Published September, 2016

INFORMATION NEEDS OF RURAL CROP FARMERS IN BORGU LOCAL GOVERNMENT AREA OF NIGER STATE, NIGERIA

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ABSTRACT

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The understanding of specific information needs, sources and use is essential towards better targeting of extension programmes and advisory services that will enhance sustainable agricultural development. The study therefore assessed the information needs of rural farmers in crop production in Borgu Local Government area of Niger State, Nigeria. Multi stage sampling technique was employed to select 132 respondents for the study comprising of crop farmers. Interview schedule was used to elicit information for the study. The responses were analysed using frequency counts, percentages and mean score. The result showed that 41.7% of the respondents were within the age range of 31 – 40 years with relative low level of education and 44.7% of the respondents have no contact with extension agents. The information on processing of farm produce (3.14), land management practices (3.13), climate change (3.11) and pest and diseases management (2.97) had the highest scores on the perception of level of information needs on crop production. The major sources farmers relied on for information on crop production in the study area were radio (68.2%), extension posters (66.7%) and friends/neighbours (64.4%). Inadequate awareness on crop production information needed (89.4%), poor extension contact (87.1%), language barrier in (84.8%) were the major challenges facing crop farmers in accessing crop production information. Awareness of relevant information through appropriate sources, improved extension contact, reduced extension agents – farmers` language barrier can stimulate farmer's interest on various extension programmes that can be of benefit in crop production.

INTRODUCTION

The non-availability of proper information and communication network, need based information dissemination centre and improved technological information to the rural farmers have made agriculture less remunerative and thus creates the problem of food security in most developing countries (Meitei and Devi, 2009).The absence of accurate and relevant agricultural information by small-scale farmers is a major factor constraining efforts to improve the agricultural sector (Ferris, 2005). Properly disseminated information is crucial and remains one of the key ingredients for farmers to yield good output (Banmeke and Olowu, 2005; Ogungbeni *et al*., 2013). Therefore it is important for rural farmers who are the major producers of food to be well equipped with appropriate and timely information to perform at optimal capacity. Accurate and timely information enables farmers to make informal decisions regarding production especially what and when to produce, sources of inputs and marketing of outputs. Good information enables farmers to manage their lives successfully to cope with everyday problems and to realize opportunities through which sustainable agricultural development can be achieved (Ferris, 2005; Matovelo, 2008; Bachhav, 2012).

The limited technical manpower to disseminate information in rural and remote areas, inadequate transportation and communication facilities, and poor financial support to transfer the technology creates large information gap among the rural farming communities. In agriculture, information is required to enhance agricultural development. It has consistently been a significant element in the development of human society and has shaped over a long period of time the way in which we think and act(Meyer, 2005). Information serves as a means of transferring events or new ideas in order to create better awareness to add new meaning that could change events, lives, or experiences. This enable farmers to have better ways of carrying out farming activities, improvement in the system of production and better livelihood of the farming households (Meyer, 2005). Ensuring adequate dissemination of appropriate information to rural farmers requires assessment of their information needs. This will prioritise the farmers' information needs based on their requirement or interest and also identify unfelt or unrecognized needs. Hence, an information needs assessments will help in the transfer of the appropriate information to the rural areas to enhance agricultural productivity, facilitating poverty alleviation strategies among rural farmers. It can be used by programme designers to develop interventions strategies to enhance opportunities in agricultural production, reduce vulnerabilities to food insecurity and improvement of rural livelihoods (Ali and Kumar, 2011; Adebayo, 2006).

Scientifically researched information need on some of the challenges militating against good farming techniques, pest and disease control in crops and livestock, impact of a climate change, storage and market hint is required towards helping rural farmers to satisfy their needs (Yusuf *et al.,* 2013).Since farmers are clearly not a homogenous group, therefore, the understanding of their specific information needs, sources, and use is a first step towards better targeting of extension programmes and advisory services that facilitate information sharing and improvement in their production process (IFPRI, 2011; Zarmai*et al.,* 2014). The main objective of the study was to assess information needs of rural farmers in crop production in Borgu Local Government area of Niger State,

Nigeria. The specific objectives were to describe the socio-economic characteristics of the respondents in the study area, examine the level information needs of rural crop farmers in the study area, examine the sources of information used by the farmers in the study area and identify the challenges facing rural crop farmers in assessing information in the study area.

METHODOLOGY

The study was conducted in Borgu Local Government area of Niger State, Nigeria. It is located between latitude 9° 55´ N to 10° 55´ N and longitude 4° 23´ E to 4° 5´ E. The Local Government lies within the middle belt of Nigeria and has a guinea savannah type of vegetation. Agriculture is the main source of livelihood for the people. The major agricultural activities carried out is farming and fishing. The fertility status the soil provides the advantage to cultivate different kinds of crops. In order to achieve the study objectives, multiple random sampling techniques were employed. The first stage involved the random selection of 4 out of the 10 wards in the Local Government Area. Three villages were randomly selected from the selected wards to give a total of 12 villages and a total of 132 farmers (at 11 per village) were randomly selected for the study. Interview schedule was used to elicit data from the respondents. The responses were analyzed using frequency counts, percentages and mean score. A 4 points Likert rating scale of highly needed (Hn = 4), moderately needed (Mn = 3), least needed (Ln = 2) and not needed (Nn = 1) were used to rank the statements bordering on the perception of the respondents on the level of information needs of rural farmers on crop production in the study area. This was further used to classify the perception responses as either "needed" with mean scores greater than or equal to (≥) 2.50 or "not needed" with mean scores below (<) 2.50.

RESULTS AND DISCUSSION

Socio-economic characteristics of the respondents

Age of respondents

Age is often assumed that as human age increases the rate of experience on various activities also increases and most often used to classify rural population into targetable groups (Tyabo *et al.,* 2014). The result in Table 1 shows that (41.7%) of the respondents are within the age range of 31 – 40 years. The findings from the study implies that most of the respondents are young adults who are still in their active age, have the ability to supply the labour required and capable of undertaking rigorous activities in crop production. Age factor is an important factor in agricultural information accessibility and utilization. Young people (farmers) are more responsive to new ideas and practices while older ones are conservative and less responsive to adoption of new ideas and practices. Hence, the younger farmers would most likely be willing to spend more time to obtain information on improved technologies compared to the older farmers.

Education of respondents

This refers to the educational attainment of respondents which is an important instrument on how individual can handle issues that arise in life. Level of education of an individual equips him on how to search for information, how to access, utilize and apply the content of the information appropriately to build his knowledge and skills to make better living. The result in Table 1 reveals that only 40.9% of the respondents have attended up till secondary level of education while 30.3% of them had no formal education. The result implies that the level of education in the study area is relatively very low and may influence their ability to search and identify their information need in crop production. Literacy level enhances individuals' ability not only to access the content of information, its relevance and apply it to a specific decision, but ultimately use appropriately (Zarmai*et al.*, 2014).

Farming experience

Farming experience is gained over time as one continues to carry-out a particular activity, and it is directly related to age. The result in Table 1revealed that majority (62.2%) of the respondents had farming experience of between 11 – 30 years, while 15.2% of them had farming experience of above 30 years. This implies that the respondents are highly experienced in farming activities. This may influence their ability to identify and utilize relevant information that will help in boosting crop production.

Extension contact

Extension agents are those individuals scheduled to disseminate information to people on various subject matters. As revealed in Table 1, about (44.7%) of the respondents have no contact with extension agent in the study area. The result also shows that 19.7% and 25.0%of the respondents were respectively visited monthly and quarterly in the study area. The finding from the result is an indication of low extension contact in the study area. This is likely to influence the rate of flow of appropriate agricultural information to the area, because extension agents are important sources of agricultural information (Tologbonse, 2002). Frequency of extension contact and poor sources of information are critical factors which affect farmers' response to adopt improved techniques and good management practices (Laogun, 2005).

Table 1: Demographic characteristics of the respondents interviewed

Variables	Frequency	Percentage
Age (Years)		
<20	19	14.4
21-30	33	25.0
31-40	55	41.7
41-50	17	12.9
>50	8	6.1
Educational level		
Non-formal	40	30.3
Primary	25	18.9
Secondary	54	40.9
Tertiary	13	9.8
Years of farming experience		
1-10	30	22.7
11-20	60	45.5
21-30	22	15.2
>30	20	15.2
Level of extension contact		
No contact	59	44.7
Weekly	3	2.3
Monthly	26	19.7
Quarterly	33	25.0
Annually	11	8.3

Source: Field Survey, 2015.

Information needs of rural crop farmers

Information needs emanate from lack of appropriate information on which to base choices that could lead to benefits or services. Rural farmers need information on improved varieties of seeds, weather conditions, credit facilities or loans, market price of produce, etc. to boost their production. The results in Table 2 showed the distribution of the respondents' perception of information needs on crop production in the study area. The results revealed that crop farmers need information on processing of farm produce (3.14), land management practices (3.13), climate change (3.11), and pest and diseases management (2.97). Other areas of information need as indicated by crop farmers include improved seed (2.95), post-harvest management techniques (2.93) pesticide application (2.88) and sources of fertilizer (2.87). The perception of farmers on the information need on crop production practices can be connected to the technical skills involve in carrying out these activities. Other reasons can also be associated to the non-availability of professionals at the required time and the financial burden that can be encountered in the process of conducting some of these practices especially information on pest and diseases management, information on pesticide application and information on sources of fertilizer.

Sources of information for the crop farmers

Although there are various ways in which information that is of relevance to production efficiency of rural farmers can be sourced. In most cases the choice of sources of information is guided by proximity, quality, availability and taking the information at the right time to the farmers (IFPRI, 2011). The results in Table 3 revealed that their major sources of information on crop production were radio (68.2%), extension posters (66.7%), friends/neighbours (64.4%), extension agents (58.3%) and agricultural institutions (53.0%).This result corroborate the work of Meitei and Devi (2009) who reported that radio serves as a major source of information for farmers. Some other sources indicated by respondents include television (50.8%), mobile phones (43.2%) and farmers' cooperatives (41.7%). From the findings in the result, it implies that farmers in the study area apparently rely on radio, extension posters, friends/neighbours, extension agents and agricultural institutions for information on crop production. This can be supported by Yusuf *et al.* (2013) who reported that majority of the farmers preferred extension agents, friends and neighbour as well as colleagues for agricultural information as it permit face to face contact. Although farmer - to - farmer extension system was effective in the study area, however, the domination of formal sector i.e. radio, extension posters, extension agents and agricultural institutes as sources of information is an indication that information transmission through this system is effective.

Challenges facing rural crop farmers in assessing information

Rural farmers are faced with constraints in accessing information on various agricultural activities especially crop production. Some of the major constraints faced by the respondents in accessing information on crop production presented in Table 4 include inadequate awareness on types crop production information needed (89.4%), poor extension contact (87.1%), language barrier of relating with extension agents (84.8%) and lack of interest on a particular information (77.3%).The creation of awareness of relevant information through appropriate sources, improved extension contact, reduce extension agents - farmers language barrier can enhance information delivery.

This can be done through the use of appropriate medium for transmission of information that can be of benefit in crop production, posting extension agents that can speak/understand, stimulate their interest and interact with farmers through their indigenous language.

Table 2: Evaluation of information needs of rural crop farmers

Information needs on crop production	Hn (4)	Mn (3)	Ln (2)	Nn (1)	M(SD)	Rank
	F(%)	F(%)	F(%)	F(%)		
Information on climate change	68(51.5)	31(23.5)	13(9.8)	20(15.2)	3.11(1.10)*	3rd
Information on pest and diseases management	54(40.9)	33(25.0)	32(24.2)	13(9.2)	2.97(1.02)*	4th
Information on improved sources of seed	46(34.8)	43(32.6)	34(25.8)	9(6.8)	2.95(0.94)*	5th
Information on how to store crop produce	11(8.3)	18(13.6)	60(45.5)	43(32.6)	1.98(0.89)	10th
Information on access to credit	20(15.2)	17(12.9)	69(52.3)	26(19.7)	2.24(0.94)	9th
Information on weed control practices	13(9.8)	22(16.7)	46(34.8)	51(38.6)	1.98(0.98)	10th
Information on sources of fertilizer	52(39.4)	34(25.8)	23(17.4)	23(17.4)	2.87(1.12)*	8th
Information on marketing	18(13.6)	22(16.7)	30(22.7)	62(47.0)	1.98(1.09)	10th
Information on post-harvest management techniques	56(42.4)	30(22.7)	27(20.5)	19(14.4)	2.93(1.10)*	6th
Information on new cropping systems	25(18.5)	19(14.4)	50(37.9)	38(28.8)	2.24(1.06)	9th
Information on land management practices	58(43.9)	41(31.1)	25(18.9)	8(6.1)	3.13(0.93)*	2nd
Information on processing of farm produce	66(50.0)	32(24.2)	21(15.9)	13(9.8)	3.14(1.01)*	1st
Information on pesticide application	52(39.4)	31(23.5)	30(22.7)	19(14.4)	2.88(1.09)*	7th
Information on harvesting methods	16(12.1)	10(7.6)	44(33.3)	62(47.0)	1.85(1.00)	11th

NB: Mean scores < 2.5 = Not needed; *Mean scores ≥ 2.5 = Needed; F = Frequency
Source: Field survey, 2015.

Table 3: Sources of information for the crop farmers

Sources of information	Frequency	Percentage*	Rank
Friends/neighbours	85	64.4	3rd
Extension agents	77	58.3	4th
Extension posters	88	66.7	2nd
NGOs	38	28.8	10th
Mobile phones	57	43.2	7th
Television	67	50.8	6th
Extension manual	36	27.3	11th
Radio	90	68.2	1st
Bulletin/newsletters	44	33.3	9th
Agricultural institutes	70	53.0	5th
Farmers cooperatives	55	41.7	8th
Internet/emails	35	26.5	12th

*Multiple responses
Source: Field Survey, 2015.

Table 4: Constraints in accessing information

Constraints	Frequency	Percentage*	Rank
Inadequate awareness on types crop production information needed	118	89.4	1st
Language barrier/illiteracy	112	84.8	3rd
Lack of interest	102	77.3	4th
Poor timing of agricultural programmes	92	69.7	5th
Poor extension contact	115	87.1	2nd

*Multiple responses
Source: Field Survey, 2015.

CONCLUSION AND RECOMMENDATION

On the bases of the findings of the research, it can be concluded that that most of the respondents are within the age range of 31 – 40 years with relatively low level of education and extension contact. Crop farmers required high level of information on processing of farm produce, land management practices and climate change. Radio, extension posters and friends/neighbours served as sources through which crop farmers acquired their information. Inadequate awareness on types of information needed, poor extension contact and language barrier of relating with extension agents were the inhibiting factors in accessing agricultural information on crop production in the study area. In order to enhance the information needs of crop farmers, there is need for the provision of relevant information through appropriate source, improved extension contact, reduce extension agents - farmers

language barrier by posting extension agents that can speak/understand and interact with farmers through their indigenous language, and stimulate farmers interest on various extension programmes that serve as a medium for transmission of information that can be of benefit in crop production.

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