

### Perception of Agricultural Information Needs by Small-Scale Maize Farmers in Isin Local Government Area of Kwara State

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**Abstract:** This study assessed the perception of agricultural information needs by small scale maize farmers in Isin Local Government Area of Kwara State. Stratified random sampling technique was used to select 110 small scale farmers duly registered with the Agricultural department of the local government. Frequency counts, percentages and Pearson correlation were used to analyze the data. Findings from the data revealed that majority (80%) received agricultural information from their neighbours. Also (36.6%) needed high information on time of planting and agronomic practices of maize. Respondents also needed information on pest and disease control, processing and storage and marketing of maize. The result of the Pearson correlation showed that lack of necessary farm inputs (r=-0.709), time of planting factor (r=0.666) had negative but significant relationship with agricultural information needs. However pest and disease control (r=0.760) and weed control (r=0.252) had positive and significant relationship with agricultural information needs information needs of the respondents. This implies that the lesser the constraints affecting the respondents the lesser the agricultural information needs by the small –scale farmers.

Key words: Information needs maize, small-scale farmers.

#### INTRODUCTION

In modern day agriculture, information plays a pivotal role in our present day society due to the advancements in information and communication technologies. Meyer (2000), stated that the information behaviour of traditional people was unwittingly applied to encourage a group of traditional farmers to produce food for their own consumption, the incoming information was better understood and accepted by the group because the message were communicated in a way which they could indentify.

Stanley (1990) posited that information is one of the basic human needs after air, water, food and shelter. This has resulted in information becoming very crucial for everyday living of people all over the world and enable people to relate with one another. Adedoyin (1990) noted that a steady flow of accurate, understandable and factual information brings about scientific innovations with which the farmers' problems can be solved. In addition, for any true agricultural progress, farmer must know, understand and act on this information. Therefore, how far people progress in whatever they are doing depends largely upon the availability and access to accurate and reliable information.

Agricultural information comes from research institute of agriculture, University of Agriculture, government legislation, services institutions, agro-based industries and agriculture in conventional University, (Aina, 1995).

It is necessary that the generated information from these different sources reaches the intended users and ultimately meets their needs for such; various agricultural information users are different from one another based on their needs and requirements. Olawoye (1996) noted that the message (agricultural information) passed by the media could enhance agricultural productivity of farmers when they have access to it. Agricultural information is targeted to improve the knowledge, skills and ability of the farmers to produce more than enough. Information on agriculture was sold and exchanged in books and journals but some other sources like audio visual aids and pictures are now used by farmers.

Maize is known to be third widely grown cereal after wheat and rice for food and livestock fodder. Green maize boiled on the cob, or roasted has become a common sight along roadsides in villages and towns along highways in Nigeria. Moreover, new use has been found for the increased production. Maize is being substituted for sorghum and millet in some local dishes and industries are using it for brewing and for oil extraction. The information are basically on pests and diseases control, storage system, improved variety, weed control etc which attention must be given so as to discourage economy down turn through crop failure (CTA Annual Crop Report, 1996).

Adenddof (1991) reported that as a result of the training programme involved in information transfer, a substantial number of people in rural communities could take part in growing food,

not only to alleviate chronic hunger, but also to raise maize growing practices to a substantial level.

However, the production of maize is getting reduced due to inadequate information to the farmers on new improved technology recommendation, protection against diseases, new planting techniques, harvesting, improved variety, spacing etc.

The study therefore identified the various sources of agricultural information available to the small-scale maize famers thereby suggesting solutions to those constraints. The socio-economic characteristics of the respondents were also examined. In this view, a hypothesis which stated that there is no significant relationship between constraints encountered in maize production and information needs of small scale maize farmers was analysed and tested.

#### METHODOLOGY

The study was carried out in Isin local government area of Kwara state in Nigeria. The local government was bounded in the north and east by Ifelodun and Irepodun local government areas respectively. Majority of the people in the area are subsistence farmers who grow arable crops such as maize, guinea corn and cash crop such as cocoa, cashew etc. They are also rearing livestock like local goats, sheep and poultry.

The population of the study comprises of men and women small –scale maize farmers in the area. There are eleven wards in the study area. Systematic random sampling was used to select ten respondents from each ward in the study area. This was done by selecting names of

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the maize farmers that fell on the even number i.e 2, 4, 6.....from the list of small-scale maize farmers collected. Therefore, 110 respondents constituted the sample size.

Structured interview schedule was used to collect information from the small-scale maize farmers in the study area. Descriptive statistics used were frequency counts and percentages. The inferential statistics used to test the hypothesis was Pearson correlation analysis.

#### **RESULTS AND DISCUSSIONS**

## Socio-Economic characteristics of the respondents

Data presented on Table 1 reveals that 25.5% and 52.7% of the sampled respondents were between age range of 20-30 years and 40-59 years respectively. This indicated that majority of the respondents were in their active years, agile and capable of coping with the rigorous activities of farming. About 21.8% were in the age range of 60 years and above. This implies that some aged farmers still engaged themselves in farming activities from where they derived means of livelihood. The table further shows that majority of the respondents (67.3%) were male while 32.7% constituted the female. This shows that men are increasingly involved in farming in the study area since they were more active and can cope with tedious activities in farming.

The table further shows that (60.9%) of the respondents had formal education, 16.4% had no formal education, 11.8% had adult education while 10.9% had Quranic education. The implication of the result is that more than average were literate which assist them in seeking for agricultural information when the need arise. In addition, 48.2% of the respondents had about 1-10years farming experience, 40.9% and 10.9% had 11-20years and 21 years and above farming experience respectively. This implies that majority of the respondents had been in farming for a long time which assist them in gathering information needs on agriculture to improve their productivity.

Also the table revealed that 54.5% of the respondents were using family labour, 73% and 10.9% utilised their personal efforts and hired labour respectively, while 27.3% used all combination of self, hired and family labour. This implies that all the respondents in the study areas had one or more access to labour which they make use of towards increasing their maize production.

Table 1: Frequency and percentage distribution of respondents according to their socio economic characteristics

characteristics		
Socioeconomic	Frequency	Percentage
characteristics		
Age interval (years)		
20-39	28	25.5
40-59	58	52.7
60 and above	24	21.8
Gender		
Male	74	67.3
Female	36	32.7
Formal Education		
No formal education	67	60.9
Adult education	18	16.4
Quranic education only	13	11.8
Farming experience		
1-10	12	10.9
11-20	53	48.2
21 and above	45	40.9
Labour source		
Family labour	12	10.9
Personal / self efforts	60	54.5
Hired labour	08	7.3
All the combinations	12	10.9
	30	27.3

Source: Field work, 2008.



Table 2 shows that 80.0% of the respondents received information from neighbours, 28.8% received information through television and radio, 64.5% from friends, 16.4% from research institute and lastly 7.3% received agricultural information from extension agents. This implies that majority of the respondents gather their information through informal means of which such information could be distorted which definitely affects their maize production.

Table 2: Distribution of respondents according to source of information

Source*	Frequency	Percent
		age
Neighbours	88	80.0
Friends	71	64.5
Television and radio	31	28.2
Research institute	18	16.4
Extension agent	8	7.3
* Multiple responses		

#### \* Multiple responses

#### Source: Field work, 2008

Table 3 shows that 78.2% were facing constraints related to pest and diseases control, 88.2% on weed control, 57.3% on time of planting factor and 56.4% on farm inputs. This implies that respondents were lacking agricultural information mostly on pest and diseases control and weed control since they have little access to formal and reliable source of information. All these could adversely affect their maize production.

Table 3: Distribution of respondents according to constraints facing them

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Constraints*	Frequency	Percentage
Pest and disease		
control	86	78.2
Weed control	97	88.2
Time of planting	41	57.3
factor		
Lack of farm inputs	62	56.4

\* Multiple responses

#### Source: Field work, 2008

Table 4 revealed that 18.2%, 24.5% and 2.7% needed high, moderate, low and no information respectively as regards to preplanting activities. Also 63.6%, 2.7%, 27.3% and 6.4% required high, moderate, low and no information respectively on time of planting. Similarly, 37.3%, 24.5%, 30.0% and 8.2% needed high, moderate, low and no information respectively on pest and disease control. In addition, 21.8%, 29.1% and 30.0% and 19.1% respectively on processing and storage of maize. Lastly, 56.4%, 11.8%, 6.4% and 25.5% needed high, moderate, low and no information respectively on marketing of maize respectively. This implies that various information as stated above must be made available and accessible to the respondents to improve their maize production.

Table 4. Distribu	ution of res	nondents ac	cording to	information	needs

ruore n. Distribution of respo	naems according to	mormation needs		
Information needs	High	Moderate	Low	Not at all
Pre-planting activities	20* 18.2	27* 24.5	60* 54.5	03* 2.7
Time of planting and				
agronomic practices	70* 63.6	03* 2.7	30* 27.3	07* 6.4
Pest and disease control	41* 37.3	27* 24.5	33* 30.0	09* 8.2
Processing and storage	24* 21.8	32* 29.1	33* 30.0	21* 19.1
Marketing	62* 56.4	13* 11.8	0.7* 6.4	28* 25.5

\* Percentages

Source: Field work, 2008



#### **Hypothesis Testing**

Data presented on Table 5 shows that relationship between the constraints facing respondents in maize production and agricultural information needs of the respondents. It was revealed that time of planting factor (r=-0.666) had significant negative but relationship with agricultural information needs. However, lack of necessary farm inputs (r=0.709), pest and diseases (r=0.760) and weed control (r=0.252) had positive and significant relationship with agricultural information needs of the respondents. This means that the lesser the constraints facing the respondents on lacking of necessary inputs, and time of planting factor, the lower their needs for agricultural information and vice versa. However, as the constraints on pests and diseases and weed control is increasing, the higher their needs for agricultural information. This implies that constraints facing respondents on maize production had great influence on their needs for agricultural information, for example, constraint on time of planting factor can be linked to agro-metrological forecast.

Table 5: Summary of the correlation analysis of the relationship between constraints facing respondents in maize production and agricultural information needs

Variables	r-values	Decision
Lack of		
necessary		
inputs	0.709	Significant
Pest and		
disease control	0.760	Significant
Time of		
planting factor	-0.0666	Significant
Weed control	-0.252	Significant
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Level of significance = 0.05

Source: Field work, 2008

#### CONCLUSION AND RECOMMENDATION

Majority of the small scale farmers were in the age range of 40-59 years, larger percentage of the respondents had formal education. Respondents received agricultural information from neighbours and friends, but few received information through television and radio, extension agents and research institutes. Also they need information on weed control, pest and disease control, marketing, storage etc. Positive and negative significant relationship existed between the constraints facing respondents and their information needs.

Based on the findings, the following recommendations were made:

- Since most of the respondents received agricultural information from neighbours and friends, but few received information through television and radio, respondents should be encouraged to seek more agricultural information on mass media channels and it should be made accessible to them.
- Extension delivery packages to small-scale maize farmers should lay emphasis on agricultural information relating to weed control, pest and disease control, storage methods and improved seeds since they were most needed information by respondents.

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