



Information Needs and Resource Utilization by Agricultural Extension Workers for Effective Agricultural Production in Adamawa State

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Abstract

The study investigated information needs and resource utilization by agricultural extension workers in Adamawa State, Nigeria. Three research questions guided the study. Descriptive survey design was adopted for this study. The population comprised 200 extension workers from Ministry of Agriculture and Natural Resources (MOANR) and Adamawa Agricultural Development Program (AADP). A random sampling technique was adopted for the study. Data obtained were analyzed using mean rating and standard deviations and the benchmark for decision was a mean score of 0.50 and above for positive decisions. The findings of this study indicated that Agricultural extension workers need information for them to be able to discharge their duty of bridging the gap between farmers, policy makers and researchers. Strategies to be adopted to overcome the challenges were found to include establishment of information centres in rural areas as a major strategy for overcoming the challenges, the need for proper time management and improved access to information, provision of current resources and orientation/training on information literacy. Based on the study, it was recommended that information infrastructure and resources i.e. information centers and functional libraries with state of the art equipment in the dissemination of information, and accessibility to the information resource by agricultural extension workers in the State is paramount and be provided within their reach.

Keyword: Information needs, Resource utilization, agricultural extension workers,

Introduction

Agriculture, agricultural events and processes involve the activities of raising animals and growing of crops. Several researches conducted indicated that the field of agriculture play a



significant role as man's most essential preoccupation Okwu and Ejembi, 2001). Today, agriculture has expanded with the scientific methods of applying new ideas in various categories. Agriculture is a subject with multidisciplinary dimensions; some of these include; forestry, animal husbandry, crop cultivation, veterinary medicine, fisheries, biotechnology, etc.(Umeokeke and Yusufu 2013). Agriculture has occupied an important position in every economy of the world particularly in the developing economics (Nigeria Millennium Development Goal's Report, 2004). Many people are engaged in agricultural activities such as crop farming, fishing, livestock farming (Okwu and Ejembi, 2001).

Agricultural extension is an educational process which has as its goal the communication of useful information to people and helping them to learn how to use it to build a better life. Agricultural extension can be viewed as an applied social science which deals with the design and strategies for transferring agricultural technology to farmers. The concept of Extension work is therefore, understood to mean helping people to solve their own problems through the application of scientific knowledge. It involves changes in behaviour of rural people presumably resulting in improved agricultural production. Nigeria agricultural extension services have commonly been regarded as that part of government activities which provides clientele with technical advice as a guide to improve welfare/standard of living. And less frequently, with economic information about production and management problems, to assist them in analyzing the alternatives available and making decisions about business operations.

Information source is an institution or individual that creates or brings about a message (Statrasts, 2004). The characteristics of a good information source are relevance, timelessness, accuracy, cost effectiveness, reliability, usability, exhaustiveness and aggregation level (Statrasts, 2004). According to Oladele (2000), the efficiency of technologies generated and disseminated depends on effective communication which is the key process of information dissemination. In Nigeria, there are various agencies, research institutes, agricultural universities/colleges and non-governmental organizations that generate innovations and improved farm practices or technologies (Ilevbaoje, 2000).

Statement of Problem

One of the main challenges affecting the adoption of new technologies by users is lack of information. The absence of a coordinated national agricultural information system creates information gaps in a community. This research alludes to the fact that the key to increasing agricultural production ultimately lies in the nation's ability to provide information infrastructure to disseminate relevant information to the farming community, to facilitate the effective adoption of new technology in production and application of agricultural inputs and decision making which is lacking in most States of the federation.

There is also concern about information access and how lack of technical information on farming affecting extension workers can increase the rate of failure for attaining envisaged success in agricultural sector. The non-provision of agricultural information such as lack of available teaching aids, non-provision of essential inputs, capital and credit facilities as well as personnel motivation and evaluation of extension programmes are some of the key factors that have greatly limited agricultural development in Nigeria. This research therefore is to investigate the information needs and resource utilization by Agricultural Extension workers for effective agricultural production in Adamawa State of Nigeria.



Purpose of the study

The main purpose of this study is to investigate information needs and resource utilization by agricultural extension workers for effective agricultural production in Adamawa State, Nigeria. Specifically, the study seeks to;

1. Identify the information needs of agricultural extension workers in Adamawa State.
2. Examine the extent of utilization of information resources by agricultural extension workers in the state
3. Establish the challenges encountered in utilizing agricultural information resources by agricultural extension workers in the study.

Research Questions

The following research questions will guide the study;

1. What are the information needs of agricultural extension workers in Adamawa State?
2. Examine the extent of utilization of information resources by agricultural extension workers in the state
3. What are the challenges associated with utilization of agricultural information resources for information needs satisfaction among agricultural extension workers in the state?

REVIEW OF RELATED LITERATURE

Concept of information needs.

Concept of Resource Utilization.

Challenges associated with utilization of agricultural information resources among agricultural extension workers.

Conceptual framework

Concept of Information needs:

The term information has variously been defined in the literature, most especially, with the convergence of electronic, computer and communication into a single concept of information technology; the definition of information is taking another dimension. To this end, Osuala (2001) considers information to be “facts and opinion provided and received during the course of daily life.” A person using such facts generate more information some of which is communicated to others during discussion, by instructions, in letters, documents and through other medium like posters, bill boards etc. Information is thus seen here as data that have been subjected to some processing functions capable of answering a user’s query, be it recorded, summarized or simply collected that would help in decision-making.

It has been observed that information does not inform unless the person can make personal sense of it, and personal sense can only be made when information can be processed in the frame of already existing personal understanding (Ozioko, 2007). However, Prooter in Chorun (2010) defined ‘need’ as a condition of lacking or wanting something necessary or very useful. It is a state of deprivation or a physical state as a circumstance in which something is lacking or necessary and requires some cause of action. Prooter’s definition of the concept of need is in agreement with Rojas and Brophy’s properties of need, which has to do with its necessity.



Concept of Information needs of Agricultural Extension Workers

The major needs of agricultural information by the Agricultural extension workers was described by “Aina and Adedigba” (2005) as “the identification and control of major pests, credit sources, cooperatives, handling of insecticides and marketing of Agricultural products”. Agricultural information was also needed according to Kaniki (2002) “on the best cropping method, different types of live stocks, crop diseases and control, planning demonstration, advice on farming seasons and requirements”. He continued: it is necessary to identify and know who the agricultural information they need and the types of information providers that are available.

Concept of Resource Utilization by Agricultural Extension Workers

The information gathered and used by extension agents is referred to the resources utilization. Therefore, management of information system entails the entire set of system activities required to manage process and use information as a resource in an organization. The significance and potentials of information were well known to all who need or use it.

Agricultural extension workers utilize agricultural information from whatever source it came from provided it is reliable and useful; Aina (2001) attested that, “Agricultural extension workers utilized Agricultural information that came from published and unpublished knowledge on all aspects of Agriculture”. The interpretation and use of information was influenced to a greater extent by the nature of the problem and decisions to be made. It became obvious that successful and smooth running of Agricultural policies depended on the availability and use of information obtained.

In Nigeria today, Bagchee (2002) highlighted that, “the usage and impact of Agricultural information to the Agricultural extension workers could be seen in the following areas; “improved technologies relating to yam and cassava based crops, maize production, livestock, fisheries and nutrition by women in Agricultural extension who demonstrated various soya-beans recipes i.e. soya milk, soya moi-moi and soya Akara.

Factors affecting Resource Utilization by Agricultural Extension Workers

Recent empirical studies by librarians and information scientists are not only concerned with the acquisition, processing, storage and dissemination of ‘hard’ information to individuals and organizations, but also concerned with the manner in which the information provided is put to use. They have also become concerned with the outcome in terms of effectiveness of the organization in carrying out their several functions (Opeke, 1984, Aiyepoku, 1989, and Tihamiyu, 1990). These researchers were also of the view that

- (a) The effective management of resources depends on the adequate use of information in the decision-making processes of an organization
- (b) Information is used for uncertainty reduction and
- (c) Organizations are made up of people and other resources, and information for uncertainty reduction has significant implications for organizations, because power is found to accrue to those who have the information to reduce uncertainty.

Methodology

A descriptive survey research design was adopted for the study. Descriptive survey according to Nworgu (2015) involves those studies which aim at collecting data on, and describing in a systematic manner the characteristics, features of facts about a given population. This design is considered appropriate for the present study because it is aimed at collecting data from



respondents on information needs and resource utilization by agricultural extension workers in Adamawa State Nigeria.

Population of the study

The population of the study comprised of 200 out of 400 agricultural extension workers in the state ministry of agriculture and those deployed to the Adamawa State agricultural and rural development agency. 98 and 102 from MOANR (Ministry of Agriculture and Natural Resources) and AADP (Adamawa Agricultural Development Program) respectively.

Table 1 – Sampling frame

S/No	Name of Institution	Number of extension workers	Sample (50%)
1	Ministry of Agriculture and Natural Resources (MOANR)	196	98
2	Adamawa Agricultural Development Program (AADP)	204	102
	Total	400	200

Sample and Sampling Technique

For this study, (50%) i.e. 200 which made up half of the entire population of 400 extension workers were studied; sampling technique was adopted because the population size is large and thus cannot be managed conveniently by the researchers. A random sampling technique was used to get response from the respondents.

Instrument for Data Collection

A questionnaire and focus group discussion was used for data collection. The questionnaire titled “Information Needs and Resource Utilization by Extension Workers Questionnaire” is divided into two sections (A and B). Section A, dwells on the demographics of the respondents while section B has three clusters. The questionnaire was based on a four-point rating scale. The response mode was presented as follows - (SA = Strongly Agree), (A = agree), (D = Disagree) (SD = Strongly Disagreed) and cluster 3, (VGE=Very great extent) (GE= Great extent) (LE= Low extent) (VLE=Very low extent).

Method of Data Collection

Data was collected with the help of research assistants who were briefed on how to administer and recover the copies of the questionnaire. The researchers also held focus group discussion session with extension workers.

Method of Data Analysis

The data collected was analyzed using descriptive statistics, such as tables, frequencies, percentages in data analysis mean and standard deviation to analyze and interpret data collected for the research. The focus group discussion was subjected to content analysis and used together support the data from the questionnaire.



Results:

Research Question 1. What are the Information needs of Agricultural Extension workers in Adamawa State?

Table1: Mean scores and standard deviation of respondents on the Information needs of Agricultural Extension workers

	N= 178	Mean	Std. Deviation	Ranking
1. Information on recent development		4.14	.99	1 st
2. Information on education or training		4.09	.97	2 nd
3. Information on latest development		4.09	.97	2 nd
4. Information on extension service delivery		3.76	.97	4 th
5. Information on good health		3.64	1.35	5 th
6. Information on agric polices		3.36	.95	6 th
7. Information on government activities		3.32	1.13	7 th

Source: Field survey 2021.

A good proportion of the respondents indicated they need information on recent development, with a mean score of 4.14 while 4.09 mean score was recorded for information on training and education of the respondents and information on latest development. The least information needed by the respondents was found to be those on government activities and agric polices with mean scores of 3.32 and 3.36 respectively. The findings of the study are precisely on recent development and on training and education of the extension workers.

Recommendations

Based on the findings of the study and discussions, the following recommendation were made:

- 1) An immediate provision of relevant information infrastructure that will address the information needs of Agricultural extension workers for them to be able to discharge their duty of bridging the gap between farmers, policy makers and researchers is key.
- 2) The types of information resources available to extension workers in the study needs to be improved on especially those that can be easily moved from one location to another with ease and those that can be utilized from off shore locations like audio cassettes, CD-ROM etc.,
- 3) The channels of utilizing information resources by agricultural extension workers in the study were found to include workshops, interaction with people and the ministry of agriculture. Others are television/radio and seminars. All of these should be sustained and those list utilized should also be given a boost.



- 4) The extent of utilization of information resources by agricultural extension workers in the study was high by bill boards, handbills and fliers and newspapers. Bibliographies, the internet and CD-ROM should also be given a premium in the utilization of resources.
- 5) The state government should see establishment of information centres in rural areas as a major strategy for overcoming the challenges faced by agricultural extension workers as this will improve their access to information. Others are proper time management and provision of current resources and orientation/training on information literacy for the extension workers.
- 6) Strategies to be adopted to overcome the challenges were found to include establishment
of information centres in rural areas, proper time management, improved access to
information, provision of current resources, orientation/training on information
literacy
and training in computer application.

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