in arable crop farming activities. The items in Section B was measured using Likert-type (4) point summated rating scale of agreement, where; Strongly Agree (SA) = 4, Agree (A) = 3, Disagree (D) = 2, Strongly Disagree (SD) = 1. Data analysis was done using descriptive statistical tools such as frequency, percentage and mean.

Results and Discussion

Socio-economic Characteristics of Youths in the Study Area

The results of the socio-economic characteristics of the respondents are presented on Table 1. It was revealed that majority (32.0 per cent and 36.0 per cent) were between 21 and25 years and 26 and30 years respectively. The result implies that respondents are in their active years, an advantage for providing farm labour because they could be more efficient in labour tasking jobs and have greater propensity and willingness to explore new ideas, concepts and technologies. The result is in agreement with the finding of Akpan (2015) which reported the propensity of young farmers' adoption of innovations in agriculture. The study revealed that 57.0 per cent were females and 43.0 per cent were males. This result is in accordance with the view of Chikezie et al. (2012), that gender is no barrier to active involvement in agricultural production activities. The low percentage of male youth participation in arable crop farming activities, could be attributed to the fact that males in the study area, could be involved in several other livelihood activities than farming. The result also revealed that majority (35.0 per cent) were single. Since a high percentage of the youth were single, it could be attributed to the fact that most of them are not yet married. On the household size, 60 per cent of the respondents had 1- 5 persons. This might be that the respondents are still young and relatively have few dependents. The majority of the respondents have secondary school education (about 43.0 per cent). This implies that most of the respondents have formal education necessary for predisposing and exposing them to understanding modern farming techniques, adoption of innovations and application. This finding agrees with Akpan (2010), who noted that education will likely enhance the adoption of modern farm technologies by youth and thereby sustain a strong farming population. Also, majority of the respondents (39.0 per cent and 37.0 per cent) indicated that they were into trading and farming respectively. Those engaged in civil service and artisans were 17.0 per cent and 7.0 per cent respectively. This implies that youths in the study area engage in other livelihood activities other than farming. The income distribution of respondents, revealed that majority (52 per cent) had income ranging from ₦51,000 - ₦100,000. This implies that respondents in the study area are low income earners possibly due to the fact that they still practice subsistence farming.

Predominant Arable Crop Farming Activities Youth Participate in the Study Area

Table 2 shows that weeding ranks the top most (1st) in the arable farming activities youths participated in during the study. This could be attributed to the fact that weeding as a farm activity, is central in the cropping cycle and the entire farm-family pays special attention to weed control, without which crop yield will be grossly reduced. Proper weeding will help to drastically reduce weed competition with crops for nutrients and improve the quality and quantity of farm produce at harvest. The findings showed that youths played active role in harvesting of farm produce, which was ranked 2nd. This could be attributed to the fact that harvesting of crops is a labour-intensive activity, hence the need for youths who are energetic are required to carry out this activity. Bush burning occupied the 3rd in the ranking. This result revealed that significant number of respondents engage in this practice, because they use it as a suitable and convenient means for hunting of wild animals/game. The result in Table 2 indicated that marketing of farm produce ranked 5th. This activity is done immediately after harvesting, as it helps the respondents to increase their income through selling of their farm produce. Processing of farm produce ranked 6th. Processing in rural areas is mostly carried out using indigenous methods and technologies in which the youths are socialized in. It was found out that manure/fertilizer application was ranked 7th as one of the arable farming activities carried out by the youths in the study area. This practice is carried out by the respondents to increase soil nutrient availability, decomposition of harmful elements, soil structure improvement and increased soil water availability thereby, increasing productivity. This confirms the view of Murmur et al (2013) that organic manure increases crop productivity, nitrogen utilization efficiency and soil health. The result in Table 2 also showed that respondents participated in making ridges (8th) in the ranking. This signifies that respondents have considered this activity most suitable to making mounds, because it reduces soil erosion and serves as easy access to their farm. Also, from Table 2 respondents participate in the area of harrowing ranked 9th.

Table 1: Socio-Demographic Characteristics of the Respondents

Variables	Frequency	Percentage
Age categories		
15-20yrs	18	18.0
21-25yrs	32	32.0
26-30yrs	36	36.0
31-35yrs	7	7.0
35 and above	7	7.0
Total	100	100.0
Sex		
Male	43	43.0
Female	57	57.0
Total	100	100.0
Marital status		
Single	35	35.0
Married	33	33.0
Divorced	26	26.0
Widowed	6	6.0
Total	100	100.0
Household size		
1-5	60	60.0
6-10	28	28.0
11-15	6	6.0
16-20	3	3.0
21 and above	3	3.0
Total	100	100.0
Educational level		
Non- formal education	13	13.0
Primary	10	10.0
Secondary	43	43.0
Tertiary	34	34.0
Total	100	100.0
Primary occupation Farming	37	37.0
Trading	39	39.0
Artisans	7	7.0
Civil service	17	17.0
Total	100	100.0
Level of income #20,000-#50,000	31	31.0
#51,000-#100,000	52	52.0
#110 and above	17	17.0
Total	100	100.0

Source: Field Survey, 2023

Table 2: Predominant Arable Crop Farming Activities Youth Participate in the Study Area

Variables	Percentages (%)	Rankings
Weeding	79	1st
Harvesting	72	2nd
Bush burning	71	3rd
Site clearing	68	4th
Marketing of farm produce	47	5th
Processing of farm produce	43	6th
Manuring/fertilizer application	42	7th
Making of ridges	30	8th
Harrowing	27	9th
Seed treatment	22	10th
Ploughing	21	11th
Transplanting	18	12th
Mulching	17	13th
Nursery raising	16	14th
Thinning	15	15th
Stumping	6	16th

Source: Field Survey, 2023.

Constraints to Youth Participation in Arable Crop Farming in the Study Area.

The result revealed that poor access to information and communication technology ($\bar{x}$ = 3.01) limits the involvement of youths in arable crop farming activities in the study area. Due largely to inadequacy of ICTs facilities and poor power supply, youths are not likely to access agricultural information adequately. It was revealed that inadequate income from arable crop farming (x = 3.13) discouraged youth engagement in arable farming. This result explains the unattractiveness of investment in farming due to poor returns on investment. The result further indicated that poor health status (x = 3.07) posed a constraint to youth participation in arable crop farming. This is because farming activities demand healthy and energetic individuals. It was revealed in the result that poor social values on arable crop farming (x = 3.11) constitute a constraint to youth participation in arable crop farming in the study area. This means that wrong values are placed on farming in the society. This agrees with Mangal (2009), who stressed that there is insufficient youth participation in agriculture, because it is perceived in the society as a job for the lower class, illiterates and rural people. Result in Table 3 further showed that inadequate processing and storage facilities (x = 3.24, x = 3.00) were among the constraints to youth participation in arable crop farming in the study area. The result revealed that agro-processing and storage facilities are inadequate and therefore, respondents cannot

carryout post-harvest activities for enhanced value addition. Table 3 further revealed inadequate extension services could hinder youth involvement in arable crop farming activities, since agricultural information dissemination system is a catalyst to agricultural production. This agrees with Chikezie et al. (2012) who stated that youth who have the energy to take up agricultural production, do not have the necessary knowledge, thus there is a need to educate them on the improved technologies and innovation associated with farming through adequate extension services. Poor marketing structure ($\bar{x}$ = 2.91) was found to be a constraint. This result indicated inadequate and improper linkages with agricultural marketing in the study area. Table 3 also revealed unpredictable climate changes ($\bar{x}$ =2.98). Majority of the developing countries still practice rain-fed agriculture, hence vulnerable to climate change. Climate conditions are more complex due to unpredictability and uncertainty in weather such as changes in rainfall distribution pattern. Further result on Table 3 also showed inadequate agricultural implements and equipment ($\bar{x}$ =3.07) as constraints. This result implied that most respondents lack agricultural implements and equipment needed for enhanced agricultural operations, therefore their participation in arable crop farming activities is limited. Table 3 showed poor attitude towards farming ($\bar{x}$ = 2.93). This result showed that youth attitude towards farming is poor. This agrees with Amadi (2012) that youth look down on agriculture, therefore shy away from agricultural activities because people who engage in it do not get any recognition like the vocational callings as Medicine, Engineering, and Law. Table 3 also revealed unfavourable agricultural policies in Nigeria ($\bar{x}$ = 2.82) as a constraint. Poor government agricultural policies in the study area, may not likely trigger off actively participation in agricultural activities among the youth. Result also showed farm labour shortage ($\bar{x}$ = 3.00) as a constraint. Furthermore, poor agricultural credit facilities ($\bar{x}$ = 3.10) was found to be among the constraints to youth participation in arable crop farming in the study area. This result implied that sufficient agro-credit facilities might not be provided both by private and public agencies for youth in the study area. Therefore, their participation is limited due to poor access to agro-credit. This confirms the view of Brown et al (2011) who posited that key constraints facing young people participation in agriculture include factors like; better access to credit facilities and access to affordable agricultural inputs, considering the fact that agriculture is capital intensive. The result further showed that poor pricing of farm produce ($\bar{x}$ = 2.92) was a constraint to youth participation in arable crop farming activities in the study area. The prices of farm produce fluctuate from region to region, time to time and thus, might discourage participation of youths in the study area. The result equally revealed that environmental pollution ($\bar{x}$ = 3.12), limits youth engagement in arable crop farming activities. This becomes germane in view of the increased rate of pollution due to incessant and indiscriminate dumping of sewage and refuse (dirt) going on in the study area. Also, from the result, inadequate incentives to farmers ($\bar{x}$ = 2.85) was indicated as among the constraints to youth participation in arable crop farming in the study area. This means that lack of necessary incentives like subsidized agricultural inputs, which will help farmers increase productivity are not available thereby, limiting youth participation in agricultural activities. Poor infrastructural facilities ($\bar{x}$ = 3.33) was identified as one of the constraints to youth participation in arable crop farming in the study area. Infrastructural facilities such as good rural road network, quality water supply, schools, and hospitals, that could facilitate and promote off-farm, on-farm, rural and urban linkages, have been generally poor and inadequate.

Table 3: Respondents' Rating of Constraints to Youths' participation in Arable Crop Farming Activities in the Study Area.

Variables	Mean	Remark
Access to Information and communication Technology	3.01	Accept
Inadequate income from arable crop farming	3.13	Accept
Poor health status	3.07	Accept
Poor social values attached to arable crop farming	3.11	Accept
Inadequate storage facilities	3.24	Accept
Inadequate processing facilities	3.00	Accept
Inadequate extension services	2.99	Accept
Poor marketing structure	2.91	Accept
Unpredictable climate changes	2.98	Accept
Inadequate agricultural implements and equipment	3.07	Accept
Poor attitude towards farming	2.93	Accept
Unfavourable agricultural policies	2.82	Accept
Shortage of farm labour supply	3.00	Accept
Poor agricultural credit facilities	3.10	Accept
Poor pricing of farm produce	2.92	Accept
Environmental pollution	3.12	Accept
Poor infrastructural facilities	3.33	Accept
Inadequate incentives to farmers	2.85	Accept

Source: Field survey, 2023.
Mean greater than 2.50 = Accept, Mean less than 2.50 = Reject

Conclusion

Based on the findings, it is concluded that youths participate in various arable crop farming activities in the study area. However, in their course of engagement in arable crop farming activities, they are face to several constraints spanning across pre-planting operation to post planting farming activities. Based on the findings, the following recommendations were made to encourage youth participation in arable crop farming activities in the study area. 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. Improvement should be made in the areas of rural infrastructural development, to reduce the rate of rural-urban migration of agricultural entrepreneurs (youths). 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. The use of ICTs in rural areas should be encouraged by the government, since it allows improved outreach to youth through web 2.0 related platforms such as Facebook, Twitter, Instagram, WhatsApp and Telegram. Through this, transformation of agricultural value chain and improved image of agriculture will occur. Extension staff should incorporate active youth work. Intervention strategies for youth's agricultural improvement, should be guided by their age, sex, education, household size, marital status and primary occupation. Finally, youth who are currently into agriculture, should be encouraged and honoured so that others will take in interest in agriculture.

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