

ACCESSIBILITY TO AGRICULTURAL RESOURCES AMONG MAIZE FARMERS IN
IREPODUN LOCAL GOVERNMENT AREA OF KWARA STATE, NIGERIA

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ABSTRACT

The study examined access to agricultural resources among maize farmers in Irepodun Local Government Area of Kwara State, Nigeria. A random sampling technique was used to select a sample size of one hundred and twenty (120) respondents from the list of registered maize farmers given by the Agricultural Development Programme (ADP). Data were collected through questionnaire and were analyzed using frequency counts and percentages. Pearson Product Moment Correlation (PPMC) was employed as inferential statistical tools for analyzing data with the threshold of significance at $P < 0.05$. The findings shows that majority (68.3%) of the respondents were male while majority (76.6%) of the maize farmers were in their active age bracket whereas majority (71.7%) of them were married and 65.8% had no formal education. However it was indicated that agricultural resources like machineries, credit facilities, fertilizers, storage facilities and innovations are not readily available and those that are available are not affordable by the majority of maize farmers in the study area. The result of PPMC shown positive and significant relationship between age ($r = 0.156$), household size ($r = 0.322$), and Educational status ($r = 0.147$) at $P < 0.05$ significant level while there is negative and significant relationship between farm size ($r = -0.177$) at $P < 0.05$ statistical level of significant and accessibility to agricultural resources. It was recommended that, credit facilities and inputs subsidy should made available at appropriate time by relevant government agencies and organization so as to reduce cost of production. Also, as mechanization leads to lower cost of production, government should make tractors, good storage facilities and other machineries available to maize farmers at subsidized rate. Finally, maize farmers should be encouraged to join cooperative societies so that they can pool their productive resources for large scale farming in the study area.

Key Words: Access, Agricultural Resources, Maize Farmers.

INTRODUCTION

Maize is one of the most important grains in Nigeria, not only on the basis of the number of farmers that engage in its cultivation, but also in its economic value (Olaniyi and Adewale, 2012) and this points to the significant role of maize production to sustainable development of the rural economy, food security and poverty reduction especially in rural areas of Nigeria. Maize is a staple food crop for most sub-Saharan Africans of which Nigeria is inclusive with per capital kg/year of 40 (FAOSTAT 2003). Despite the economic importance of maize to the teeming populace in Nigeria, it has not been produced to meet food and industrial needs of the country and this could be

attributed to low productivity from maize farms or farmers who have not adopted improved technologies for maize production (Onuk *et al.*, 2010).

Between 1970 and 1985, Nigerian agricultural policies have attempted to promote rural development and increase food production through more direct state intervention. Integrated rural development programs were undertaken beginning with National Accelerated Food Production Program (NAFPP) in 1972, Operation Feed the Nation (OFN) in 1976 and the Green Revolution launched in 1980. Up till 1983, subsidies on fertilizer were high; it was as high as 80 percent of the market value. Insecticides, tractor

hiring, seeds and other farm inputs were also heavily subsidized. This was due to the fact that the nation's agriculture has always been dominated by the smallholder farmers who represent a substantial proportion of the total farming population and produce over 90% of the total agricultural output in the country (Ajibefunet al, 2002). Despite all these programs introduced by the government, the rate of food production is still very low. Low productivity in the farm sector has resulted mostly from resources access problems leading to low use of internal resources and high cost of external resources such as transportation, market information, uninsured risks and so on (Gollin and Rogerson, 2012).

As urbanization changes the use of agricultural resources such as land use, farming is gradually becoming a minor occupation and certain threats are notable especially to the landless and those whose livelihood depends on agricultural production, output market, and agricultural wage market. More so, low capitalization, price fluctuation, disease and pest, poor storage facilities and inefficiency of resources utilization are the identified problem in maize production in Nigeria (Ojo, 2000).

Objectives of the study

The objective is to examine the accessibility of maize farmers to land, machineries, agro-inputs, innovation and other agricultural resources that are very important in maize production in Irepodun Local Government Area of Kwara state, Nigeria. The specific objectives were to describe the socioeconomic characteristics of the respondents, identify the respondent's source of inputs and examine the agricultural resources availability and affordability in terms of cost.

Hypothesis of the study

There is no significant relationship between the selected socio-economic characteristics of maize farmers and accessibility to agricultural resources.

METHODOLOGY

The study was conducted in Irepodun Local Government Area of Kwara State, Nigeria. Irepodun Local Government Area (LGA) was created as Igbomina/Ekiti division in 1976 which later metamorphosed into Irepodun LGA in 1986. Its headquarters is in the town of Omu Aran. It is located at latitude $8^{\circ} 13' 60''$ N and longitude $4^{\circ} 49' 0''$ E as displayed on the world map, coordinates and short location facts. It is bounded by Ifelodun LGA to the North, Osun State to the South, Ekiti and Offa to the East and West. Irepodun LGA has a vast arable land which supports the cultivation of wide varieties of crops and people in this area are mainly farmers. It has a population of about 148,610 people according to the 2006 population census and a landmass of 737km². It has great historical significance due to its vast Yoruba cultural diversity and heritage. It is populated by the Igbomina tribe. The major towns and villages in Irepodun LGA include Omu-Aran, Oro, Ajassee-ipo, Oko, Aran-Orin, Esie, Arandun, Igbo-nla, Agbamu and Agbonda. Five (5) villages in Irepodun Local Government Area of Kwara State were randomly selected for this study. The selected villages are Omu-aran, Oro, Esie, Ajassee-ipo, Oko. 120 respondents were randomly selected from the list of registered maize farmers given by the Agricultural Development Programme (ADP). Data were entered into a data bank (excel sheet) and exported to the statistical Package for Social Science (SPSS version 20.0) for data analysis. Descriptive statistics were used for data presentation and categorization. Pearson Product Moment Correlation (PPMC) was employed as inferential statistical tool to show the significant relationship between the selected maize farmers' socio economic characteristics and their access to agricultural resources in the study area.

RESULTS AND DISCUSSION

Table 1 showed the gender, age, marital status, household size, education status, farm size and years of farming experience of the respondents. Majority (68%) constituting above 2/3 of the maize farmers were male while below 1/3 (32%) were female. This finding corroborates with Odeyinka *et al.*, (2007), who stated that although it has been estimated that 50% of the food in Nigeria is produced by women, men were still found to be dominating crop production. Also (76.6%) of the farmers were within the age range of 31-60 years, only (1.7%) of the maize farmers fall below 31 years of age. This is probably because, most of the maize farmers' children usually go to city to further their education or look for other work after their secondary school instead of having their own portion of farm land to cultivate maize. More so, majority (71.7%) of the

respondents were married. The higher percentage of married maize farmers is in agreement with the views of Ekong (2002) who asserted that at 25 years and above most people are married in rural community. Besides, it implies that average farmers marry women to assist in harvesting, processing and marketing of maize. However, it was indicated that farmers with household size of 12 and above made up of 53.3% of the population size, and farmers with a household size of 3 and below made up of 5.0% of the population size. This means that most of the farmers have many farm labours which greatly reduces the cost of hiring labour and indirectly reduces the cost of production.

Table 1: Distribution of the respondents in relation to their socio-economic characteristics

Variables	N = 120 (Percentages)
Gender	
Male	82 (68.3)
Female	38 (31.7)
Age	
≤30	02 (1.7)
31-60	92 (76.6)
≥61	26 (21.7)
Marital Status	
Single	18 (15.0)
Married	86 (71.7)
Widowed	12 (10.0)
Divorced	04 (3.3)
Household Size	
≤3	06 (5.0)
4-7	10 (8.3)
8-11	40 (33.3)
≥12	64 (53.3)
Educational Status	
Primary	25 (20.8)
Secondary	12 (10.0)
Tertiary	04 (3.3)
No formal education	79 (65.8)
Farm Size	
≤1	75 (64.2)
2-4	40 (33.3)
5-7	04 (3.3)
≥8	01 (0.8)
Years of Farming Experience	
≤3	02 (1.7)
4-9	16 (13.3)
10-15	25 (20.8)
≥16	77 (64.2)

Sources: Field Survey, 2015.

Table 1 also showed that (65.8%) of the respondents had no formal education, 20.8% had primary education, and 10.0% had secondary education while 3.3% of the farmers had tertiary education. This low educational attainment among the maize farmers has a tendency for low level of technology adoption that has implication on the use of agricultural resources that will help them in increasing their productivity. This agreed with Adebawale and Lawal (2002) that farmers do not value education much because they do not see any link between high level of education and farming. 62.5% of the farmers have a farm size of one hectare and below, 33.3% of the farmers have a farm size of 2-4 hectare, 3.3% of the farmers have a farm size of 5-7 hectare while 0.80% of the farmers have a farm size of 8 hectares and above. This is in accordance with Oladele (2008) who stated that farm sizes not up to 10 hectares are the most common among rural farmers. This may be due to the subsistence nature of production among farmers. Finally, as shown in table 1, majority (77%) of the maize farmers have 16 years' experience or more in maize farming. It is of general opinion that experienced farmers would be more efficient, have a better knowledge of climatic conditions and market situations and

are thus expected to run a more efficient and profitable enterprise. 1.7% of the farmers have farming experiences of 3 years and below.

Table 2: Distribution of respondents in relation to their source of input

Variables	Frequency (%)
N=120	
Extension contact	12 (10.0)
Agro-company	4 (3.3)
Friends/neighbor	42 (35.0)
Cooperatives	8 (6.7)
Self	54 (45)

Source: Field survey, 2015.

Table 2 showed that 45.0% of the respondents acquired their input by themselves while 35.0% got their input from friends and neighbors, only 10.0%, 3.3% and 6.7% got their inputs as a result of extension contact, cooperatives and Agro-companies respectively. This findings revealed that most of the farmers have to source for their inputs themselves and they got very little help from external bodies which negatively affects their productivity.

Table 3: Distribution of the respondents in relation to agricultural resources availability and cost of these resources.

Variable	Availability			Cost		
	RA	A	NA	HA	A	NA
	F (%)	F (%)	F (%)	F (%)	F (%)	F (%)
Land	100 (83.3)	18 (15.0)	2 (1.7)	70 (58.3)	47 (39.2)	3 (2.5)
Improved seeds	5 (4.2)	95 (79.2)	95 (79.2)	3 (2.5)	50 (41.7)	67 (55.8)
Machineries	6 (5.0)	20 (16.7)	94 (78.3)	2 (1.7)	22 (18.3)	96 (80.0)
Fertilizers	14 (11.7)	90 (75.0)	16 (13.3)	5 (4.17)	20 (16.67)	95 (79.2)
Irrigation water	93 (77.5)	27 (22.5)	0 (0.0)	56 (46.7)	60 (50.0)	4 (3.3)
Credit facilities	0 (0.0)	7 (5.9)	113 (94.1)	0 (0.0)	2 (1.7)	118 (98.3)
Labour	53 (44.2)	62 (51.7)	5 (4.2)	62 (51.7)	55 (45.8)	3 (2.5)
Storage facilities	16 (13.3)	18 (15.0)	86 (71.7)	5 (4.2)	23 (19.2)	92 (76.7)
Chemical inputs	9 (7.5)	61 (50.8)	50 (41.7)	5 (4.2)	53 (44.2)	62 (51.7)
Innovations	0 (0.0)	44 (36.7)	76 (63.3)	5 (4.2)	23 (19.2)	92 (76.7)

Source: Field survey, 2015

RA: readily available A: available, NA: Not available, HA: Highly affordable, A: affordable, NA: Not affordable,

Table 3 revealed that, majority (83.3%) of the respondents indicated that land is readily available and highly affordable 58.3%, probably because most of maize farmers in the study area have access to the family land. In some cases, farmers that do not have access to family land may rent from the land owners or get it freely and use such land to cultivate maize. Also, majority (79.2%) of the respondents claimed that seeds are available to them while only 16.6% indicated not available, meanwhile, majority (67(55.8%)) indicated improved maize seed is not affordable in the study area while only 2.5% of the respondents showed that improved maize seeds are highly affordable. This might be as a result of farmers using harvested seed from healthy plants during previous harvest and keeping it for next planting season, as such may discourage them to buy improved maize seeds and see it as highly expensive for them to buy. More so, majority (78.3%) of the respondents indicated that machineries were not available, and (80.0%) claimed not affordable, while just a few (1.7%) of the respondents indicated that the machineries were highly affordable. It was further revealed in the table that majority (75.0%) claimed that fertilizer were available while 79.2% of the farmers stated that it was not affordable, probably because, when they need fertilizer for their farm they have to get it from neighboring villages/towns at high prices in addition to the cost of transportation that might result to increase in the cost of production. As regards to the credit facilities, only 5.9% of the farmers indicated that credit facilities were available to them while majority (94.1%) of the farmers indicated that credit facilities were not available, nevertheless 1.7% of the maize farmers have access to credit in the study area. This result revealed that, majority of the maize farmers does not have access to loan and financial help. This poor or lack of access to loan by farmers has been reported by Mohammed *et al.*, (2007). Moreover, 44.2%, 51.7% and 4.2% of the respondents showed that labour were highly available, available and not available respectively, while slightly above

average of the respondents (51.7%) indicated that labour were highly affordable. This might be due to the fact that most of these farmers make use of the family labour as a result of their large household size and subsistence nature of their farming in the study area.

As shown in table 3, majority of (86 (71.7%)) of the respondents acknowledged that storage facilities are not available to store their maize while 92 (76.7%) of maize farmers cannot afford to secure storage facilities for themselves. Also, majority of respondents showed that inputs were available but not affordable, probably because, most of them do not have access to subsidized agro-inputs relevant by government agencies and organizations. More so, only 36.7% of the maize farmers in the study area has access to the new technology and information on maize production. According to (Munyua, 2000), when rural farmers lack access to knowledge and information that would help them achieve maximum agricultural yield, they are not only grope in the dark but are driven to the urban center in search of formal employment, as the option for survival. Similarly, majority (76.7%) of these farmers indicated that innovation introduced were not affordable, this might be due to their level of education, exposure and their attitude towards new technology of the sampled population.

Table 4: Result of the hypothesis that there is no significant relationship between some selected Socio-economic characteristics of maize farmers and accessibility to Agricultural resources

Variable	r	p-value	Decision
Gender	-0.012	0.796	Not-significant
Age	0.156**	0.001	Significant
Household size	0.322 **	0.000	Significant
Educational status	0.147**	0.000	Significant
Farm size	-0.177**	0.000	Significant
Farming experience	0.080	0.089	Not-significant

Source: Field survey, 2015.

Table 4, shows positive and significant relationship between age ($r = 0.156$), household size ($r = 0.322$), and Educational status ($r = 0.147$) at $P < 0.05$ significant level. This implies that the more the respondent advances in age, the higher the level of access to agricultural resources in the study area. Also, the larger the household size of the respondents, the higher the level of utilization of agricultural resource. More so, the higher the level of education of the maize farmers in the study area the more they have access to agricultural resources, this may be attributed to the fact that an educated person could be able to read and write, able to keep record and ready to try innovations. Conversely from table 4, there exists negative and significant relationship between farm size ($r = -0.177$) at $P < 0.05$ statistical level of significant and accessibility to agricultural resources. This indicates an inverse relationship among the variables hence, an increase in farm size may not necessarily be as a result of having access to agricultural resources in the study area. It was revealed from the same Table 4 that there is no significant relationship between gender, Farming experience, and access to agricultural resources. This means that, being a male or female maize farmer and year of farming experience are not determinant factors of having access to agricultural resources in the study area.

CONCLUSION AND RECOMMENDATIONS

The study revealed that majority of maize farmers got inputs through friends/neighbors and by themselves while agricultural resources like machineries, credit facilities, fertilizers, storage facilities and innovations are not readily available and those that are available are not affordable by the majority of maize farmers in the study area. However, only land and labour are readily available and affordable for them. However, based on the findings, it was recommended that, credit facilities and inputs subsidy should made available at appropriate time by relevant government agencies and organization so as to reduce cost of production. Also, as mechanization leads to lower cost of production, government should make tractors, good storage facilities and other machineries available to maize farmers at subsidized rate. Finally, maize farmers should be encouraged to join cooperative societies so that they can pool their productive resources for large scale farming.

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