



## Assessment of the Benefit Derived by Farmers on the use of Improved Seed and Number of Visit by Extension Workers in Gombe State

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### ABSTRACT

The main objective of this study was to determine the benefit derived by the farmers on the use of improved seed and number of visit by extension workers. The method of research design was survey, area of the study is Gombe State located in the north eastern part of Nigeria, Two research questions and null hypotheses were formulated to guide the study. The population of the study comprises of farmers in Gombe State who practice irrigated agriculture. Gombe Central which comprises of Akko and Yamaltu Deba Local Government Area was used as a sample in this research, questionnaire and interview were used to collect data from the respondent. Data collected were analysed using SPSS programme where both percentage distribution of the respondent and chi-square were used. The result reveals that 80% of the respondent benefited from the used of improved seed and extension workers visit farmers 2=3 times in a season. The paper recommended that more extension workers should be employed so that wider area should be covered to meet various farmers

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### INTRODUCTION

The role of agricultural extension service in the development of agriculture throughout the world is not in doubt. It has remained one of the prime movers in the development of agricultural and invariably in the rural development. It is not very easy to defined agricultural extension in a short concise, phrase or statement attempt to define it properly would involve lengthy explanation of several principles and philosophies. However, different authorities and experts have defined extension in different forms and ways, all ending on the improvement of the standard of living of the peoples. Fisher and Asibaka (2002) defined extension as a system of education extending beyond the class room to individuals on the forms and it available to every members of the family. Fisher, thus, analyzed extension in terms of family approach system whereby all members of the family are taking into consideration in planning extension program.

Van den Ban and Hawkins (1988) defined extension as involving the conscious use from communication of information to help people form sound opinions and make good decision. They explained extension systematically as a process which help farmers to analyzed their present and expected future situations, helps farmers to become aware of the problems, which can be arise in such analysis, increase knowledge and develop into problems solving and helps to structure

farmers existing knowledge, help farmers to acquire specific knowledge related to certain problems solutions and their consequences so that they can act on possible alternatives, help farmers to evaluate and improve their own opinion farming and decision making skills.

Asiabaka (2002) tried to look at extension from modern perspective and thus, explained it from the aim, which extension seek to accomplish; which is to teach both the rural and urban clientele how to determined their problems using their own resources. In addition Asiabaka (2002) said that extension is having three important dimension namely: educational component, which involves charging the behavior complex and attitude of the peoples, economic dimension, which include: increase the incomes of the clientele, increased crop yield, better financial management, better method of food preservation, social dimension which also include: improved health of the clientele, leadership development, better grooming, development co-operation and increase zeal for development.

Maunder (1972) defined extension as a science ,which deals with the creation , transmission and application of knowledge designed to bring about planned changes in the behavioral complex of people with a view to help them live a better life through learning new ways of improving their vocation, enterprise and institution. . Obibuaku (1983) saw extension as an

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informal system of education meant to improve the living standard of the local people who did not have the opportunity of formal education. According to Jones and Garforth (1997) agricultural extension is important because in the first place, information about good or new agricultural practices in a particular environment from research station or farmers experience can be assembled synthesized and made available to use. Secondly this information can be used especially for educational purpose to further investigate it or to disseminate knowledge. Thirdly it results in creation of organizational and administrative setup at which can make dissemination of technologies easier.

Involvement of government at different levels is important to agricultural sector improvement. According to Rivera et al (2001), government of developing countries are confronting new extension challenges; on the one hand, there is a need to increase production to provide food for all citizens, raising from the income of the rural population and reducing poverty; on the other hand there is a need to manage the natural resources in a sustainable way in a rapidly changing world with new technologies developed all the time therefore, it is important that policy makers be aware of the key role that extension plays in the national economy development before modernizing and reforming the existing agricultural system. Extension mission by itself is challenging as it deals with uneducated rural poor with the aim of changing their behavior positively as compared to dealing with animals and plant at safe and comfortable research stations (Qamar, 2005). Despite the fact that Nigerian government gave an average attention to the agricultural research institutes, research stations in the country are too few to cover the whole country. Improved seeds are basically tried in few research stations and at farmers' field near the station but disseminated to a larger area.

#### **Objectives of the Study**

The main objective of this study was to determine the benefit derived by the farmers on the use of improved seed and number of visit by extension workers. Specifically to determine

1. The benefit drive by farmers on the use of improved seed and number of visit by extension workers.

2. The benefit drive by farmers on the use of improved seed and language used by extension workers.

#### **Research Questions**

1. What are the benefit derived by the farmers on the use of improved seed and number of visit by extension workers?
2. What are the benefit derived by the farmers on the use of improved seed and language used by extension workers?

#### **Hypothesis**

1. There is no significance relationship between the benefit derived by the farmers and number of visit by extension workers.
2. There is no significance relationship between the benefit derived by the farmers and the language used by extension workers.

#### **RESEARCH METHODOLOGY**

The method of research design was survey, area of the study is Gombe State located in the north eastern part of Nigeria, is one of the 36 state in the country, it is capital Gombe with a latitude of 9°30' and 12° 30'N and longitude of 8°45' and 11° 45E. Gombe State shared a border with Borno State and some part of Adamawa by the east, Bauchi State by the West, Yobe State by the north and Taraba State by the south. The population of the study in this research comprises of farmers in Gombe State who practice irrigated agriculture. Gombe Central which comprises of Akko and Yamaltu Deba Local Government Area was used as a sample in this research. The data used in this study was collected during 2015 farming activities (April to ending November the period covered both the growing and harvesting activities as such it became easy to the farmers to answer the questions giving to them because they provide answers to all relevant information needed from them. To generate quantitative data farmers of the areas were given structured questionnaires, the questionnaire were given to farmers who can read and write, and they filled it to the best of their knowledge

Descriptive statistics was used for the analysis of data with the help of SPSS programme where both the percentage distribution of the respondents and chi-square were used. The results were reflected in cross tabulations tables.

## RESULT

**Table 1:** Chi-square test for benefit from use of improved seeds by number of visits in Gombe State

			Number of visits					Total
			6-5 times	4-3 times	3-2 times	once	never come	
<b>Benefit from used of improved seeds(q14)</b>	Yes	Count	20	45	75	20	0	160
		% of Total	10.0%	22.5%	37.5%	10.0%	0.0%	80.0%
	No	Count	0	0	0	15	25	40
		% of Total	0.0%	0.0%	0.0%	7.5%	12.5%	20.0%
Total		Count	20	45	75	35	25	200
		% of Total	10.0%	22.5%	37.5%	17.5%	12.5%	100.0%
Significance 0.002								

The above Table shows that 80% of the total respondents admitted that they benefited from the used of improved seeds while only 20% admitted they did not benefit. Among those who benefited, 37.5% of them which was the majority indicated that extension workers visited farmers 3-2 times in a season while 10%, 10%, 22.5% indicated 6-5 times, once and 4-3 times respectively. Among those who did not benefit on

the other hand, 12.5% being the majority indicated that extension workers never visit them at all throughout the season while the remaining 7.5% indicated once and none indicated 6-5 times, 4-3 times or 3-2 times, the table shows that people benefited from the use of improved seed were usually visited by extension workers 3-2 times in a season and the cross tabulation relation between the variables was highly significant.

**Table 2:** Chi-square test for benefit from use of improved seeds by language used in Gombe State

			Language used			Total
			It is clear to understand	Moderate to understand	Not clear to understand	
<b>Benefit from used of improved seeds</b>	Yes	Count	70	70	20	160
		% of Total	35.0%	35.0%	10.0%	80%
	No	Count	0	0	40	40
		% of Total	0.0%	0.0%	20.0%	20.0%
Total		Count	70	70	60	200
		%	35.0%	35.0%	30.0%	100%
Significance 0.025						

The above table shows significant relation between variables where 80% of the total respondents admitted that they benefited from use of improved seed while the remaining 20% admitted they did not. Among those who admitted they benefited, 35% and 35% opined that the language used in extension work was clear to understand and moderate to understand respectively, while only few of them that was 10% opined that it is not clear to understand. Among those who did not benefit on the other hand, none admitted that the language was either clear or moderate to understand, but all (the 20%) opined that the language was not clear to understand, that insure the service of applying improved seeds was affected by the language used by extension workers.

## CONCLUSION

Extension services are vital tools of economic and social development to especially the less developed areas. This is true because it helps famers improve their farming methods thereby increasing their productivity and hence increases their income earning. This will further influence better living standard and modernity. The absence of extension service to local farmers can seriously delay development and economic growth. If extension agents are ready to do their work of orienting and educating the farmers on newly improved method of farming using the appropriate method farmers are likely to cooperate and accept. And if this is done, then, higher Agricultural productivity, development and better living standard will be ensured.



Every society of the world where agriculture is emphasized need agricultural extension service to growth and development. The success of every society in general and Gombe State in particular toward outstanding extension service delivery can only be actualized through genuine acceptance of extension services by the farmers and willingness of the extension agents to offer the required services. Extension services therefore, need the time and cooperation of farmers to function effectively and achieve its desired objective, and the farmers in the other hand need extension services to improve in their farming method, then increase productivity, develop and improve their living standard.

### RECOMMENDATIONS

The following recommendations are therefore provided:

1. More extension staff should be employed so that wider area should be covered to meet various farmers with extension service. This will solve the problem of insufficient visit and teaching. In addition, number of times of visit per season should also be increased so that the farmers will receive adequate orientations.
2. Instead of always reliant on visitation from extension officers, government should pick at least five individuals through certain criteria's from every section of the society and offer them free education in the university on agriculture/ agricultural and rural development. In addition to the services of the extension staff, these trained indigenous individuals can influence

and motivate more farmers positively towards innovative farming. They can help directly or indirectly in educating the people (mostly farmers) of their respective areas on innovative farming.

3. To aid the services of extension agents, and provide conducive atmosphere for better service delivery, the government should provide social amenities to the rural areas (farmers) such as pipe bone water, roads, bridges, electricity among others. The absence of these basic social amenities forms part of the problems of lack of visitation by the extension officers.

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