



ANALYSIS OF AGRO- INFORMATION USE AMONG FARMERS IN GIADE LOCAL GOVERNMENT AREA OF BAUCHI STATE, NIGERIA

ABSTRACT

This study was conducted to determine factors influencing effective communication of agricultural information in Giade LGA, Bauchi state. The study utilized a descriptive survey research design. The sample size was 150 respondents randomly drawn from three wards of the LGA using simple random sampling technique. Fifty respondents were selected

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Introduction

Background to the study

Agricultural information is essential for improving agricultural production. Specifically, agricultural productivity can arguably be improved by relevant, reliable and useful information and knowledge. Agricultural information interacts with and influences agricultural productivity in a variety of ways. It can help inform decisions regarding land, labour, livestock, capital and management. Agricultural productivity can arguably be improved by relevant, reliable and useful information and knowledge. Hence, the creation of agricultural information (by extension services, research, education programmes and others) is now often managed by agricultural organizations that create information systems to disseminate information to farmers so that farmers can make better decisions in order to take advantage of market



opportunities and manage continuous changes in their production systems. Agricultural information creates awareness among farmers about agricultural technologies for adoption. Information is the first and indispensable step of an adoption process. How far farmers progress in agriculture depends largely upon the availability and access to accurate and reliable information (Bello and Obinne, 2012). Information is an important tool used in the realization of any objective or goal set by individuals. It is a valuable resource required in any society; thus acquiring and using information are critical and important activities. Users of information use it for different reasons. Some use it for health, others for advancement in knowledge, while others for politics. To all these people, information seeking is a fundamental human process closely related to learning and problem solving. Many factors initiate the search for information. Among these are individual tasks for knowledge advancement, creativity and for future documentation. Information seeking process depends on these tasks, and the complexity of the task difficulty is

from each of the selected wards. The study used a questionnaire to obtain primary data. The questionnaires were self-administered. Results of the study indicated the major extension communication media in the study area is radio 90% utilized by the respondents. The result further revealed that there is a positive and significant relationship between choice of media, socio-economic characteristics and effective communication of agricultural information as supported by beta coefficients of 0.217 and 0.651 respectively. Choice of agro information sources and farmers attitude influences effective communication. The study recommended that the extension agency through the relevant contact persons at the community level, should develop communication structures that can effectively improve information exchange between the extension workers and the farmers.

KEYWORDS: Agro Information, Uses, Factors, Giade and Bauchi State



an important factor that influences an individual in seeking information. Agricultural information is essential for improving agricultural production. Specifically, agricultural productivity can arguably be improved by relevant, reliable and useful information and knowledge. Agricultural information interacts with and influences agricultural productivity in a variety of ways. It can help inform decisions regarding land, labour, livestock, capital and management. Agricultural productivity can arguably be improved by relevant, reliable and useful information and knowledge. Hence, the creation of agricultural information (by extension services, research, education programmes and others) is now often managed by agricultural organizations that create information systems to disseminate information to farmers so that farmers can make better decisions in order to take advantage of market opportunities and manage continuous changes in their production systems. Agricultural information covers all published and unpublished knowledge on general aspects of agriculture and consists of innovations, ideas and technologies of agricultural policies. However, agricultural information provides the data used for decision making. Agricultural information is needed for overall development of agriculture for the improvement of living standard of farmers. The objectives of agricultural information can hardly be realized if farmers have no access to information. Agricultural information creates awareness among farmers about agricultural technologies for adoption. Therefore, how far people progress in whatever they are doing in agriculture depends largely upon the availability and access to accurate and reliable information. Today, in the age of information and technology, the dissemination of information becomes much easier and more complex. This is because information messages must be disseminated to the farmers in ways and methods, which are appropriate, and best support its recipient.

Objectives of the study

The main objective of the study is to analyses the factors influencing use of agricultural information in Giade Local Government Area of Bauchi State

The specific objectives are:



- i. to identify the socioeconomic characteristics of respondents in the study area.
- ii. to determine farmers choice of agro information sources in the study area.
- iii. to examine the influence of farmers' attitudes on the effectiveness of communicating agricultural information in the study area.

Review of Related Empirical Studies

Sources of Agriculture Information

Farmers receive Agricultural information from various sources and those who provide information. For example, the conditions of weather have their source from the national meteorological department. Some information can be received from other information providers, for example, expert of agricultural information such as agricultural research institutes and the Ministry of Agriculture , research organizations and other agencies, higher learning institutions and agriculture consultants. Agricultural information has been developed and published by government agencies and academic institutions as well as non governmental institutions and relevant private companies. This information is available in either primary or secondary form depending on the purpose of use. Produce market price is considered more accurate if the information is directly collected from local markets. However, an effective use of new agricultural technology, such, dissemination of information in real-time is more reliable if it is proven and disseminated from government bodies or research centres. For farmers to maximize or improve production, they need to know the best practices that have taken place in agronomy and plant breeding. This information will give the farmers information which may include general practices such as the right seed to plant, use of fertilizers, methods of irrigation, pest and disease management, harvesting, how to market and sell their produce. There are different studies that have been done show types of agricultural information that has been disseminated to farmers. The information that is relevant before the planting period may include crop management or planning of crop activities (Tiwari, 2008), the improved seedlings (Irivwieri, 2007), the inputs and their prices and availability (Tiwari, 2008) and the fertility of the soil and irrigation methods (Ekoja,



2004). During the time the plants grow, different types of information is required to improve the amount and the quality of produce. This information may include information on weather (Rao, 2004), fertilizer and how to supply fertilizer weeding (Ekoja, 2004), and pests and their management (Rao, 2004), weed control (Ekoja, 2004), and management of disease (Tiwari, 2008) Continuous flow of relevant information from different sources, such as government departments, sales agents, Non-Governmental institutions, mass media such as radio, web sites, may improve agricultural production. (Ekoja, 2004).

MATERIALS AND METHODS

The Study Area

This study was conducted in Giade local government of Bauchi State. Giade is situated in northern part of Bauchi state one of the three (3) geopolitical zones, under latitude 11°N and Longitude 13°E of the Equator. About 188km away from Bauchi town. The three wards are found within the Sudan savannah, base on the Nigerian vegetation. Soil type found in the study area loam. The annual rainfall ranges between 78.5mm normally falls between May to October.

Within these, three (3) villages were selected randomly.

Sampling Techniques and Sample size

Three (3) wards were randomly selected from ten (10), the three wards selected are Jugudu, Zirami and Giade. Fifty (50) respondents

Instrument for data collection

The instrument used for data collection was a questionnaire developed by the researcher which contains information on age, gender, level of education, marital status, household size, farming experience, major occupation, respondent choice of communication, farmers attitude towards effective communication.

Validity of Instrument

Cronbach's alpha coefficient was used to determine the reliability of the research instrument. A Cronbach's alpha value of 0.83 was obtained. Which indicated that the instrument can give valid result.



Reliability of Instrument

To ensure reliability of the questionnaire it was pre-tested on 10 respondent who did not participate in the main research.

Data Analysis Techniques

Data collected were analyzed using both descriptive and inferential statistics. A linear multiple regression model was used to major the relationship between independent variables and the dependent variable (effective communication), which are explained in the model.

RESULT AND DISCUSSION

Socio economic characteristics of the respondent

The result from table 1 shows that majority (33.3%) of the respondents falls within the age of 40 – 49. This means that they are active working class. (6.7%) the least 60 and above are dependent. Farmers at the age of 41-50 have the % of 14, therefore the study suggested that, majority of the farmers were within the age of 51 and above years considered as the most productive age as well as been less conservative. The result shows that majority (89.3%) of the respondents were males. The result shows majority (53.3%), have no formal education and (3.3%) posses tertiary education, this indicates that majority lack formal education, and this can affect their attitudes toward fellow farmers which hinder effective communication of agricultural information. This is not surprising outcome as the local government area, is among the educationally backward L.G.A in the state. The results indicates that majority (83.3%) are married this shows that most likely have dependents on them. The result from table 5 shows majority (63.3%) of the respondents have household ranging from 1 – 10 followed by (29.3%) with 11 – 20 and the least (7.4%) 21 and above. This indicates that size guarantee free and available cheap labour for the farm and family. The result from table 6 shows that majority (40.0%) have farming experience between 11 – 20years. Followed by (26.6%) and the least (13.3%). This shows that the farmers attitude towards effective communication on agricultural information through radio is positive. The result further shows that about (5) respondents representing 4.2% were farming. This shows that most of the respondents have one thing or the other doing as a means if



livelihood. The findings disagree with the finding of Ugwoke et al (2012) where the reported a high percent's of the respondents having less than five years experience. The result shows that respondents had an average of 9 years of farming experience.

The result shows that majority (61.4%) are farmers followed by (16.7) and the least (3.3) engage in fishing activities in the study area. The result shows that Majority (70.0%) of the respondents cultivated 1 – 3h, this indicates there subsistence nature of farming activities.

Table 4.1 socio-economic characteristics of respondents

Variable	Frequency	Percentage
Age (years)		
20-29	15	10.0
30-39	45	30.0
40-49	50	33.3
50-59	30	20.0
60 and above	10	6.7
Gender		
Males	134	89.3
Females	16	10.7
Level of formal education		
Primary school	30	20.0
Post primary	35	23.4
Tertiary	5	3.3
No formal education	80	53.3
Marital status		



Married	125	83.3
Single	25	16.7
Household size		
1-10	95	63.3
11-20	44	29.3
21 and above	11	7.4
Farming experience (years)		
1-10	20	13.3
11-20	60	40.0
21-30	40	26.6
Above 30	30	20.0
Major occupation		
Civil servant	8	5.3
Farming	92	61.4
Fishing	5	3.3
Hand craft/artisan	25	16.7
Trading	20	13.3
Farm size (hectares)		
Less than 1	20	13.3
1-3	105	70.0
4-6	25	16.7

Source: Field survey (2021)



Distribution of respondents according to choice of agro information sources used.

The results shows that majority (90%) of the respondents choose radio as their choice (70%) from extension agents (45%) (40%) indicate their choice from farmers association and agrochemicals/feed sellers. (31%) choice from mobile phones, (25%) goes for veterinary personnel, (15%) from internet and bulleting/posters, no any choice made for television, newspapers, seminar/workshop, journal and NGO. This shows that number of radio station in the area and neighbouring state of Jigawa and Kano makes it to be the majority.

Table 2 Respondents choice of agro information sources and used (N = 150)

Information media	Percentage response
Extension agents	70
Farmers associations	45
Internet	15
Radio	90
Television	00
Bulletin/Posters	05
Newspapers	00
Mobile phone	31
Seminar/workshop	00
Journals	00
NGO	00
Agro chemicals/feed sellers	40
Veterinary personal	25

Source: Field survey (2021)

Conclusion and Recommendation

Socio economic characteristics of the respondent influences effective use of agricultural information in the study area. The choice of agro information sources and farmers attitudes influences effective use of the agro information sources in the study area. The study recommended that the extension agency through the relevant contact persons at the community level, should develop communication structures that can



effectively improve information exchange between the extension workers and the farmers.

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