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Assessment of Existing Extension Services in Jos- South Plateau State, Nigeria

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Abstract:

The study assessed existing extension services in Jos South Local Government Area of Plateau state, Nigeria. Data for this study was obtained mainly from primary source of information by the used of well-structured questionnaire and oral interviews, a total number of 109 farmers from four (4) communities in the study area were selected. Data was analysed using descriptive statistics The finding revealed that farming is a male dominated profession as 86.1% of the farmers are males while 13.9% are females, and are within the age range of 31-40 years (47.5%) while 76.2% of the farmers are married. And (38.6%) attend secondary school, also (45.5%) has 15 years and above farming experience. The study also revealed that method demonstration (73.3%), result demonstration (13.91%) and field meeting with farmer (6.9%) and field day (5.9%) are the available extension services in the area.

Keywords: Evaluation, farmers perception and extension services

1. Introduction

Mobile phone has been used rapidly in the remote rural areas for adoption of farming technology, as well as farmer's knowledge and awareness of other relevant knowledge and information (Heeks et al; 2009). And is recognized as an important factor in promoting agricultural development (Birkhaeuser et al., 2009). Extension service delivery according to Oguremi and Olatunji (2012), is the process by which extension providers bring extension service from research institutes to farmers. Farmers perceive the extension service delivering in different ways. An alternative means of evaluating extension programs is measurement of the learning situation provided, which is extension delivery mechanism or process as means of measuring extension effectiveness (Ajayi, 2009). The agriculture extension service operates from the backdrop belief that increased agricultural productivity depends primarily upon the acceptance of improved cultural and technological changes at the rural farm level and that pleasant farmers can achieve higher farm yield only if they adopt recommended scientific farming techniques in place of their tradition practice.

1.1. Problem Statement

Resource poor farmers belong to a complex diverse and risk prone agriculture, which supports several million of people in Africa (River et al; 2012). Extension delivery services is contingent upon many factors such as personal, social-economic, social-cultural and social- political parameters (Babasanya, el al; 2013). They stressed further that availability of credits, compatibility of exiting technology with improved ones, suitability to farmer circumstances and needs, and the financial benefits influence perception and adoption of innovation. According to oladosu (2006) farmers in Nigeria usually complained that agricultural extension agents (AEAs) were using unfamiliar terminologies to explain recommended agricultural practices to them and this made them fail to comprehend what was intended by (AEAs). In addition to all these challenges confronting agricultural extension services, there are still other problems bordering on personal attitude and credibility such as the notion of extension as a rural based profession, the supply driven approach of extension rather than the demand driven approach, inadequate or lack of infrastructure in rural areas which makes it unattractive for staff of extension services to live in the rural area, lack of credibility on the part of extension agents from their clientele who see them as media doctors who diagnose, predict but cannot dispense (Agbamu, 2005). Therefore, the objectives are to: describe the socio-economic characteristics of the farmers in the study area; identify existing extension services available in the study area.

2. Methodology

2.1. Study Area and Data Collection

The study was carried out in Jos south local Government area of plateau state. The local government area has a total population of 301,492 people (National population census, 2006), and a total land area of 1,037 square kilometer. The area is located within longitude 80° 42'N to 80° 58'N and latitude 9° 53' E, temperature of 9°C – 25°C while the mean rainfall varies between 131.75cm to 146cm (Jos South Local Government Diary, 2006).

Under economic activities Jos South Local Government is a hub – nub of industrial activities on the plateau, and some many different varieties of crops are cultivated such as tomatoes, carrots, lettuce, cabbage, green pepper, rice, maize, beans etc. there are satellite vegetable market all over the local government.

2.2. Population and Sample Size Selection

The population of the study covers all farmers in selected areas of Jos south local government area of plateau state. The studies utilize a multi – stage random sampling approach to arrive at the sample size. The second stage involved a random selection of two (2) districts which are Kuru and Vwang from the five (5) districts which include Kuru, Vwang, Du, Gyel, Zawan districts in the study area. This is mainly due to their involvement in agricultural activities. The third stage involved a purposive selection of two (2) communities each to arrive at four (4) communities in all. The communities will include Kushe, Dazak, Chugwi and Turu from Kuru and Vwang respectively. Yaro- Yemane formula was used to determine the number of respondents that make up the sample size.

This method will helped in preventing biases and ensured the degree of accuracy that will allow for making inference applicable to a wider population.

Selection Local Government Area	Selected Districts	Selected Communities	Sample Frame	Sample Size (18.8%)
Jos south	Kuru	- Kushe	183	34
		- Dazak	114	21
	Vwang	- Chugwi	217	41
		- Turu	69	13
Total			583	109

Table 1: Sample Size Selection Plan

Source: Field Survey, 2018

$$\text{Yaro- Yamane formular} = \frac{N}{1+N(e^2)}$$

Where N= Population size
S= Sample size required
E= Level of significance

2.3. Method of Data Collection

Data was collected using well – structured questionnaire from 109 respondents that will be drawn in the study area. The data collected include; determine the socio-economic characteristics of farmers, identify the existing extension service available in the study areas.

2.4. Data Analysis

Objective 1 and 2 was analyzed using descriptive statistics such as frequencies, percentages, means and standard deviation.

3. Results and Discussion

3.1. Demographic Characteristics of Respondent

The distribution of respondents on the basis of gender in table 2 shows that out of 101 farmers that participated in this exercise, 87 (86.1%) are male while 14 (13.9%) are females. The percentage of males in this research is more than that of the females. This therefore implies that males are more into farming than females. It also agrees with Oguntola (1998), who concluded that farming is a male dominated profession. Also, according to Fabusoro et al., (2012) reported that there are more men in farming than women. The result also agrees with Ibitoye (2013), who reported that more men were found in farming in Kogi state than women.

Gender	Frequency(N)	Percentage (%)
Male	87	86.1
Female	14	13.9
Total	101	100

Table 2: Distribution of Respondents According to Gender

Source: Field Survey, 2019

The table on age categories shows that 47.5% of the farmers that participated in the exercise fall within the age bracket of 31-40 years, 25.7% falls within ages 21-30 years, 24.8% falls within ages 51 years and above while 2% are less than 21 years. A careful look at the table indicates that more matured persons formed the greater percentage of the respondents in this study. The reason may be due to their willingness and dedication to farming activities. Onasanya (2009) classified productive age of farmers to be between 20 and 55 years. Ibitoye (2013) also asserted that only those farmers within the productive age group of 20-50 years are likely to possess the necessary strength to carry out farming operation. Which also agrees with Ekong (1988), he concluded that the population of old people is the most predominant in farming communities in Nigeria.

Age Categories	Frequency(N)	Percentage (%)
<21 years	2	2.0
21 – 30 years	26	25.7
31 – 40 years	48	47.5
51 years and above	25	24.8
Total	101	100

Table 3: Distribution of Respondents According to Age Categories

Source: Field Survey, 2019

The result on marital status shows that 76.2% of the farmers who participated in the exercise were married while 23.8% are single. It is in-line with Ogunremi et al., (2012) who reported that higher percentage of the respondent are married.

Marital Status	Frequency(N)	Percentage (%)
Single	24	23.8
Married	77	76.2
Divorced	0	0
Widowed	0	0
Total	101	100

Table 4: Distribution of Respondents According to Marital Status

Source: Field Survey, 2019

Table 5 indicates the distribution of respondents based on their religion. It shows that most 86 (85.1%) of the farmers are Christians, 8 (7.9%) are Muslims while 7 (6.9%) are traditional worshippers.

Religion	Frequency(n)	Percentage (%)
Christian	86	85.1
Muslim	8	7.9
Traditionalist	7	6.9
Total	101	100.0

Table 5: Distribution of Study Participants According to Religion

Source: Field Survey, 2019

Their educational status reveals that most of the farmers (38.6%) attended secondary schools, 29.7% had no formal education, and 24.8% attended tertiary institution while 6.9% attended primary school (Table 6).

Educational Status	Frequency(n)	Percentage (%)
No Formal Education	30	29.7
Primary School	7	6.9
Secondary School	39	38.6
Tertiary Institution	25	24.8
Total	101	100.0

Table 6: Distribution of Study Participants According to Educational Status

Source: Field Survey, 2019

The table on the year of farming experience shows that 51.5% of the farmers had farming experience between 1-5 years, 45.5% between 6-10 years and 3% between 11-15 years of farming experience. This agreed with Ibitoye et al., (2013) who found out that the levels of education of farmers are generally high in Kogi state.

Years of Farming Experience Categories	Frequency(N)	Percentage (%)
1-5	52	51.5
6-10	46	45.5
11-15	3	3.0
Total	101	100.0

Table 7: Distribution of Study Participants According to Years of Farming Experience Categories
Source: Field Survey, 2019

The result on farm size categories shows that 40.6% of the farmers occupies farmlands between 1-3 hectares, 38.6% between 4-6 hectares while 20.8% occupies farmlands between 7-10 hectares.

Farm Size Categories	Frequency(n)	Percentage (%)
1-3	41	40.6
4-6	39	38.6
7-10	21	20.8
Total	101	100.0

Table 8: Distribution of Study Participants According to Farm Size Categories
Source: Field Survey, 2019

Spearman Rank Test Variables	r _s Value	P. Value	Decision
Age of Farmers Vs Organization of method demonstration	-0.109	0.280	Non-significant negative correlation between age, educational level and organization of method demonstration and a non-significant positive correlation between farm size and organization of method demonstration
Educational level Vs Organization of method demonstration	-0.021	0.833	
Farm size Vs Organization of method demonstration	0.001	0.995	
Age of Farmers Vs Organization of result demonstration	-0.076	0.456	Non-significant negative correlation between age, educational level, farm size and organization of result demonstration
Educational level Vs Organization of result demonstration	-0.141	0.165	
Farm size Vs Organization of result demonstration	-0.096	0.346	
Age of Farmers Vs Organization of field meeting with farmers	-0.044	0.661	Non-significant negative correlation between age and organization of field meeting with farmers and a non-significant positive correlation between educational level, farm size and organization of field meeting with farmers
Educational level Vs Organization of field meeting with farmers	0.053	0.598	
Farm size Vs Organization of field meeting with farmers	0.023	0.822	
Age of Farmers Vs Organization of field day with farmers	-0.115	0.253	Non-significant negative correlation between age, farm size and organization of field day with farmers and a non-significant positive correlation between educational level and organization of field day with farmers
Educational level Vs Organization of field day with farmers	0.101	0.313	
Farm size Vs Organization of field day with farmers	-0.072	0.474	

Table 9: Correlation Analysis of Some Socio-Economic Variables of Farmers and Perception Regarding Extension Services Delivery

3.2. Existing Extension Services Available in the Study Area

Table 12 shows that 81.2% of the farmers agrees to having access to extension services while 18.8% have no access. The results therefore shows that extension services available and accessed for the farmers within their locality are method demonstration (73.3%), result demonstration (13.9%), field meeting with farmers (6.9%) and field day (5.9%) (Table 13).

Access to Extension Services	Frequency(N)	Percentage (%)
Yes	82	81.2
No	19	18.8
Total	101	100.0

Table 10: Distribution of Study Participants According to Access to Extension Service

Source: Field Survey, 2019

Extension Services	Frequency(N)	Percentage (%)
Method Demonstration	74	73.3
Result Demonstration	14	13.9
Field Day	6	5.9
Field Meeting with Farmers	7	6.9
Total	101	100.0

Table 11: Distribution of Study Participants According to Extension Services

Source: Field Survey, 2019

4. Conclusion and Recommendation

The study revealed that majority of the farmers are in their active years and are aware of the usefulness of extension service which bring about increase in their productivity. Regular farm visit is important or vital for dissimulation of extension messages and should be encouraged at all times to bring about the needed change in the area. The study revealed that male dominate the agricultural sectors in the study area.

Based on the findings of this, there is need for government should create a sensitization programmes to provide good working condition and enlightenment to the farmers and to lectures them on the need of extension agent would bring change in the region and farmers should seek contact advice from extension agents on knowledge and skill to increase their yields.

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