

## USE OF SOCIAL MEDIA AS A SOURCE OF AGRICULTURAL INFORMATION BY FARMERS IN MUBI SOUTH LOCAL GOVERNMENT AREA OF ADAMAWA STATE, NIGERIA

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### ABSTRACT

*This study was carried out to assess the use of social media as a source of agricultural information by farmers in Mubi South Local Government Area of Adamawa State. A Random sampling technique was adopted for selecting respondents. The total sample size was 100 respondents. Data were collected through a well-structured questionnaire and analyzed with descriptive statistics and standard deviation. The study revealed majority (43.8%) of respondents use Facebook as their main social media platform when looking for agricultural information and they often source information on agrochemicals, improved crop, and Pest and disease control with mean and standard deviation of ( $X$  2.3178  $S.D$  1.2309,  $X$  2.2078.  $S.D.$  1.1511,  $X$  2.6974,  $S.D.$  1.0835). Poor network access, relative cost for access, untimely provision of information and lack of Infrastructure were the most serious challenges militating against the use of social media when driving agricultural information. It is therefore recommended that adequate information available and accessible to farmers on social media' in order to enhance effective participation in agriculture, especially rural farmers who might find it difficult to have access to the latest trends in agricultural innovation and also agricultural information (programs) should be broadcasted in local languages as much as possible and efforts must be taken in to consideration to guarantee that the airing times are suitable.*

**Key words:** Social Media, Agricultural Information and Farmers

### 1. INTRODUCTION

Information is necessary for educating the masses on various area of concern and people will look for information to meet their needs. Various channels relay information that helps audiences to solve their problems and also influence their decisions making. Communication functions in a number of ways to determine group outcome (Kuria, C. U., 2014).Suchiradipta and Saravanan (2016) defined social media as web based tools of electronic communication that allow users to personally and informally interact, create, share, retrieve, and exchange information and ideas in any form that can be discussed, archived and used by anyone in the virtual communities and networks.

In the agricultural sector, there is growing rate of social media usage amongst actors. Sokoya et al. (2012) opined that there is a large increase in the utilization of social media among agricultural researchers, professionals, stakeholders and farmers in the agricultural sector. Social media have ensured quick delivery and response to information between the receiver and sender and an effective way of ensuring successful delivery and sustainability of a viable agricultural extension subsector. Mukhtar, *et al.*, (2015) revealed that social media has fostered a fast platform for information dissemination and interactive contact; rivalled by none in this time. The degree of social media penetration is obviously growing faster that imagined, couple with the level of technology advancements that continue to bring world at everyone's finger tips and make information accessible

without having to go through hiccups of travelling and delays. Stanley (2013) also pointed out that it is staggering to believe that in little as two short decades, the evolution of the internet and social media has taken place right before our very eyes. Therefore, since extension deals with audience (farmers centrally) to effect positive social change social media present a great opportunity.

Currently in Nigeria, agricultural information comes mainly from research institutions, which generates new technologies to farmers. It thus follows that the agricultural research information service center is the custodian of several information resources including CD-Rom databases (which could be bibliographic, research, factual), multimedia knowledge bases and in house publication. Other sources may include agricultural information providers such international organizations and local non-governmental organizations and community based organization. The main modes of delivery are farmers' magazines, newspaper, posters, handbooks, radio, television, films and videos. However, with the increase in the use of social media it has been another good sources of information dissemination, such as the mobile telecommunication system.

Social media use for disseminating agricultural information has the potential to bridge the gap created by the short fall in the farmers' extension ratio. The ratio of extension agents to farm families as recommended by Food and Agricultural Organization is put at 1:250; this is against 1: 4,882 with 415,030 farm families in Oyo state (FAO, 2012). The use of social media is becoming increasingly necessary among all professionals of the world. The information that is transfer on the social media cannot be compared to any other means of information dissemination in the world because it gives direct access to information source and how to go about the use of the information gathered. This is believed to have the potential to change the face of agriculture in Nigeria and improve the channel of gathering information among farmers because the ratio of agricultural extension officers is very low compare to the number of farmers that exist in the country (FMARD, 2011).

Farmers are using social media because it has ability to connect with farmers, agribusiness, agri-experts over a geographical distance. Up to certain extent social media in agricultural marketing provides solutions to the agricultural marketing problems. The main purpose of social media is sharing information and creating awareness. The most popular social media among farmers is Facebook, Twitter, YouTube, LinkedIn, WhatsApp etc. In addition to use of social media is on personal basis, they tell their stories of success, failure etc., they also shares updates regarding harvesting, post harvesting, promoting agricultural produce, market information, answering problems of farmers if it is related to their known areas. Social media is very different form traditional media (Bite B. B and Anand A. D., 2017). The users of social media are creating their own groups, pages, community and blogs to share information. In thisgroup they are also selling, buying agricultural commodities. It can be done by sending images,pictures, links, videos etc.This sharing of information facilitates the marketing of farmers produce andformation of network (Bite B. B and Anand A. D., 2017). Therefore, there is likely to be stagnation in the dissemination, utilization and application of scientific agricultural information for purposeful development of the system if social media are not adequately built into the mainstream of Nigerian agricultural extension system. This study therefore attempt to examine the use of social media as a source of agricultural information by farmers in Mubi South Local Government area of Adamawa State.

## 2. METHODOLOGY

### 2.1 Study area

The study was conducted in Mubi South Local Government area of Adamawa State in Mubi South Local Government Area (LGA) of Adamawa State. The LGA is located in the North eastern part of Adamawa State and lies on latitude 10°00' north and longitude 13°30' east at an altitude of 731.4m (Adebayo and Tukur, 1999). The wet season commences as early as May/June and attains its peak in July/ August before it declines in September and the average rainfall in the area is about 100mm/annum. The annual temperature ranges between 25-30°C (Adebayo and Tukur, 1999). It shares common border with the Republic of Cameroon and Maiha LGA of Adamawa State to the South. It also shares common border with Mubi north LGA to the north and with Hong LGA to the west (Adamawa State Government Dairy, 1999). Farming is the major occupation of the people of the area with cowpea as the most cultivated crop. Other crops cultivated in the area include maize, rice, millet, sweet potatoes, cassava, cowpea and cotton, which is the major cash crop cultivated.

### 2.2 Sampling Technique and Sample Size

Ten farmers were selected randomly from each of the 10 wards in the study area to make up a total number of 100 farmers as sample size.

### 2.3 Data Collection

The primary data used for this study were collected from the respondents with the use of well-structured questionnaire administered to 100 farmers. The questionnaire was well structured in line with the objectives of the study such that it contained open ended and closed ended questions. However, all were returned but 78 were correctly filled used for the analysis.

### 2.4 Analytical Tools

Descriptive statistics such as frequency, tables, percentage, mean and inferential statistics such as standard deviation to achieve the objectives of the study.

## 3. RESULTS AND DISCUSSION

### 3.1 Social media tools in Used in Accessing Agricultural Information

The finding of the study revealed that 43.8% of the respondent uses Facebook in accessing agricultural information, while 33.6% uses WhatsApp, 16.4% uses YouTube but only 6.2% uses Twitter. This study shows that majority (43.8%) of respondents use Facebook as their main social media platform when looking for agricultural information as revealed by Kuria, C. W., (2014) that a majority of respondents (42.9%) in Nairobi use Facebook as their main social media platform for deriving agricultural information, but contrary with the study of Suleiman, *et al.*, (2018) who infers that WhatsApp is the most used social media platform for agricultural information by farmers in Keana Local Government of Nassarawa State.

**Table 1: Social media tools in Used in Accessing Agricultural Information**

Social media	Frequency	Percentage
Facebook	56	43.8
WhatsApp	43	33.6
YouTube	21	16.4
Twitter	8	6.2
<b>Total</b>	<b>128*</b>	<b>100</b>

Source: Field Survey, 2020

\*: Multiple response

### 3.2 Respondent's Frequency of Social Media Access Agricultural Information

The result in Table below show that 23.1% of the sample always used the social media, 43.6% used social media often, 26.9% used it occasionally, while 6.4% rarely used the social media for accessing information needed to improve their farming activities. This study revealed that most of the respondents (farmers) often use the social media for accessing information needed to improve their farming activities. This disagreed with the study of Suleiman, *et al.*, (2018) who reported that respondents always used the social media for accessing agricultural information needed in Keana Local Government Area of Nassarawa state.

**Table 2: Respondent's Frequency of Social Media Access Agricultural Information**

Variables	Frequency	Percentage
Always	18	23.1
Often	34	43.6
Occasionally	21	26.9
Rarely	5	6.4
<b>Total</b>	<b>78</b>	<b>100</b>

**Source:** Field Survey, 2020

### 3.3 Agricultural Information Sourced and Accessed From the Social Media

As presented in table below that shows that respondents using the social media as a source of information often seek for information on Agrochemicals (X 2.3178, S.D 1.2309), improved crop variety (X 2.2078, S.D. 1.1511) and pest and disease control (X 2.6974, S.D. 1.0835). Followed by weed control fertilizer application (X 2.396, S.D. 0.9199), erosion control (X 1.6623, S.D 0.9816), erosion control (X 4.1039, S.D 0.7537) and lastly Weather condition and environmental information (X 2.357, S.D. 0.6834). This study indicated that majority of respondents using the social media as a source of information often seek for information on agrochemicals, improved crop, and Pest and disease control as it is in agreement the study of Kuria, C. W., (2014) who stated that majority of respondents using the social media mostly seek information on Agrochemicals with mean and standard deviation of 3.853 and 0.6734.

**Table 3: Agricultural Information Sourced and Accessed From the Social Media**

Information Sourced and Accessed	Mean (X)	Std. Deviation (SD.)
Improved crop variety	2.2078	1.1511
Fertilizer application	2.396	0.9199
Agrochemicals	2.3178	1.2309
Weed control	1.6623	0.9816
Pest and disease control	2.6974	1.0835
Erosion control	4.1039	0.7537
Processing and storage	1.4156	0.4961
Marketing of Produce	1.0390	0.1948
Improved Planting Techniques	1.6883	0.5443
Weather condition and Environmental information	2.357	0.6834

**Source:** Field Survey, 2020

### 3.4 Challenges encountered when Accessing Agricultural Information from Social Media by Farmers

The analysis of challenges encountered in accessing agricultural information from social media indicated that 16.4% of the respondent show that is relative cost for access, 15.5% lack of infrastructure, 9.9% illiteracy, 22.2% poor network access, 4.1% lack of awareness of information sources available, 15.8% untimely provision of information, 6.7% difficulty in understanding and proper utilization of information and 9.4% lack of Adequate satisfying Heterogeneous Users. This analysis revealed that poor network access, relative cost for access, Untimely provision of information and lack of infrastructure were the most serious challenges militating against the use of social media when driving agricultural information by farmers in the study area. This analysis disagrees with that of Babu, *et al.*, (2012) who pointed out that the major constraints to information access from social media by farmers in Tamil Nadu India are poor availability, poor reliability, a lack of awareness of information sources available and untimely provision of information but in consonant with that of Kuria, C. W., (2014) who state that most common challenges faced include poor network access, costly charges and power outages when accessing the information.

Table 3.4: Challenges encountered when Accessing Agricultural Information from Social Media by Farmers

Challenges	Frequency	Percentage
Relative cost for Access	56	16.4
Lack of Infrastructure	53	15.5
Illiteracy	34	9.9
Poor network access	76	22.2
Lack of awareness of information sources available	14	4.1
Untimely provision of information	54	15.8
Difficulty in understanding and proper utilization of information	23	6.7
Lack of Adequate satisfying Heterogeneous Users	32	9.4
<b>Total</b>	<b>342*</b>	<b>100</b>

Source: Field Survey, 2020

\*: Multiple response

#### 4. CONCLUSION AND RECOMMENDATIONS

Despite the challenges encountered by farmer when accessing information from the social media it still remain a paramount medium that can be used to reach millions of farmers at a time. Based on the analysis of the study it is concluded that, majority of farmer in study area use Facebook as their main social media platform when looking for agricultural information and they often source information on agrochemicals, improved crop, and Pest and disease control and poor network access, relative cost for access, untimely provision of information and lack of Infrastructure were the most serious challenges militating against the use of social media when driving agricultural information. And recommended that:

There is a need to make adequate information available and accessible to farmers on social media' in order to enhance effective participation in agriculture, especially rural farmers who might find it difficult to have access to the latest trends in agricultural innovation.

Farmers should be encouraged more on using social media to communicate their farming experience because this will enhance democratization of knowledge and information on agriculture.

Social media platforms should be deployed by agriculture extension workers as part of their communication strategies in promoting farmers' participation in agriculture

Also agricultural information (programs) should be broadcasted in local languages as much as possible and efforts must be taken in to consideration to guarantee that the airing times are suitable.

The ministry of agriculture and extension organizations should organize training workshops to aid farmers on the knowledge and application of social networking sites in agricultural practices to help improve efficiency among farmers.

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