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Information Needs of Cassava Farmers in Ilorin East Local Government Area of Kwara State Nigeria

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Abstract

The study examined the information needs of cassava farmers in Ilorin East LGA, Kwara State, Nigeria. One hundred and twenty (120) respondents were randomly selected for the study. Data were collected using structured interview schedule and were analyzed through the use of frequency count, simple percentages and pearson product moment correlation. The result showed that majority (46.7%) of the respondents were between the ages of 51-75 with the mean age being 54.2. Also, majority of the respondents were males (65%) with 84.2% being married. Marketing information (MS = 4.63), Use of pesticide (MS = 4.58), and Weed control (MS = 4.46) were the major information needs of cassava farmers in the study area.

major constraints faced by farmers in accessing information are inadequate information training materials, high rate of illiteracy, bad road network, lack of personal interest, and bad internet connectivity. Age (r= -0.188; p=0.040), gender (r=0.309; 0.001), membership of cooperative (r=0.241; p=0.008) and contact with extension agent (r= -0.213; p=0.024) were found to be significantly related with the information needs of farmers. The study concluded that the farmers need various types of information for their cassava production. It was recommended that educational programs be designed for farmers so that they could use media and tools of agricultural information easily and become information literate.

Keywords: Information, Needs, Farmers, Cassava

1. Introduction

Cassava (Manihot esculenta) also known as manioc, mandioca or yucca, tuberous edible plant of the spurge family (Euphorbiaceae) is cultivated throughout the tropical world for its tuberous roots. The production of the crop is vital to the economy of Nigeria as the country is the world's largest producer of the commodity and the crop is grown throughout the year, making it preferable to the seasonal crops of yam, beans or peas. This is partly due to its efficient production of food energy, year-round availability, tolerance to extreme weather conditions and its suitability for farming and food system in Africa. Cassava is the chief source of dietary food energy for the majority of the people living in the lowland tropics, and much of the sub-humid tropics of West and Central Africa (Tsegia and Kormawa, 2012) [6] The processing of the crop by traditional methods is labour-intensive but the application of improved processing technology has reduced processing time and encouraged further production. Though the crop is produced in 24 of the country's 36 states, cassava production dominates the southern part of the country, both in terms of area covered and number of farmers growing the crop. The diversification and expansion of cassava development into new growth markets have attracted considerable research interests of governmental and non-governmental organizations.

Information on the other hand is one of the key factor the farmers need in cassava production. This is defined as data used in planning, decision making and analysis of some program. One of the key ingredients for farmers to yield good output is information (Tologbonse; Fashola; Obadiah M, 2008) ^[5]. Everyone needs information about everything even in his day-to-day life. It is the act of informing or impacting knowledge, of making the good unknown facts that the farmers need to make their livelihoods better become known to them. A nation cannot attain a state of food sufficiency without the development of her farmers. It is important for cassava farmers to be well equipped for them to perform at optimal capacity. It has become the most important element for progress in society. Information has become one of the most important factors of production in the contemporary and emergent global village and it is the single most important factor of agricultural production.

In agriculture environment, relevant and timely information helps farmers' community to take right decision to sustained growth of agricultural activity. Use of information in agriculture sector is enhancing farming productivity in a number of ways. Information such as weather forecast has always been crucial to the success of a farmer, providing information on weather

trends, best practice in farming, timely access to market information helps farmer make correct decisions about what crops to plants and where to sell their product and buy inputs. Agricultural information dissemination is crucial to the productivity of farmers and makes them learn about those things which they are not aware of (Banmeke and Olowu, 2015) [2]. Agricultural information needs are meant to boost productivity because they are essential tools to strengthen the food chain of a nation's economy.

For a long time now, cassava farmers in the rural areas are not getting the right information needed at the right time. Non-acquisition of good farm practice skill due to lack of information by our rural farmers has not helped to improve the crop yield. This leads to non-improve product quality, low yield, emergence of pest and diseases that attack farm crops, poor quality fertilizer and use of old farm implements. Agricultural information needs are channels of helping information reach rural farmers to know what to do, learn what is new and do what can improve their crop produce. The farmers in their effort to access knowledge and information from available sources for better farming system and improved cassava yield are confronted with certain constraints. Information needs of cassava farmers seeks a careful exploration into how agricultural information needed by the farmers get to them and how well they use them to improve cassava production, better farm practice and improve their community in general. It is against this background that this study was designed to specifically: identify the different types of information needs of the farmers; and examine the constraints encountered by the cassava farmers when accessing information.

Hypothesis

 H_{01} : There is no significant relationship between the socioeconomics characteristics of the cassava farmers and their use of information needs.

2. Methodology

The study was conducted in Ilorin East Local Government Area of Kwara State, Nigeria. Ilorin is the state capital of Kwara state. The state lies between latitude 80 and 100.04I north of the Equator and longitude 20.45 I and 60.12 I East of Greenwich Meridian (Longman, 2000). Kwara State is bounded in the North by Niger State and by River Niger; to the East is Kogi State, while it shares boundary with Oyo, Ondo and Osun States in the south. There are many flowing streams in Kwara State and the state has about 36,820 hectares of farmland (Alalade *et al.*, 2016) [1]. All the rivers empty their water into River Niger. The Niger River and its numerous tributaries provide abundant water resources for irrigation activities in the State, especially during the dry season.

A two-stage sampling procedure was adopted to select the respondents of this study. In the first stage, four villages (Iponrin, Gambari, Alalubosa and Agbeyangi) under Ilorin East Local Government were purposively selected due to the prominence of cassava production in the area. While in the second stage, 4% of 3000 registered cassava farmers under the agricultural development programme (ADP) were randomly selected from each of the villages. Thus, a total sample size of One Hundred and Twenty (120) respondents was used for this study. Primary data was used for the study and interview schedule was used to elicit information from the respondents. Descriptive statistical tools such as

frequency counts, percentages and charts were used to analyze the objectives while inferential statistical tool such as Pearson product moment correlation was used to analyze the generated hypothesis.

3. Results and discussion Socio-economic characteristics

The Data in table 1 shows the socio-economic characteristics of the respondents. Majority (46.7%) of the respondents are within the age range of 51 – 75 years. with the mean age being 54.2 years. This shows that majority of the farmers are aging hence, the need for younger farmers to take the baton to ensure sustained production in the study area. Majority (65%) of the respondents are male, showing the dominance of male in cassava production in the study area. About 84.2% of the respondents are married meaning that they have family responsibilities that they must attend to physically, socially and economically. This is an indication that they need to engage in cassava production as a source of income to feed their families. Also, their marital status can be said to be a catalyst to their commitment to cassava farming.

Furthermore, table 1 reveals that majority (44.2%) of the farmers have primary education. By implication, it will be very difficult for farmers who cannot read to access agricultural information package in print media. Also, it was observed that majority of the cassava farmers have about 1 to 5 acres of farmland. Therefore, yield performance of cassava is relatively low in the study area because of the farmers' small farm sizes. Table 1 also reveals that majority (57.5%) of the cassava farmers have 1 to 15 years of farming experience. Also, majority of the respondents in the study area do not belong to a cooperative society but they have contact with extension agents frequently.

Table 1: Distribution of respondents according to their Socioeconomic Characteristics

Variables	Frequency	%	Mean (SD)
Age (years)			54.25(16.769)
25 and below	5	4.2	
26 – 50	45	37.5	
51 – 75	56	46.7	
76 - 100	14	11.7	
Gender			
Male	78	65.0	
Female	42	35.0	
Marital Status			
Single	8	6.7	
Married	101	84.2	
Divorced	2	1.7	
Widowed	9	7.5	
Educational level			
No formal education	25	20.8	
Adult education	5	4.2	
Primary education	53	44.2	
Secondary education	31	25.8	
Tertiary education	6	5.0	
Cassava farm size (acres)			4.28(3.313)
1 - 5	86	71.7	
6 – 10	30	25.0	
11 – 15	3	2.5	
16 – 20	1	0.8	
Experience in cassava farming		,	19.10(15.347)
(years)			19.10(13.347)
1 – 15	69	57.5	

16 - 30	29	24.2	
31 – 45	14	11.7	
46 - 60	6	5.0	
Above 60	2	1.7	
Membership of cooperative			
society			
Yes	22	18.3	
No	98	81.6	
Contact with extension agents			
Yes	111	92.5	
No	9	7.5	
Average income from cassava			115,866.67
produces (Naira)			(78851.518)
100,000 and below	65	54.2	
101,000 - 200,000	43	35.8	
201,000 - 300,000	10	8.3	
301,000 - 400,000	1	0.8	
400,000 and above	1	0.8	

Source: Field survey, 2020

Information Needs of Cassava Farmers

Table 2 reveals that marketing information is the mostly desired information with a mean of 4.63. This shows that majority of the cassava farmers in the study area needs information on marketing of their produce. It is very

important that farmers get early information on cassava produce. This is consonance with Banmeke and Olowu (2015) ^[2], who pointed out that information on, quantities traded, market prices other market related matters rarely reaches farmers in developing countries. Also, use of pesticides is ranked 2nd with a mean of 4.58. cassava farmers need information on the right pesticides to use, the right dosage and the right timing to use these pesticides.

Table 2 further reveals weed control (MS = 4.46) as another area farmer needs information on and ranked 3rd. Also, improved cassava varieties are the introduction of newly developed cassava varieties like yellow yam (Vitamin A) and the TMS series. This need is ranked the 4th on the list of information needs. However, it was also noted that very few farmers use new improved varieties. This is probably due to a lack of awareness or lack of enough capital to acquire them. This finding collaborated by RLDC (2009) which reported that most of the farmers lack knowledge on the improved seeds hence stick to traditionally preferred varieties with are not economically efficient. Improved harvesting techniques (MS = 3.74) are the usage of technologies to harvest and process cassava produce. This ranked 5th on the list of information needs of cassava farmers.

Table 2: Distribution of Respondents according to the Information Needs of Cassava Farmers

Areas of Information needs	Very needed	Needed	Not very needed	Not needed	Not needed at all	Mean	Mean rank
Areas of information needs	Freq. (%)	Freq. (%)	Freq. (%)	Freq. (%)	Freq. (%)		
Land preparation	14(11.7)	7(5.8)	45(37.5)	39(32.5)	15(12.5)	2.72(1.132)	6
Recommended crop spacing	3(2.5)	20(16.7)	31(25.8)	40(33.3)	26(21.7)	2.45(1.083)	9
Recommended planting date	5(4.2)	18(15.0)	36(30.0)	32(26.7)	29(24.2)	2.48(1.137)	8
Weed control	74(61.7)	33(27.5)	9(7.5)	2(1.7)	2(1.7)	4.46(0.839)	3
Use of pesticides	78(65.0)	37(30.8)	3(2.5)	0(0.0)	2(1.7)	4.58(0.706)	2
Improved cassava varieties	73(60.8)	35(29.2)	3(2.5)	6(5.0)	3(2.5)	4.41(0.948)	4
Recommended harvesting time	8(6.7)	19(15.8)	44(36.7)	22(18.3)	27(22.5)	2.66(1.185)	7
Improved harvesting techniques	29(24.2)	55(45.8)	18(15.0)	12(10.0)	6(5.0)	3.74(1.088)	5
Marketing information	81(67.5)	33(27.5)	6(5.0)	0(0.0)	0(0.0)	4.63(0.581)	1

Source: Field survey 2020

Constraints faced by farmers in accessing cassava production information

The results in table 3 shows the constraints facing the respondents, the following are the perceived constraints; inadequate information training materials, high rate of illiteracy, bad road network, lack of personal interest, bad internet connectivity, Inability to access formal channel of information, Lack of rural electrification, inadequate fund, Presentation/poor format of information, Lack of time to listen to agricultural programs, Language barrier, Lack of government incentives, Out-dated information and Inadequate marketing information. These were rated according to how severe the constraints are.

Inadequate fund to acquire information is a very serious constraint faced by cassava farmers in the study area as it has the mean of 3.58. This finding collaborates with Barefoot (2016) that some of them cannot afford to buy

information sources or attend important agricultural workshop/seminars or agricultural shows. This is followed by high rate of illiteracy and has a mean of 3.48, lack of government incentives has a mean of 3.47, inadequate marketing information which has a mean of 3.43, poor reliability of information with a mean of 3.39, followed by poor road network with a mean of 3.34 and, inadequate information training materials and has a mean of 3.23. However, inability to access good channel of information, lack of time to listen to agricultural informative program on either radio or television, lack of personal interest and bad network connectivity leads to major constraints in accessing information needs in the study area with the means of 3.18, 3.13, 2.92, 2.70 and 2.62 respectively. Also, lack of rural electrification (2.470), outdated information (2.40) and language barrier (2.130) are other constraints encountered.

Strongly disagree Disagree Agree Strongly agree S. No Areas of Information needs Mean Level of severity Freq (%) Freq (%) Freq (%) Freq (%) 13(10.8) 64(53.3) 3.23(0.667) 1 Inadequate information training materials 1(0.8) 42(35.0) Severe High rate of illiteracy 1(0.8) 5(4.2) 50(41.7) 64(53.3) 3.48(0.621) Severe 3 Poor road network 1(0.8) 4(3.3) 68(56.7) 47(39.2) 3.34(0.587) Severe 4 Lack of personal interest 22(18.3) 42(35.0) 6(5.0)50(41.7) 2.70(1.192)Severe 5 18(15.0) 50(41.7) 40(33.3) Bad internet connectivity 12(10.0) 2.62(1.101) Severe 6 Inability to access good channel of information 4(3.3) 3(2.5)80(66.7) 33(27.5) 3.18(0.635) Severe 7 28(23.3) 40(33.3) Lack of rural electrification 48(40.0) 4(3.3) 2.47(1.181)Not severe 8 Inadequate fund 3(2.5) 15(12.5) 11(9.2) 91(75.8) 3.58(0.805) Severe 9 Lack of government incentives 2(1.7)7(5.8)44(36.7) 67(55.8) 3.47(0.685) Severe 10 14(11.7) 63(52.5) Poor reliability of information 3.39(0.725) Severe 1(0.8)42(35.0) 11 Lack of time to listen to agricultural programs 10(8.3) 46(38.3) 8(6.7) 56(46.7) 2.92(1.089) Severe 12 Language barrier 34(28.3) 55(45.8) 13(10.8) 18(15.0) 2.13(0.992) Not severe

5(4.2)

46(38.3)

94(78.3)

13(10.8)

20(16.7) 19(15.8)

0(0.0)

29(24.2)

3(2.5)

Table 3: Farmers' Constraints to Accessing Cassava Production Information

Inadequate marketing information **Source:** Field survey, 2020

Hypothesis

13

14

15

H01: There is no significant relationship between some selected socio-economic characteristics and information needs of cassava farmers.

Presentation or poor format of information

Out-dated information

Results of correlation analysis showing the relationship between some selected socio-economic characteristics and information needs of cassava farmers as presented in table 4 shows that age (r= -0.188; p=0.040), gender (r=0.309;0.001), membership of cooperative (r=0.241; p=0.008) and contact with extension agent (r= -0.213; p=0.024). Here, the null hypothesis is rejected and alternative is accepted. This finding implies that increase participation as membership of cooperative will increase the training need of cassava farmers in the study area and, the more contact with extension agent and increase in age will decrease the training needs for cassava production information among farmers in the study area.

21(17.5)

32(26.7)

78(65.0)

3.13(0.448)

2.40(1.126)

3.43(0.857)

Severe

Not severe

Severe

Table 4: Pearson Product Moment Correlation showing the relationship between socio-economic characteristics and information needs of cassava farmers

Independent Variables	Pearson Correlation (r-value)	Sig. (2-tailed) p-value	Decision
Age	- 0.188*	0.040	Significant
Gender	309**	0.001	Significant
Marital status	0.007	0.943	Not significant
Education	0.003	0.974	Not significant
Farm size	215*	0.19	Significant
Farming experience	- 0.158	0.084	Not significant
Membership of cooperative	- 0.241**	0.008	Significant
Contact with extension agents	- 0.213*	0.024	Significant
Average income	- 0.154	0.094	Not significant

Note: * Correlation is significant at the 0.05 level ** Correlation is significant at the 0.01 level

Source: Field survey, 2018

4. Conclusion and Recommendations

The study concluded that cassava farmers in Ilorin East LGA need various types of information for their cassava production, and they use various sources and media for access to their required information. Therefore, the following recommendations were made with respect to future undertakings:

- Adult literacy program is required to help the farmers acquiring basic skills and abilities to seek and receive needed agricultural information through modern communication channels.
- Educational programs should be designed for farmers so that they could use media and tools of agricultural information easily and become information literate.
- The extension agents should intensify effort in training the cassava farmers on the effective use of information needs brought to them on their cassava production farm practices.

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