**IMPACT OF AGRICULTURAL EXTENSION AGENT IN THE DEVELOPMENT OF AGRICULTURE IN EGOR LOCAL GOVERNMENT AREA OF EDO STATE**

**CHAPTER ONE**

**1.0 INTRODUCTION**

**1.1 BACKGROUND OF STUDY**

**ABSTRACT**

This project work is brought up to investigate the impact played by agricultural extension agent in the development of agriculture in the nation using Egor Local Government Area  of Edo State as a case study. Four research questions were raise to capture the impacts played by agricultural extension agents and questionnaires is used to elicit information from the respondents which are farmers in the study area. the questionnaire is divided into two part, part  A and B. the part A was set up to ask questions on the personal information of the respondents while section B was to ask questions that will answer the research questions asked in chapter one of this project. Multistage random sampling is used to select the respondents. Hundred (120) respondents are randomly selected and used for the study. The questionnaire was given to the project supervisor to proof read before administering it. The questionnaire was collated and simple percentage method was used to analyze the collated questionnaires and the results were presented in chapter four of the project. The recommendation made are, the agricultural extension agents to farmers ratio should be work upon. There should be considerable number of assigned farmer to agricultural extension agents so as to foster, learning or there should be more employment of specialist to carryout agricultural extension service, more time should be allocated to training or teaching of farmers as some of the farmers are late adopters, time of visitation should be more frequent so as to instigate encouragement from the agricultural extension agents to the farmers. If this is worked upon, it will be very hard for the farmer to forget what they have been taught.

TABLE OF CONTENT

CHAPTER ONE

Introduction                                                                                          Background to the Study

Statement of problem

Objective of the study

Significant of the study

Scope of the study

Basic assumption

CHAPTER TWO

Literature Review

CHAPTER THREE

Research methodology

Design of study

Area of study

Population of the study

Sample and samplings techniques

Research instrument

Administration of research instrument

Method of data Analysis

CHAPTER FOUR

Data analysis

CHAPTER FIVE

          Summary

Implication of findings

Recommendations

REFERENCES

  QUESTIONNAIRES

**CHAPTER ONE**

**1.0 INTRODUCTION**

**1.1 BACKGROUND TO THE STUDY**

Agricultural extension has often been conceptualized as an education process, which promotes learning it uses the combined findings of biological sciences and the principles of social science to bring about changes in knowledge, skill attitude and practices in and out of school setting (Ileubaoje 2004). Eremie (2005) postulated that an agricultural extension services has a lot play in ensuring that Nigeria achieves the million development goals. It was these perceived important roles of agricultural extension that informed the establishment of the agricultural development programme (ADPs). With the re-organization and strengthening of the extension agent of the ADPS, along training and visits line in 2006, a number of activities were initiated so as to ensure that the seven features of the trainings and visits are implemented. These have led to a change in the roles performed by the extension workers thereby resulting in some level of satisfaction among both extension workers and their clients (Ajuwon 2006). It is also worth noting that despite the tremendous achievements of the agricultural sector in Nigeria, the ADPs have been besotted by a myriad of problems, especially with the terminal end of the counterpart funding by the World Bank. These problems range from the Nona rail ability of facilities necessary for effective implementation and functioning of extension workers to poorly motivated staff resulting in low morale, low level of role perception and poor performance of extension workers (Banmeke and Ajayi 2005) Chikwendu et al, (2007) noted that in recent years, there have been indications of ineffectiveness in the extension agent of the ADPs. The goal of every manager is to increase production and efficiency to obtain maximum result for the organization motivation for better performance depends on job satisfaction, achievement, recognition and professional growth (Adeniyi, 2001). The rural area is the predominant food and fibre producing sector of the Nigeria society and all natural resources which constitute the wealth of a nation are obtained of the rural areas. The importance of the rural in Nigeria also his in the mere fact that over 70% of the people live and derive their livelihood from there. The state of the rural areas in Nigeria’s is determined by a combination of methods which include available social, physical and institutional infrastructures as well as the people’s level of living including their levels of perceived deprivation and satisfaction with current level of living. The rural areas in Nigeria is characterized by lack of public infrastructure, sub-standard education, poor health services and low agricultural productivity leading to poor standard of living for the majority. The agricultural extension agent in recent years has however played a significant role in improving agricultural production in Nigeria through advisory agent and adequate access to information on improved techniques of production agricultural extension plays a pivotal role in ensuring the awareness and subsequent adoption of the contemporary methods of agricultural management various extension teaching methods have been employed to make sure that the technologies get to the end users prominent among there is the training and visit system of the agricultural development programme. The central principle or idea of the extension strategy is to produce competent and well- informed extension agents who will frequently and regularly visit farmers with relevant technical messages and bring farmers problems to research. The system of extension entails that each extension agent is required to regularly visit the farmers/farmer’s group with relevant messages that are specific to the farm practices taking place in the field at that point in time. Feed back is also taken by the extension agents from farmers to the research station. The extension agent operates from the back drop belief that increased agricultural productivity depends primarily upon acceptance of improved cultural and technological change at the rural farm level and that peasant farmers can achieve improved production only if they adopt recommended to agricultural practices in place of traditional over. Successful adoption of improved agricultural practices is predicated upon rural farmer’s acquiring the required knowledge and understanding of these technologies. This will improve productivity and rais4e the living standards of the farmers who are the beneficences of the agent (Lawal, Bodo Toriminobia Makanjuola (2006) the efficiency of technologies generated and disseminated however, depends on effective adoption of the technologies by the end-users.

**1.2 STATEMENT OF THE PROBLEM**

     The failure of the various extension delivery approaches in developing counties to effectively engineer significant and sustainable agricultural growth has become a major concern to all stakeholders, including the donor community. The concerns have been fueled lately by the wave of pluralism, market liberalization and globalization sweeping across the world and giving rise to initiatives that will enhance efficiency and effectiveness of not only the sub-components of extension delivery but the entire system of technology generation, dissemination and use. With a rapidly expending population, environmental degradation, political instability, economies failure and the declining budget, re-thinking the way agricultural technology is delivered to farmers has become necessary. This re-thinking engineered the way we have to investigate the impact of agricultural extension agent in the development of agricultural in Egor local government of Edo-state.   **1.3 PURPOSE OF THE STUDY**

This study is set up to investigate the impact played by agricultural extension in the development of agriculture in the nation using Egor Local Government Area of Edo State as a case study.

**1.4 SIGNIFICANCE OF THE STUDY**

Knowing the impact played by agriculture it will go a long way to encourage both the individual, government and NGO’s to see reason why they have to give more attention to agricultural extension in the country.  Also, in an attempt to evaluate the impact of agricultural extension, problems faced by agricultural extension will be look into and possible solution will be suggested which if duly followed will heap in educating and alerting existing agricultural extension agents as a result new agents on what to expect as an extension agent.

**1.5 RESEARCH QUESTION**

1.     What is people’s Understanding about agricultural extension? 2.     Have you been visited by extension agent?

3.     What impact does this visit plays in your agricultural life style?

4.     What are the problems militating the best usage of agricultural extension?

**1.6 RESEARCH HYPOTHESIS**

**H0:** the introduction of Agricultural extension agent has no significant impact on the agricultural development in egor local government area of Edo state.

**H1:** the introduction of Agricultural extension agent has significant impact on the agricultural development in egor local government area of Edo state.

**1.6 SCOPE OF THE STUDY**

This study will look into the impact of agricultural extension on the development of agricultural in the country and the case is Egor Local Government Area of Edo-state. The populations for this study comprise of the farmers in the local government as well as agricultural extension agents.

**CHAPTER TWO**

**2.0 REVIEW OF RELATED LITERATURE**

**2.1 THE CONCEPT OF EXTENSION SERVICES**

The crucial role of agricultural Extension (i.e. farmer education) in the social and economic development of the nation cannot be over-emphasized. Never before in Nigerian history has the necessity for educating and raising the productive capacity of our farmers been of such importance as it is today. Increased agricultural productivity depends primarily upon the acceptance of cultural and technological changes at the rural farm level.

Thus, for Nigerian agriculture to improve, our farmers have no alternative but to learn and adopt recommended scientific farming techniques in place of their traditional practices. Perhaps, the slow development of Nigerian agriculture can be attributed to the inability of the Nigerian farmers to respond positively to new ideas or innovations. For farmers to respond positively to new ideas, they must be properly educated on how best to apply the new ideas or practices to their farming activities. This is because the new ideas are often complex, technical and can hardly be understood by most of our farmers. Nigeria cannot achieve increased agricultural productivity on rural farm level, except through the provision of basic agricultural education, particularly, the non-formal or extension type that will help move millions of the farmers from traditional to progressive farming, thereby improving the overall quality of rural life. It is not very easy to define agricultural extension in a short concise, phrase or statement. Any 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 people. Fisher (1983) defined extension as a system of education extending beyond the classroom to individuals on the farms and is available to every member 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 programme.

Vanden Ban and Hawkin (1988), defined extension as involving the conscious use of communication of information to help people form sound opinions and make good decisions. They explained extension systematically as a process which helps farmers to analyze their present and expected future situations, helps farmers to become aware of the problems, which can arise in such an analysis, increase knowledge and develops into problems and helps to structure farmers’ existing knowledge, helps farmers to acquire specific knowledge related to certain problems, solutions and their consequences so that they can act on possible alternatives, helps farmers to evaluate and improve their own opinion-forming 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 determine their problems and be able to rise to such problems using their own resources. He further explained Extension as having three important dimensions namely; educational component, which involves changing the behavior complex and attitude of the people, economic dimension, which includes; increased income of the clientele, increased crop yield, better financial management, better methods of food preservation, social dimension, which also includes; improved health of the clientele, leadership development, better grooming, development co-operation, increased zeal for development.

He summarized that the clientele of extension are not only farmers, rather other members of the citizenry who will benefit from the extension service hence, extension education. Obibuaku (1983) saw extension as an informal system of education meant to improve the living standard of the local people who did not have the opportunity of formal education. 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 behavioural complex of people with a view to helping them live a better life through learning new ways of improving their vocation, enterprise and institution.

There are however, three basic concepts that clarify the scope, understanding and meaning of extension. They are; extension as educational process, which consists of four phases or steps, namely; knowing the rural/urban community, programme planning and development, implementation or execution of the programme, evaluation of the executed programme. Extension as education/change, which means that extension brings about change in the behaviour, attitude and skills of the people and is done using a systematic and planned method, utilizing the basic principles of teaching and learning in extension education, extension as salesmanship, which means that extension sells its ideas and knowledge to others to help them grow and improve.

It then means that the techniques being used by the professional salesmanship can be modified and used by extension service. However, extension service unlike salesmanship is more interested in result than in profit making, which is the hallmark of the salesmanship. Although, extension service may adopt the same propaganda and techniques to convince farmers, it is worth mentioning that the watchword in extension is honesty. (Uwakah, 1989).

Finally, William (1979) summed up three basic tasks of extension as; disseminating useful information, applying it to the analysis of practical problems and help people to use it to help themselves. Extension today goes beyond informal, non-formal and formal forms of education as it fits in the three forms of education known throughout the world.

**2.2 THE BRIEF HISTORY OF EGOR LOCAL GOVERNMENT AREA OF EDO STATE**

Egor is a Local Government Area of Edo State, Nigeria. Its headquarters are in the town of Uselu. It has an area of 93 km² and a population of 339,899 at the 2006 census. The postal code of the area is 300.

Edo stateis an inland state in southern Nigeria. Its capital is Benin City. It is bounded in the north and east by Kogi State, in the south by Delta State and in the west by Ondo State. The 1992 gubernatorial election, pitting John Odigie

Oyegun (the SDP candidate) against Lucky igbenedion (the NRC candidate)

was annulled on February of that year by the electoral tribunal. Among Igbinedion's claims were that the Oba of Benin and one of his chiefs, Nosakhare Isekhure, unfairly supported Oyegun. Oyegun's victory was upheld on 18 March 1992.

On 20 March 2008, an election tribunal nullified the election of Oserheimen Osunbor People's Democratic Party,(PDP) and declared erstwhile labour leader Comrade Adams Oshiomhole of the Action Congress as the winner. The decision was based on several voting irregularities.

**2.3 THE ROLE OF AGRICULTURAL EXTENSION SERVICE IN THE DEVELOPMENT OF AGRICULTURE**

A role may be defined as a set of norms, values and interaction patterns associated with a given category of individuals. It is therefore, the job or function attached to a given status. It can be clarified with the economic concept of division of labour, which states that individuals work in different sectors of the economy. Agricultural extension service could be the government agency or ministry responsible for promoting the adoption and utilization of new scientific farming practices through educational procedures (Uwakah, 1984).

Many agricultural extension services could also be found in many non-governmental organizations (NGOs), many private firms and private organizations such as NTC, Coffee-Growers Association, Shell Corporation, Church organizations etc. Role of extension service therefore include; act as an intermediary or go between or even link between agricultural development institutions such as research institutes, universities, colleges of agriculture and target groups (which may be the farmer, women group, youths etc.), carries out the formulated agricultural extension policies, links the farmer with sources of farming inputs and credit facilities, provide the timely information on new innovations and practices meaningful agricultural development, provides educational services to farmers, and plays active role in the rural community development of any nation.

This explains why it remains one of the strategies for rural development through out the world, assist people to determine their own problems, help them find desirable solutions and encourage them to take action, foster beneficial changes in the outlook of all people, re- appraise its work periodically to meet changing conditions and to modify its programs to suit the changing conditions, to provide maximum opportunity for the youth and the family to participate in attaining a better and more rewarding life, to maintain the highest level of proficiency in its workers by exposing them to relevant and continual training, to encourage and aid in the wise use and conservation of all human and natural resources, to promote the use and the development of volunteer leaders and help in the execution of extension programs, to promote efficient agricultural production and the development of institutions to ensure proper handling of the products for welfare of both the producers and consumers, it aids through educational efforts, the diffusion among people of all appropriate research and practical information relating to agriculture, home economics, health and encourage their application and above all, it promotes the social and economic life of all people (Adams, 1982).

**2.4 THE ROLE OF AGRICULTURAL EXTENSION AGENT**

There are no models of an agent's role which are applicable to all situations. An agent must consider each situation individually and adopt a position or role suitable to that situation.

Indeed, there is a wide variety of views on the extension agent's role in bringing about change among farmers. To illustrate this range of views, a number of different statements on the agent's role, taken from extension practice from different parts of the world, can be examined.

An extension agent tries to arouse people to recognize and take an interest in their problems, to overcome these problems, to teach them how to do so, to persuade them to act on his teaching, so that they ultimately achieve a sense of satisfaction and pride in their achievements.  
- A change agent is a person whose primary role is to achieve a transformation of attitudes, behaviour and social organization.  
- Change agents are multi-purpose agents serving as links between government and people.

- A change agent is a person who sets in motion a process of change after realizing that certain changes are necessary for the rural society.  
- A change agent is an activist whose main role is to help people form their own organizations in order to be able to tackle their problems.  
- A change agent is a professional who influences the innovation/decision-making process in a direction deemed desirable by the change agency.

**2.5 THE ROLE OF THE AGRICULTURAL EXTENSION OFFICER**

In most developing countries such as Nigeria, subsistence or traditional agriculture dominates the economy and for national progress to occur, change in agriculture is essential. The change is needed not only to increase production, but to liberate households from poverty. A great deal of the responsibility for bringing about this change rests on the shoulders of extension workers. That is the men and women at the front line of the struggle for progressive change in agriculture. An extension worker helps farmers increase the productivity of their farms and improve their living standards. An extension worker has many roles. He is an adviser, a technician and a middleman operating between agricultural research institutions and the farm families. He is a change agent, consultant and advocate helping farmers to identify their problems and find their own solution. He works for the creation of community harmony essential for group projects. He is a manger planning and organizing his work and that of his assistants.

In most extension organizations such as in ADPs, Ministry of Agriculture etc, Extension Staff or Officers are organized on a 3 or 4 tier system or hierarchy namely; the state headquarter, the zonal offices, the local Government offices/blocks and the village levels/circles/cells. At the state headquarters, the chief extension officer heads the extension organization. He is vested with formal authority over the organization and his management functions can be categorized by using the acronym POSDCORB which stand for:

***Planning:*** Outlining philosophy, policy, objectives and resultant things to be accomplished and techniques for accomplishment.

***Organizing:*** Establishing structures and systems through which activities are arranged, defined and coordinated in terms of some specific objectives.

***Staffing:*** Fulfilling the personnel function, this includes selecting and training staff and maintaining favourable work conditions.

***Directing:*** Clarifying, guiding, teaching and encouraging employees.

***Coordinating:*** Inter relating the various parts of the work.

***Reporting:*** Keeping those to whom he is responsible, including both staff and public informed.

***Budgeting:*** Making financial plans, maintaining accounting and management control of revenue and keeping costs in line with objectives.

Other officers at the state headquarter for Ministry of Agriculture include; Deputy Chief Agric. Officer, Asst. Chief Agric. Officer etc. while ADP has a deputy Chief Extension officer. They attend the management meeting and are in close touch with other heads in the large body of the ministry. At the zonal level, the Zonal Extension Officer (ZEO) heads the extension unit in the zone organizes the FNT. He is in charge of all extension activities going on in the zone. He is in close touch with the zonal manager as well as the subject matter. specialists who impart the knowledge got from research on the extension agents and extension supervisors. Testing research findings in pilot trails and building them into the extension programme, ensuring inputs are available for extension agents, supervision and training of extension agents and extension supervisors.

At the local government level or block level as used in ADP, the block extension supervisors are in charge. They conduct on the spot supervision of the activities of the extension agents following the extension agent’s field visit schedule. He organizes the Block meetings where he reviews what were taught in the FNT and records the farmer’s problems as reported by the extension agents for onward transfer to FNT and down to MTRM. The Block extension supervisor oversees the activities of extension service at the local government levels. He facilitates, encourages and supports the efforts of management to achieve goals through other people who work directly on the job.

At the village level or circle/cell, the extension agent becomes the contact man between the extension agency and the farmer. The extension agent is the last and at the same time the most important link in the chain connecting research and the farmers. The key function of the extension agent is the continual moulding and re- moulding of the farmers farming habit in accordance with proven and most up to date technologies and research recommendation in other to enable the farmers increase their farm production at reasonable costs. The extension agent divides his operational area circle into sub-circles based on the farming areas. He would then select his target farmers the contact farmers. He would also draw his fixed schedule of visit which would guide his activities from Tuesday to Fridays every week.

Every Monday is kept aside for the two important training for the EA namely the FNT and BM. The EA is expected also to render reports of his daily activities at the end of every month. He establishes the Small Plot Adoption Techniques (SPATS) with which he disseminates information to his farmers. He is the agricultural expert which the farmer knows. It must be realized that agriculture is a very dynamic subject and processes involved in its practice are season and times specific, hence the need for regular and constant training to update those involved.

He together with his Block Extension supervisor organizes field days where farmers are brought together and taught by subject matter specialists invited from the zones or headquarters. He also assists the subject matter specialists in selecting sites for OFAR and contract farming. It is necessary that the extension agent must be familiar with the local farming system and have a thorough knowledge of and sympathy with, decision- making problems of the small farmer, both theoretical and practical. He must also be capable of giving farmers practical field demonstrations of appropriate improved techniques, help them to locate farm supplies and equipment, advice them on sources of credit and follow up their requests with the organizations involved. Before the advent of Agricultural Development Programmes, agricultural extension follows the pattern illustrated in Figure 1. Under the Ministry of Agric arrangement.

AS - Agric Superintendent

AAS - Assistant Agric Superintendent AAST - Assistant Agric Superintendent II AFO - Agric Field Officer

AFA - Agric Field Assistant CAO - Chief Agric Officer

DCAO - Deputy Chief Agric Officer ACAO - Assistant Chief Agric Officer CAS - Chief Agric Superintendent

DCAS - Deputy Chief Agric Superintendent ACAS - Assistant Chief Agric Superintendent PAS - Principal Agric Superintendent

PAO - Principal Agric Officer

SAG - Senior Agric Superintendent HAS - High Agric Superintendent

Agric extension today is mostly carried out by the state. Agric Development programme and it takes the pattern shown in figure 2.

CEO - Chief Extension Officer PM - Project Manager

CTO - Chief Technical Officer CCRO - Chief Crop Research Officer CFO - Chief Fisheries Officer CAFO - Chief Agro Forestry Officer CENG - Chief Engineer

CWIA - Chief Women in Agric

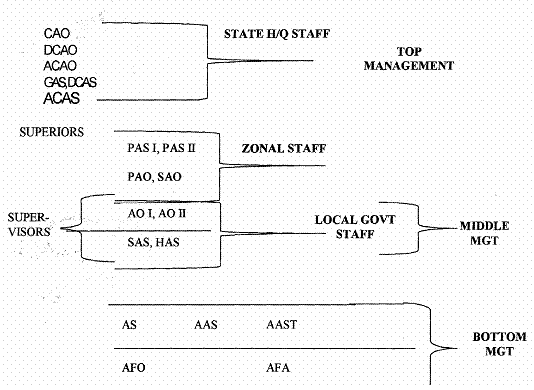
CMDRO - Chief Manpower & Research Development Officer

CCO - Chief Commercial Officer CLO - Chief Livestock Officer ZM - Zonal Manager

ZEO - Zonal Extension Officer SMS - Subject Matter Specialist• BES - Block Extension Supervisor BEA - Block Extension Agent

EA - Extension Agent

From the figures 1 and 2, it is seen that the bulk of agric extension service rests on the supervisors and Extension Agents Programmes developed from research at the end of the day, gets to the Block extension supervisors who then supervise the extension Agents who impart the knowledge to the farmers. Also problems from field take the same form of getting to the supervisors through the agents who would then send it up the ladder till it gets to research for solution. This, therefore, means that Extension management is done from the HQ by the CEO with the assistance of different chiefs in their subject matter, at Zonal level by the BES and BEA, while at the circle level the extension agents.



**Figure 1.** Agricultural pattern before advent of agricultural development programmes. Source: Adapted from Madukwe M.C. The role of supervision in extension, UNN 1985.

**REFERENCE**

Adams ME (1982). Agricultural Extension in developing countries. Intermediate tropical agriculture services. Longman group Limited Essex, UK: 63-69.

Anaeto CF (2003). Concept of Rural Development in Nigeria: Issues, Prospects, Problems and Solutions. The Nigerian Academic forum: 4(2): 121- 130.

Anaeto CF (2005). Need to strengthen supervision in Agricultural Extension service in Nigeria. J. Pure and Appl. Sci., 5(1): 1-7.

Asiabaka CC (2002). Agricultural Extension. A handbook for Development Practitioners. Molsyfem United Services, Omoku, Rivers state, 1-2: 148-152.

Contado TE (1997). Formulating Extension Policy in Improving Agricultural Extension, A reference Manual. Sustainable Development Department FAQ Rome.

Fisher in Asiabaka CC (2002). Agricultural Extension. A handbook for Development Practitioners. Molsyfem United Services, Omoku, Rivers State: 1-2: 148-152.

Madukwe MC (1984). Role of supervision in extension education. Seminar paper presented in the Department of Agricultural Extension, University of Nigeria Nsukka (UNN).

Maundar AH (1972). Agricultural Extension, A reference manual, FAQ publication: pp3.

Obibuaku LO (1983). Agricultural Extension as a strategy for agricultural transformation UNN: 57

Offor RE (1995). Orientation course for new Extension agents - Onitsha Zone ASADEP.

Uwakah CT (1984). Programmes and opportunities in agricultural Extension Education. A paper presented to students of Agriculture Extension Department UNN.

Uwakah CT (1989). Summaries/Abstract of Agricultural Exension, Adult Education and Rural Development Studies UNN.

Vanden Ban AW, Hawkins HS (1988). Agricultural Extension Bath press Avon Great Britain.

**CHAPTER THREE**

**3.1 RESEARCH DESIGN**

Research design is the plan structure and strategy of investigation developed so as to obtain answer to research questions and control variance (Kerlinger, 1973:45).

**3.2** **SOURCES OF DATA**

The researcher used both primary and secondary methods of data collection.

Primary Data: This is data that is obtained first hand from the respondents. Primary data method is obtained through the administration of questionnaires and personal interviews.

Secondary Data: secondary source of data are opinions of exports in the experts views and are obtained from related literature from private, professional ad academic libraries.

**THE POPULATION STUDY**

The study of population would cover about 120 inhabitant of Egor local government area of Edo State.

**3.4 SAMPLE DESIGN AND DETERMINATION OF SAMPLE SIZE**

The researcher used Yaro Yammane’s formular to determine the sample size from the population.

Yaro Yamane’s formula is given

As n = N

1+N (e)2

Where N = population of study

n = sample size

e = level of significance at 5%

1 = constant

Thus substituting for the formula

n = 286

1 + 286 (5%)

= 286

1 + 286 (0.0025)

= 286 = 286

1 +1.38 2.38

= 286 = 120.1

2.38 = OR

= 120

The sample size of the study is 120 respondents.

**3.5 METHOD OF DATA COLLECTION**

The research instrument used by the researcher in collecting useful data is questionnaires and interview.

The questions were both close and open ended with multiple answers. These formulated questions were submitted to the supervisor necessary corrections were made.

This was necessary because the instrument has to agree with the subject under discussion.

**3.5.1 QUESTIONNAIRE DESIGN, DISTRIBUTION AND COLLECTION OF RESPONSES**

The questionnaires were carefully designed to accommodate two sections. The first section is the demographic characteristics of the respondents such as sex, age, educational level which the second section deals on relevant aspect of the topic under study.

**3.5.2 SECONDARY METHOD OF DATA COLLECTION.**

The researcher used the following sources for the collection of secondary data with the used of libraries, textbooks, journals, newspaper conference and seminar papers and the review of other related literature.

**3.6 METHOD OF PRESENTION AND ANALYSIS**

Data collected subjected to statistical analysis with the use of chi square test of independence. Chi square is given as

X2 = ∑ (o-e) 2

e

Where x2 = chi square

o = observed frequency

e = expected frequency

Level of confidence / degree of freedom

When employing the chi – square test, a certain level of confidence or margin of error has to be assumed. More also, the degree of freedom in the table has to be determined in simple variable, row and column distribution, degree of freedom is: df = (r-1) (c-1)

Where; df = degree of freedom

r = number of row

c = number of columns.

In determining the critical chi \_ square value, the value of confidence is assumed to be at 95% or 0.95. a margin of 5% or 0.05 is allowed for judgment error.

**DECISION FOR VALIDATION OF HYPOTHESIS**

The rule in deciding or whether to accept or reject the null hypothesis is that were the computed chi – square (X2) value is greater than the critical chi – square (X2) values reject the null hypothesis and accept the alternative hypothesis. However, were the critical value (table value) of the chi – square is greater than that of the computed value, accept the null hypothesis and reject the alternative hypothesis.

Thus;

Accept HO if X2c < X2t

Accept H1 if X2c > X2t

Where; Ho; null hypothesis

H1; alternative hypothesis

X2c; computed chi – square value

X2t; table (critical) chi – square value.

**4.0 CHAPTER FOUR**

**4.1 DATA PRESENTATION, DATA ANALYSIS AND INTERPRETATION**

This chapter is devoted to the presentation, analysis and interpretation of the data gathered in the course of this study. The data are based on the number of copies of the questionnaire completed and returned by the respondents. The data are presented in tables and the analysis is done using the chi-square test.

**4.2 Data Presentation and Analysis**

The data presented below were gathered during field work.

QUESTIONNAIRE ADMINISTRATION

INSTRUCTION: please endeavor to complete the questionnaire by ticking the correct answer(s) from the options or supply the information required where necessary.

SECTION A: personal information/Data

**Gender**

Male

Female

**Age range**

15-20yrs

21-30yrs

31-40yrs

41-50yrs

Above 50yrs

**Educational qualification**

OND

HND/BSC

PGD/MSC

PHD

Others

**Marital status**

Single

Married

Divorced

Widowed

**Years of service/experience**

0-2yrs

3-5yrs

6-11yrs

Above 11yrs

SECTION B: The impact of agricultural extension agent in the development of agriculture

the introduction of Agricultural extension agent has significant impact on the agricultural development in egor local government area of Edo state.

Strongly agreed

Agreed

Undecided

Disagreed

Strongly disagreed

there are problems militating the best usage of agricultural extension in egor local govern ment area of edo state.

Strongly agreed

Agreed

Undecided

Disagreed

Strongly Disagreed

agricultural extension agent have significant effect on the standard of living of the inhabitants of egor local government area

Strongly agreed

Agreed

Undecided

Disagreed

Strongly Disagreed

In your own words explain the role of agriculturl extension agents

\_ \_ \_ \_\_\_\_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_ \_\_\_\_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_

The practice of agriculture has increased overtime in Edo state.

Strongly agreed

Agreed

Undecided

Disagreed

Strongly Disagreed

**BIO DATA OF RESPONDENTS**

| **Table 1 Gender of respondents** | | | | | |
| --- | --- | --- | --- | --- | --- |
|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | male | 80 | 66.7 | 66.7 | 66.7 |
| Female | 40 | 33.3 | 33.3 | 100.0 |
| Total | 120 | 100.0 | 100.0 |  |

Source: field survey, april 2016.

Table 1 above shows the gender distribution of the respondents used for this study.

80 respondents which represent 66.7percent of the population are male.

40 which represent 33.3 percent of the population are female.

| **Table 2 Age range of respondents** | | | | | |
| --- | --- | --- | --- | --- | --- |
|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 15-20 years | 15 | 12.5 | 12.5 | 12.5 |
| 21-30 years | 20 | 16.7 | 16.7 | 29.2 |
| 31-40 years | 35 | 29.2 | 29.2 | 58.3 |
| 41-50 years | 40 | 33.3 | 33.3 | 91.7 |
| Above50 years | 10 | 8.3 | 8.3 | 100.0 |
| Total | 120 | 100.0 | 100.0 |  |

Source: field survey, april 2016.

Table 2 above shows the age grade of the respondents used for this study.

Out of the total number of 120 respondents, 15 respondents which represent 12.5percent of the population are between 15-20yrs.

20 respondents which represent 16.7percent of the population are between 21-30yrs.

35 respondents which represent 29.2 percent of the population are between 31-40yrs

40 respondents which represent 33.3percent of the population are between 41-50yrs.

10 respondents which represent 8.3percent of the population are above 50yrs.

| **Table 3 Educational qualification** | | | | | |
| --- | --- | --- | --- | --- | --- |
|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | OND | 20 | 16.7 | 16.7 | 16.7 |
| HND/BSC | 42 | 35.0 | 35.0 | 51.7 |
| PGD/MSC | 40 | 33.3 | 33.3 | 85.0 |
| PHD | 10 | 8.3 | 8.3 | 93.3 |
| OTHERS | 8 | 6.7 | 6.7 | 100.0 |
| Total | 120 | 100.0 | 100.0 |  |

Source: field survey, April 2016.

Table 3 above shows the educational background of the respondents used for this study.

Out of the total number of 120 respondents, 20 respondents which represent 16.7percent of the population are OND holders.

42 respondents which represent 35.0percent of the population are HND/BSC holders.

40 respondents which represent 33.3percent of the population are PGD/MSC holders.

10 respondents which represent 8.3 percent of the population are PHD holders

8 respondents which represent 6.7percent of the population had other types of certificate.

| **Table 4 Marital status of respondents** | | | | | |
| --- | --- | --- | --- | --- | --- |
|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Single | 40 | 33.3 | 33.3 | 33.3 |
| Married | 70 | 58.3 | 58.3 | 91.7 |
| Divorced | 5 | 4.2 | 4.2 | 95.8 |
| Widowed | 5 | 4.2 | 4.2 | 100.0 |
| Total | 120 | 100.0 | 100.0 |  |

Source: field survey, April 2016

Table 4 above shows the marital status of the respondents used for this study.

Out of the total number of 120 respondents, 40 respondents which represent 33.3 percent of the population are single.

70 respondents which represent 58.3percent of the population are married.

5 respondents which represent 4.2 percent of the population are divorced.

5 respondents which represent 4.2 percent of the population are widowed.

| **Table 5 Years of service/experience** | | | | | |
| --- | --- | --- | --- | --- | --- |
|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 0-2years | 30 | 25.0 | 25.0 | 25.0 |
| 3-5years | 50 | 41.7 | 41.7 | 66.7 |
| 6-11years | 30 | 25.0 | 25.0 | 91.7 |
| over 11years | 10 | 8.3 | 8.3 | 100.0 |
| Total | 120 | 100.0 | 100.0 |  |

Source: field survey, April 2016.

Table 5 above shows the years of experience of the respondents used for this study.

Out of the 120 respondents, 30 which represent 25.0percent of the population have had 0-2yrs experience at work.

50 which represent 41.7percent of the population have had 3-5yrs experience.

30 which represent 25.0percent of the population have had 6-11yrs experience.

10 which represent 8.3percent of the population have had more than 11yrs experience.

**TABLE BASED ON RESEARCH QUESTION**

**Table 6**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| the introduction of Agricultural extension agent has significant impact on the agricultural development in egor local government area of Edo state. | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Strongly agreed | 70 | 58.3 | 58.3 | 58.3 |
| Agreed | 30 | 25.0 | 25.0 | 83.3 |
| Undecided | 10 | 8.3 | 8.3 | 91.7 |
| Disagreed | 5 | 4.2 | 4.2 | 95.8 |
| Strongly disagreed | 5 | 4.2 | 4.2 | 100.0 |
| Total | 120 | 100.0 | 100.0 |  |

Source: Field survey, April 2016

Table 6 above shows the responses of the respondents that the introduction of Agricultural extension agent has significant impact on the agricultural development in egor local government area of Edo state

70 percent of the respondent strongly agreed that the introduction of Agricultural extension agent has significant impact on the agricultural development in egor local government area of Edo state

30 percent of the respondents agreed that the introduction of Agricultural extension agent has significant impact on the agricultural development in egor local government area of Edo state

10 percent of the respondents were undecided.

5 percent of the respondents disagreed that the introduction of Agricultural extension agent has significant impact on the agricultural development in egor local government area of Edo state

5 percent of the respondents strongly disagreed that the introduction of Agricultural extension agent has significant impact on the agricultural development in egor local government area of Edo state

.

**Table 7**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| there are problems militating the best usage of agricultural extension in egor local government area of edo state.. | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Strongly agreed | 60 | 50.0 | 50.0 | 50.0 |
| Agreed | 45 | 37.5 | 37.5 | 87.5 |
| Undecided | 10 | 8.3 | 8.3 | 95.8 |
| Disagreed | 5 | 4.2 | 4.2 | 100.0 |
| Total | 120 | 100.0 | 100.0 |  |

Source:field survey,April 2016

Table 7 above shows the responses of the respondents that there are problems militating the best usage of agricultural extension in egor local government area of edo state.

60 percent of the respondent strongly agreed that there are problems militating the best usage of agricultural extension in egor local government area of edo state.

45 percent of the respondents agreed that there are problems militating the best usage of agricultural extension in egor local government area of edo state.

10 percent of the respondents were undecided

5 percent of the respondent disagreed that there are problems militating the best usage of agricultural extension in egor local government area of edo state.

**Table 8**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| agricultural extension agent have significant effect on the standard of living of the inhabitants of egor local government area.. | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Strongly agreed | 80 | 66.7 | 66.7 | 66.7 |
| Agreed | 40 | 33.3 | 33.3 | 100.0 |
| Total | 120 | 100.0 | 100.0 |  |

Field survey, April 2016

Table 8 above shows the responses of the respondents that agricultural extension agent have significant effect on the standard of living of the inhabitants of egor local government area.

80 percent of the respondents strongly agreed that agricultural extension agent have significant effect on the standard of living of the inhabitants of egor local government area.

40 percent of the respondents agreed that agricultural extension agent have significant effect on the standard of living of the inhabitants of egor local government area.

**Table 9**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| The practice of agriculture has increased overtime in Edo state. | | | | | |
|  | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Strongly agreed | 50 | 41.7 | 41.7 | 41.7 |
| Agreed | 60 | 50.0 | 50.0 | 91.7 |
| Undecided | 5 | 4.2 | 4.2 | 95.8 |
| Disagreed | 5 | 4.2 | 4.2 | 100.0 |
| Total | 120 | 100.0 | 100.0 |  |

Source: field survey, April 2016

Table 9 above; show the responses of the respondent that the practice of agriculture has increased overtime in Edo state.

50 percent of the respondents strongly agreed that the practice of agriculture has increased overtime in Edo state.

60 percent of the respondents agreed that the practice of agriculture has increased overtime in Edo state.

5 percent of the respondents were undecided.

5 percent of the respondents disagreed that the practice of agriculture has increased overtime in Edo state.

**RESEARCH HYPOTHESIS**

**HYPOTHESIS TO BE TESTED**

**Hypothesis 1**

**H0:** the introduction of Agricultural extension agent has no significant impact on the agricultural development in egor local government area of Edo state.

**H1:** the introduction of Agricultural extension agent has significant impact on the agricultural development in egor local government area of Edo state.

**LEVEL OF SIGNIFICANCE** (α=0.05)

**DECISION RULE:** reject H0 if the p-value is less than the level of significant, otherwise accept the null hypothesis.

TABLE 10

|  |  |
| --- | --- |
| **Test Statistics** | |
|  | The introduction of agricultural extension agent has significant impact on the development of agriculture in egor local government area of Edo state |
| Chi-Square | 71.667a |
| Df | 3 |
| Asymp. Sig. | **.000** |
| a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 30.0. | |

**CONCLUSION**

Since the p-value is less than 0.05 which is the level of significance, we reject the null hypothesis and conclude that the introduction of agricultural extension agent has significant impact on the development of agriculture in egor local government area of Edo state

**CHAPTER FIVE**

**5.0 SUMMARY, CONCLUSION AND RECOMMENDATION**

This study is set up to investigate the impact played by agricultural extension in the development of agriculture in the nation using Egor Local Government Area of Edo State as a case study

**SUMMARY OF FINDINGS**

From the responses of the respondents we were able to find out that:

1. The introduction of Agricultural extension agent has significant impact on the agricultural development in egor local government area of Edo state.

2. There are problems militating the best usage of agricultural extension in egor local government area of edo state.

3. Agricultural extension agent has significant effect on the standard of living of the inhabitants of egor local government area.

4. The practice of agriculture has increased overtime in Edo state.

**CONCLUSION**

From the finding and the result of the data analysis, we therefore conclude thatthe introduction of agricultural extension agent has significant impact on the development of agriculture in egor local government area of Edo state.

**RECOMMENDATION**

We therefore recommend that:

1. The federal government of Nigeria should encourage farmers in Egor local government area of Edo state by sending more agricultural extension agent and officer to this local government area.

2. The federal government of Nigeria should also make provision of fertilizers and other farm machineries to this area.

3. The agricultural extension agents should also tell the inhabitant of Egor local government area the importance of agriculture.

**REFERENCE**

Adams ME (1982). Agricultural Extension in developing countries. Intermediate tropical agriculture services. Longman group Limited Essex, UK: 63-69.

Anaeto CF (2003). Concept of Rural Development in Nigeria: Issues, Prospects, Problems and Solutions. The Nigerian Academic forum: 4(2): 121- 130.

Anaeto CF (2005). Need to strengthen supervision in Agricultural Extension service in Nigeria. J. Pure and Appl. Sci., 5(1): 1-7.

Asiabaka CC (2002). Agricultural Extension. A handbook for Development Practitioners. Molsyfem United Services, Omoku, Rivers state, 1-2: 148-152.

Contado TE (1997). Formulating Extension Policy in Improving Agricultural Extension, A reference Manual. Sustainable Development Department FAQ Rome.

Fisher in Asiabaka CC (2002). Agricultural Extension. A handbook for Development Practitioners. Molsyfem United Services, Omoku, Rivers State: 1-2: 148-152.

Madukwe MC (1984). Role of supervision in extension education. Seminar paper presented in the Department of Agricultural Extension, University of Nigeria Nsukka (UNN).

Maundar AH (1972). Agricultural Extension, A reference manual, FAQ publication: pp3.

Obibuaku LO (1983). Agricultural Extension as a strategy for agricultural transformation UNN: 57

Offor RE (1995). Orientation course for new Extension agents - Onitsha Zone ASADEP.

Uwakah CT (1984). Programmes and opportunities in agricultural Extension Education. A paper presented to students of Agriculture Extension Department UNN.

Uwakah CT (1989). Summaries/Abstract of Agricultural Exension, Adult Education and Rural Development Studies UNN.

Vanden Ban AW, Hawkins HS (1988). Agricultural Extension Bath press Avon Great Britain.

**APPENDIX 1**

QUESTIONNAIRE ADMINISTRATION

INSTRUCTION: please endeavor to complete the questionnaire by ticking the correct answer(s) from the options or supply the information required where necessary.

SECTION A: personal information/Data

**Gender**

Male

Female

**Age range**

15-20yrs

21-30yrs

31-40yrs

41-50yrs

Above 50yrs

**Educational qualification**

OND

HND/BSC

PGD/MSC

PHD

Others

**Marital status**

Single

Married

Divorced

Widowed

**Years of service/experience**

0-2yrs

3-5yrs

6-11yrs

Above 11yrs

SECTION B: The impact of agricultural extension agent in the development of agriculture

the introduction of Agricultural extension agent has significant impact on the agricultural development in egor local government area of Edo state.

Strongly agreed

Agreed

Undecided

Disagreed

Strongly disagreed

There are problems militating the best usage of agricultural extension in egor local govern ment area of edo state.

Strongly agreed

Agreed

Undecided

Disagreed

Strongly Disagreed

Agricultural extension agent have significant effect on the standard of living of the inhabitants of egor local government area

Strongly agreed

Agreed

Undecided

Disagreed

Strongly Disagreed

In your own words explain the role of agriculturl extension agents

\_ \_ \_ \_\_\_\_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_ \_\_\_\_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ \_\_ \_ \_ \_ \_ \_ \_ \_

The practice of agriculture has increased overtime in Edo state.

Strongly agreed

Agreed

Undecided

Disagreed

Strongly Disagreed