NATIONAL OPEN UNIVERSITY OF NIGERIA

SCHOOL OF SCIENCE AND TECHNOLOGY

COURSE CODE: AEM 405

COURSE TITLE: EXTENSION TRAINING AND CURRICULUM DEVELOPMENT

AEM 405 EXTENSION TRAINING AND CURRICULUM DEVELOPMENT

COURSE DEVELOPER

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NATIONAL OPEN UNIVERSITY OF NIGERIA

INTRODUCTION

Agricultural Extension work has a venerable, albeit largely unrecorded, history. It is a significant social innovation, an important force in agricultural change, which has been created and recreated, adapted and developed over the centuries. Its evolution extends over nearly four thousand years, although its modern forms are largely a product of the past two centuries. Today, the organizations and personnel engaged in agricultural extension encompass a diverse range of socially sanctioned and legitimate activities which seek to enlarge and improve the abilities of farm people to adopt more appropriate and often new practices and to adjust to changing conditions and societal needs.

COURSE AIMS

➢ To develop the knowledge and understanding of basic principles and practice of Extension training and curriculum development in agricultural education.

COURSE OBJECTIVES

At the end of this course candidates should be able to:

- Understand the concept of agricultural extension

- Identify the fundamental objective of extension education

- Enumerate the roles of agriculture in Nigeria Economic Development

- ✓ Review Extension Training as the process of teaching

- ✓ Inform and educate people for career development and

- Itemize and review the various types of Extension Training.

WORKING THROUGH THE COURSE

This course involves that you would be required to spend lot of time to read. The content of this material is very dense and require you spending great time to study it. The course has therefore been developed in a comprehensive and readable way to aid your easy understanding of the course content. For further understanding of the course, it is advisable that you attend a tutorial sessions where you would have opportunity to compare your knowledge with that of your peers.

THE COURSE MATERIAL

The major components of the course are

- Course Guide

- Study Units

- **STUDY UNITS**

- There are sixteen study units divided into six modules in this course, as follows:

- **MODULE 1 Concepts of Agricultural Extension**

- UNIT 1   Meaning of Extension, and Functions of Extension Education

- UNIT 2   Scopes of Extension Services

- **MODULE 2 Practices of Extension Training**

- UNIT 3   Basic Philosophy and Objectives of Extension

- UNIT 4   History of Agricultural Extension in Nigeria

- UNIT 5   Role of Agriculture in Nigerian Economic Development

- **MODULE 3 Extension Training**

- UNIT 6   Types of Extension Training

- UNIT 7   Methods of Extension Training

- UNIT 8   Objectives of Different Extension Training

- UNIT 9   Training approaches and Phases of Training

- **MODULE** 4 **Curriculum Development Process**

- UNIT 10   Concept of Curriculum Development

- UNIT 11   Training Needs Analysis

- UNIT 12   Stages of Training Cycles

- **MODULE 5**   **Organisation of Causes and Evaluation of Training Programmes**

- UNIT 13   Concept of Extension Evaluation

- UNIT 14   Benefits of Extension Evaluation

- UNIT 15   Scope of Extension Evaluation

- UNIT 16   Principles of Effective Evaluation

- **MODULE 6**   **Evaluation, Criteria and Methods**

- UNIT 17   Factors to be considered in Extension Evaluation

- UNIT 18   Criteria for Evaluating Extension Programmes

- UNIT 19   Methods for Evaluating Extension Training Programmes.

TEXT BOOKS

Fenley, J.M and SKT Williams (1964): background for extension work, ministry of agriculture and Natural Resources: Extension Training Manual Bulletin No 3

Goad T.W. (1982) Delivering Effective Trainings San Diego, California: University Association INC

Leagans P.A (1963): Guides to Extension teaching in developing countries; Cornel International Bul. 5, Cornel University, Ithaca, New York.

Saville, A.H (1965): Extension in Rural Communities; London Oxford University Press Pp3.

West Africa Rice Development Association (WARDA) (1991) Training of Agricultural Trainers, Course Instructors Manual, Says Publishers, UK.

ASSIGNMENT FILE

In this file, you will find the details of the work you must submit to your tutor for marking. The marks you obtain from these assignments will count towards the final mark you obtain for this course. Further information on assignments will be found in the Assignment file and in this course guide in Assessment section.

There are four assignments in this course. These five assignments are stated as follows

Assignment 1 – all TMAs' question in Module 1 & 2

Assignment 2 – all TMAs' question in Module 3

Assignment 3 – all TMAs' question in Module 4

Assignment 4 – all TMAs' question in Module 5

Assignment 5– all TMAs' question in Module 6

ASSESSMENT

There are two components of assessment for this course. The Tutor Marked Assignment (TMA) and the end of course examination.

Tutor Marked Assignment

The TMA is the extension training and curriculum development component of the course. It accounts for 30% of the total score. You will be giving four TMA's to answer this you must submit before you will be allowed to sit for the course examination. The best three would be recorded as your continuous assessment. This TMA's would be given to you by your facilitator.

End of the Course Examination

This examination concludes the assessment for the course it constitute 70% of the whole course. You will be informed of the time for the examination.

COURSE OVERVIEW

The table below shows the number of weeks it should take you to complete the study units in this course.

Unit	Title	Week Activity	Assessment
1	Meaning of Extension, and Functions of Extension Education	} 1	
2	Scopes of Extension Services		
3	Basic Philosophy and Objectives of Extension	} 1	Assignment 1
4	History of Agricultural Extension in Nigeria		
5	Role of Agriculture in Nigerian Economic Development	} 1	Assignment 2
6	Types of Extension Training		
	Methods of Extension Training		
7	Objectives of Different Extension Training	} 1	Assignment 3
8	Training approaches and Phases of Training		
9	Concept of Curriculum Development	} 1	
	Concept of Extension Evaluation		
10	Benefits of Extension Evaluation	} 1	Assignment 4
11	Scope of Extension Evaluation		
12	Principles of Effective Evaluation	} 1	
13	Factors to be considered in Extension Evaluation	} 1	
14	Criteria for Evaluating Extension Programmes	} 1	Assignment 5
15	Methods for Evaluating Extension Training Programmes.	} 1	
16			
17			
	Total	**10 weeks**	

TUTOR AND TUTORIALS

There are some hours of tutorials provided in support of this course. You will be notified of the dates, times and locations of these tutorials together with the name and phone number of the tutor as soon as you are allocated a tutorial group. You should try to attend the tutorials, because this is the only chance you a tutorial group. You should try to attend the tutorials, because this is the only chance you have to meet your tutor face to face and to ask question on any area of the course and for you to get instant answer to the questions.

SUMMARY

AEM 405: The changes in the learners' behaviour are brought about by the planned learning activities' deduced from the established instructional objectives and prepared by the classroom teacher while the students learning progress is periodically assessed through the use of appropriate evaluation instruments that will measure every aspects of instructional objectives desired. Wishing you success in this course and hoping that you will find it both interesting and useful.

405:   EXTENSION TRAINING AND CURRICULUM DEVELOPMENT

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UNIT 1   AGRICULTURAL EXTENSION

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UNIT 1   AGRICULTURAL EXTENSION

1.0   Introduction

Agricultural Extension work has a venerable, albeit largely unrecorded, history. It is a significant social innovation, an important force in agricultural change, which has been created and recreated, adapted and developed over the centuries. Its evolution extends over nearly four thousand years, although its modern forms are largely a product of the past two centuries. Today, the organizations and personnel engaged in agricultural extension encompass a diverse range of socially sanctioned and legitimate activities which seek to enlarge and improve the abilities of farm people to adopt more appropriate and often new practices and to adjust to changing conditions and societal needs.

2.0   Objective

It is expected that at the end of this unit, students should be able to:

- understand the concept of agricultural extension
- identify the fundamental objective of extension education
- enumerate the roles of agriculture in Nigeria Economic Development

3.0   Content

3.1   The Concept of Extension Education

The use of the word "extension" derives from an educational development in England during the second half of the nineteenth century. Around 1850, discussions began in the two ancient universities of Oxford and Cambridge about how they could serve the educational needs, near to their homes, of the rapidly growing populations in the industrial, urban area. It was not until 1867 that a first practical attempt was made in what was designated "university extension", but the activity developed quickly to become a well-established movement before the end of the century. Initially, most of the lectures given were on literary and social topics, but by the 1890s agricultural subjects were being covered by peripatetic lecturers in rural areas (Jones, 1994). The growth and success of this work in Britain influenced the initiation of similar activities elsewhere, especially in

the United States. There, in many states, comparable out-of-college lectures were becoming established by the 1890s (True, 1900, 1928). During the first two decades of this century, the extra mural work of the land-grant colleges, concerned with serving the needs of farm families, was to expand dramatically and become formally organized; but the use of the term "extension" continued and has persisted as the designation for the work.

The overt use of the notion of "extending" relevant and useful information to the adult population at large, however, predates the university extension movement. Earlier in the nineteenth century, a British politician, Lord Henry Brougham, an influential advocate of formal education for the poor and of mass adult education, founded the Society for the Diffusion of Useful Knowledge in 1826. Its objective was "imparting useful information to all classes of the community, particularly to such as are unable to avail themselves of experienced teachers, or may prefer learning by themselves". The Society sought to do this largely through producing low-priced publications and establishing local committees throughout the country "for extending the object of the Society" (Society for the Diffusion of Useful Knowledge 1827). During its twenty years' existence, agricultural topics were well covered in the society's publications. Similar, albeit short-lived, societies were also established before 1840 in several other European countries, and in India, China, Malaysia, and the United States, specifically, Virginia. (Grobel, 1933; Smith, 1972).

3.2 Philosophy of Extension Education

A philosophy is a body of principles governing human activities. A philosophy of extension is, essentially, an understanding of the ideas which an individual extension worker holds about rural people and the rural environment. A worker's extension philosophy consists of the ideas he holds as important and which influence his attitude towards rural people. When these ideas are consciously conceptualized and presented, they serve as guidelines to extension work. A sound and positive extension philosophy can be an aid to an extension worker in effectively moving in the direction that his

philosophy suggests. If he believes that rural people are intelligent and capable of making use of educational opportunities, he is likely to provide such opportunities and assist the people in benefiting from them. On the other hand, if he down-grades (underestimates or disregards) the capabilities of the rural people, he is likely to assume the attitude of a 'snub' and consequently encounter negative reaction from the people.

3.2.1 The Basic Philosophy of Extension

Extension philosophy consists of a body of principles underlying extension work. Extension principles are fundamental truths; it entails the essential constituents that guide the conduct of extension work. An extension philosophy must start with the concept of extension as an educational activity. This concept deals primarily with the purposes and ways of working with rural people. Extension education is education for action – education for use today. It concerns people and what the worker wishes to do with them.

Agricultural extension is based on the philosophy that rural people are intelligent, capable and desirous of acquiring new information and making use of it for their family and community improvement. This assumes that direct approach to the people is required, and that friendly relationship and mutual trust between the extension worker and the people is assured. It also means that the extension worker must have a thorough knowledge of the people's problems.

Ordinarily, extension education is democratic in its approach. It is based on the principle of helping people to help themselves. The extension approach to economic development is, first, develop the people, and they will develop their farm land, their livestock, their educational and recreational institutions, their public services and anything else they wish. Extension philosophy is based on the premise that if farm people fully understand their relationship to the natural resources and other factors they deal with, it is possible for them to attain personal satisfaction in their way of life.

Extension work is based on the idea that each individual is unique and important. People differ as to values and goals they hold. Extension education fosters action to realize values and goals they hold. Extension education fosters action to realize values

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and attain the goals, which will aid them in establishing new ones. Extension education supports activities to introduce change. Improvement requires change, but change is not necessarily improvement. The key consideration is the quality and type of change that is acceptable to the people and the one that contributes to the achievement of their goals.

Acceptance of change as a normal aspect of life and embracing of social change as an instrument of improvement is essential for progress. People should be helped to develop favourable attitude towards change. If we can bring people to accept change as a normal course of events, they are more likely to recognize the extent to which they themselves can help to shape such change.

One possible outcome of change is progress and progress results from creative action. If an individual acquires new values through working with others, he tends to get satisfaction from the experience and tends to repeat it. One develops his creative capacities through working with other people. Within the village setting, informal co-operation to achieve an objective important to a group, may lead to formal co-operation. Membership in a committee of an action programme may lead to membership of a formal organization and this may further result in the acceptance and holding of an office in such organized bodies as co-operative societies. Therefore, the idea of creativity is based on the uniqueness of the individual and his capacity to co-operate with other human beings.

Extension education is, also, based on the belief that the aims and objectives of extension are not static. These must be modified on the basis of individual and societal needs. It is the duty of practitioners of extension to determine people's needs and to help them to acquire knowledge and subsequently to inspire them to action. The acquisition of knowledge as a basis for action is essential since it is the basic philosophy of extension to teach people how to think and not what to think.

Through the acquisition of ability to think and to take positive action on the basis of mature deliberation, the individual can accept new ideas and practices which will help him to attain a fuller and more satisfying life.

A sound extension philosophy always looks ahead. We live in changing times and our extension philosophy must accommodate such changes. This means that extension

must have a definite goal. In addition, each extension worker must have his personal philosophy consisting of what he believes about people and his work. If his philosophy is a sound one, it can weather whatever storm he may encounter wherever he finds himself.

The saying that, "for he who knows not to which port he is bound, no wind can be favourable", is most appropriate in the present Nigerian agriculture system. In the present confused state of agricultural policies in a number of states, the extension worker may feel disillusioned. If, for example, he believes that the private farmer is the man that can and should produce the food to feed the Nigerian population, he should not throw in his towel when Government policy calls for direct Government participation in agricultural production, realizing that someday, somehow, commonsense will prevail. All that he can do, in the mean time, is to do his best with whatever logistics and other support he can get and hope for the best.

3.3 Fundamental Objectives of Extension Education

Every extension programme or activity should have clearly defined objectives. An objective may be defined as an end towards which efforts are directed or a condition to be attained. Objectives can be conceived as statements of purposes for which an extension service is established, change in clientele's behaviour being the ultimate end.

Leagans (1963) defined an objective as a "direction of movement". This means the direction in which an extension worker wants to take his clientele or the distance he wants to cover. For example, where or in what direction do you want to go with respect to poultry enterprise? Is it increased number of eggs? Better quality eggs, more efficient marketing or feed efficiency? If there is to be improvement in farming or in the development of farmers, the objectives of extension must be clearly set down and regularly modified in response to changing conditions.

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3.3.1 Objectives and Goals

Objectives are the direction of movement, while goals connote the distance one intends to cover within a given period of time. For instance, in poultry programme, the objective may be to increase the average flock size among poultry keepers to 5,000 layers per farmer within the next five years.

However, the goal for the current year may be to increase the size of 1,000. It should be borne in mind that not all the people wish to go in the same direction or can cover the same distance. Therefore, opportunities must be provided for people to move in different directions and at their own pace. Not all the farmers in the community may want to participate in the poultry programme. Not all can attain the 5,000 flock target. Alternative programmes must be provided so that people can pursue their divergent interests and attain their individual goals and objectives.

A good extension objective is one which provides different opportunities for a large number of people to move in the direction their interests dictate. Extension, of course, must define the goal which the people must attain, and then, it must offer whatever assistance is necessary in reaching that goal. This is the essence of extension work.

3.3.2 Kinds of Objectives

In considering objectives and goals in extension, it is important that we think of them in relation to the people on whom our extension activities focused. The following types of objectives may be identified:

(1) Group Objectives

These refer to the purpose which a group wants to achieve. Such a group may include Farmers' Co-operative Societies, Farmers Councils and the like.

The objective of the group may be to improve the quality of cocoa beans or to market their produce in such a way as to maximize their income. In pursuing such objectives the group exerts an influence on the individual.

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Once objectives have been set, they become an influence on the activities and behaviour of the members of the group as well as on the extension worker. Therefore the time spent by the extension worker in helping the group to define their objectives can help them acquire the ability to develop some focus, which in turn, will motivate them towards greater achievements.

(2) Individual or Family Objectives

These are personal goals pursued in the production of a crop or in the improvement of a home. In pursuing individual or family objectives, the individual acts on his own, independent of the group.

(3) *Long-Term Objectives* are those set by an individual or group to be attained during a relatively long period of time, perhaps between two to five years. This is contrasted with short-term or immediate objectives.

(4) *Short-Term or Immediate Objectives* are ones set and achievable within a relatively short time say within a year. Goals and objectives indicate what people are trying to accomplish and identify the target towards which action is directed.

(5) *Broad Objectives* - these are all inclusive objectives of a society. They are achieved with great difficulty mainly because progress is not as apparent as in the more specific objectives. Another difficulty is that measurement of progress is not feasible.

3.3.3 Levels of Objectives

In most African countries the relationship between the objectives of the extension workers and those of the people are not usually co-ordinate. Local extension staff tries to execute programmes which have been tailor-made at the state headquarters and handed down to local workers. Since the educational objectives of the people are not ascertained, the workers try to conduct the programmes, which their superior officers believe are needed, and comfort themselves with the hope that they are achieving desired objectives. Indeed, they may be producing some negative change in the people who, failing to understand the objectives suggested by the extension service, may not have the slightest

idea of their own objectives. Extension staff should therefore appreciate the nature of objectives. Educators think of objectives as falling in various levels. Burton (1944) has identified four levels of objectives as follows: the overall societal objectives, programme objectives; teaching objectives, and learning objectives. These are discussed below:

(1)   The Over-all Societal Objectives

The central aim of every society is the attainment of the "good life" for all its citizens. People often speak of achievement of high standard of living, maximization of incomes, egalitarian society and such-like generalizations. This kind of all-inclusive objective is useful in defining national ends, but they are of little use to extension action programmes. Examples of this kind of objective are found in the national development plans, legislations and charters of organizations. The following objectives listed in the Nigerian 4-year Development Plan are examples of societal objectives:

       (a) A great and dynamic economy

       (b) A just and egalitarian society

       (c) A land of bright and full opportunities for all citizens

       (d) A free and democratic society.

(2)   Programme Objectives

These are more specific social objectives and are the type of statements found in programme documents of the extension services and development agencies. The objective towards which the activities of the extension service are directed is improvement for the economic and social well-being of the entire community. This level of objectives is therefore directed to the group rather than the individual. Examples of programme objectives are "to help rural people to determine their own problems and initiate action", "to help rural people have better home living".

(3) Extension Workers' Objectives (Teaching Objectives)

Objectives at this level are stated in terms of the changes which the extension worker intends to bring about in the people with whom he works. They show the ability of the worker to translate objectives into action programmes.

(4) People's Objectives

This level of objectives is related to what the people wish to accomplish. A farmer may desire to increase his income from eggs by N100.00, or a club member may want to increase the number of birds in his broiler project to 100 birds. Such objectives may not be known to the extension worker unless he sets out to find out for himself. If he is alert he will easily see through people's needs and desires during the course of routine activities or through a fact finding community survey.

The worker-learner levels of objectives seek to harmonize what the rural people feel they need and what extension workers think they ought to have. There should be a reasonable degree of agreement between the two. It is not safe to let either the worker's or the learner's objective dominates the setting of objectives. What people want may not be what they need most. For example, a farmer may want and therefore be prepared to borrow money or sell his land in order to take a title. Title taking may not be the farmer's real need. His real adopt improved practices and to work harder so as to produce more and better food. Resulting food surpluses can be sold and with increased income he can achieve his stated objectives more easily. Experience shows that the most successful programmes are those based on actual situations, such programmes include the wants, needs, and problem of the people. These constitute the worker-learner objectives without which effective extension cannot be a reality. Objectives of the extension worker and those of his clientele need not be similar, but they need to have a common base (Kelsey and Hearne 1963). The objectives of the people are those which they believe they can achieve through participation in projects they have helped to design.

3.4 Principles of Extension Education

Certain basic principles underlie the conduct of extension work. These principles differ with respect to the kind of community in which extension education is carried on. Since most African communities are democratic in outlook, it is hoped that extension workers will endeavour to follow democratic methods. The reason for this is that the methods adopted by an extension worker are important for his ultimate success and because the implications of his methods are of great significance.

It is necessary to emphasize this point because, extension directors and supervisors in Nigeria as in many ex-British colonial territories are known to have a tendency to adopt autocratic approach to extension work (Bauman 1966). Since they are products of British education and British administration in which the distinction between the superior and the subordinate is unduly emphasized, they favour autocratic methods, preferring the use of memos and directives to face-to-face communication. The subordinates, including those who work with farmers, appear to imitate their superiors in their relationship with farmers. To counter this tendency, Glenn Johnson and his co-workers (1969) recommend encouragement of the extension staff to adopt an attitude of persuasion through demonstration and teaching of farmers rather than through an approach which directs farmers as is typified by such staff comments as "we told farmers to" and "we supervised farmers, directing them" in what was to be done.

Extension work is directed to the changing of people's way of doing things in specific predetermined way believed to be desirable for individuals and the entire society. The objective is to initiate actions that might lead to improvements on the farms, in the homes and within community institutions. This is a complex understanding and involves a set of principles. Extension principles have been defined as guidelines for the conduct of extension work. These principles may be considered as part of extension philosophy and include the following:

(1) Extension Education Starts where the People Are

Extension teaching must start at the learners' (farmer's) level. That is, at his level of knowledge, understanding, interest and degree of readiness. Colonial agriculturists and early extension workers in Nigeria, impressed by the large farms in North America and Western Europe, and despising the peasant farms prevalent in Nigeria, proceeded to set up large government demonstration farms ostensibly to impress the Nigerian farmer or to persuade him to embark on large-sized farms. Several decades elapsed and not many farmers were persuaded to adopt the new system. The correct approach would be to start with the peasant system, and try to improve the system, and if physical and economic conditions permit, to aspire towards large-sized farms. Really, this was the approach later adopted particularly in the Northern States, in the production of relatively successful "cash crops" such as groundnut and cotton. This means that to succeed with farmers, new ideas must be related to what the farmer already knows and that with which his is familiar.

(2) Extension Workers must Gain the Confidence of Their Audience

Farmers are said to be conservative. They are wary to thread on unsure grounds, and are unlikely to take action without conviction. This is why it is necessary that the extension worker should gain their confidence. Unless they are sure of the ability and skill of an extension worker, they will not be persuaded to accept his recommendations. This is more so if the extension worker is young and has had little or no farm experience. In that case, he must start with one or two programmes that are likely to succeed and must work on them until eventual success.

(3)   People have Unsatisfied Wants

An extension worker cannot go far with people unless they want to help themselves. Therefore programmes must start with the felt needs of the people and proceed to others that are also needed by them. Thus people may want more food or a different kind of food. Extension education ties those to new and desired programmes

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and translates these into action. In this way extension can take the people from the present undesirable condition to new conditions which they desire. The initial step for the extension worker is to discover the real needs of the people. The wants of the people must be kept in reasonable relationship with the effort they are capable and willing to make. All the people within a community do not want the same thing at the same time, and in the same fashion. Their values differ and so do their goals and the ability to achieve them.

(4) **The Best Programmes are those Determined by the Local People and Extension Staff Working Together**

Planning programmes with the people is an important part of extension teaching. People understand a programme better and are more likely to support it if they participate in its creation. Planning is also a learning process. By participating in programme planning, people learn to work together. Decisions made by the people have more force and greater support than decision made for them by outsiders. Rural people resist change until they see the benefit of such a change, and there is no better way of helping them than by involving them in planning for change.

(5) **In African Rural Communities Participation in Extension Programme is Voluntary and therefore Programmes must meet the Varying Needs of Individuals**

Participants in extension programmes differ significantly in age, sex, education, attitudes, interests, needs and economic and social values. Programmes must therefore be attractive and tailored to meet the needs and interests of the varying groups.

(6) **Extension Education must deal with ideas and Programmes that have Application to People's Immediate Problems**

The types of information given by extension are not those to be stored away for future use, but those that have immediate value. As a matter of fact, sound extension education will improve future performance, but the future is related to the present and is shaped by it, (Mosher, 1958). Extension programmes, therefore, must be designed to

solve today's problems. Today's problems are known, whereas tomorrow's problems are not so well known and are likely to differ in scope and, perhaps, in nature. The speed and readiness with which people adopt extension programmes show the effectiveness of extension work

3.2   HISTORY OF AGRICULTURAL EXTENSION IN NIGERIA

From time immemorial, traditional agriculture has existed in Nigeria: simple instruments to till the soil, and crop cultivation to meet family needs. Though we have no organized research, there is evidence that conscious efforts were made to select high-yielding crops and thus improve agriculture. Most of our present-day cultivated varieties, in fact, are the result of conscious efforts by our pioneer peasant farmers.

With the advent of the British and the colonization of Nigeria, modern agriculture appeared. This period is also the beginning of direct government involvement in the development of agriculture. Though what was regarded as extension work in the early days cannot be so interpreted in our modern view, the history of extension service in Nigeria must be seen in terms of agriculture and its development.

The history of organised agriculture in Nigeria dates back to 1893, when a Department of Botanical Research was established, with the headquarters at Olokomeji in the former Western Nigeria. Its responsibilities included research in both agriculture and forestry. The venture failed and was thus, abandoned. In 1905, the British Cotton-growing Association acquired four square miles of land at the site now known as Moor-Plantation, for the purpose of growing cotton for the British textile industry. This scheme also failed and was abandoned.

In 1910, Moor Plantation in Ibadan became the headquarters of the Department of Agriculture for the southern part of Nigeria, under the direction of Mr. W. H. Johnson. The establishment of this station is a milestone; it can be regarded as laying the foundation upon which modern agriculture in the southern part of Nigeria is built. During this period, Northern Nigeria, under Lord Lugard, was administered as a separate

political entity, and the development of its agriculture followed the same pattern as in the south, culminating in the establishment of a Department of Agriculture in 1912.

In 1921, following the amalgamation of North and South into a single political entity, a unified department of agriculture was established under the direction of Mr. O.T. Faulkner. The establishment of a central department constitutes another milestone; it thus became possible to set up the necessary machinery for central planning and policy making.

The Central Department of Agriculture pursued a vigorous policy aimed at increasing export crops, primarily for the British market. Efforts were made to improve the efficiency of crop handling and marketing, and laws were passed to set standards which would improve the quality of the major export crop production.

3.3 THE ROLE OF AGRICULTURE IN NIGERIAN ECONOMIC DEVELOPMENT

In many developing countries, including Nigeria, agriculture is often called the backbone of the economy. It is expected to perform the following services:

First, it must provide more food of suitable varieties for the rapidly increasing population and at prices people can afford. The inflation now occurring in Nigeria and many other countries is partly due to low productivity.

Second, in view of the fact that agriculture represents such a large proportion of total national production, it must be made as efficient as possible. In Nigeria, agriculture provides jobs for about 70 percent of the labour force, produces 80 percent of the food consumed at home, and in the early 1970s it contributed about 33 percent of the total national export.

Third, it must provide, particularly for the textile, leather, plastics and food processing industries, raw materials which would otherwise have to be imported. It will thus not only conserve the much-needed foreign exchange but also provide employment and diversify the economy. The new industries should be, as far as possible, located in rural areas to keep people from migrating to the cities to create more urban slums.

Fourth, it must provide exports to earn foreign exchange so that the country can afford to pay for the large amounts of industrial equipment it needs to import in the early stages of industrialization.

Fifth, as the largest industry in Nigeria, it must be made productive enough to allow for the accumulation of capital out of its earnings. Any kind of development in any country depends upon adequate investment for sustained growth, and much of this investment must be financed by domestic savings. Agriculture should produce internal capital from such areas as export duty, marketing board surplus, and savings, so that investment in other industries is financed.

Sixth and last, it must leave sufficient money in the pockets of the farmers, so that they can buy the manufactured inputs they need to improve their farming; and, no less important, the good things of life for themselves and their families. If farmers do not have enough income to be consumers of industrial products, then the industrial sector cannot prosper.

3.5   The Meaning and Function of Extension Education

What is extension education, or, as it is sometimes called agricultural extension? Fenley and Williams offer a succinct definition: extension education brings about improvement in a systemic way, through carefully planned and organized programmes. These programmes start in the villages, and tackle problems the villagers themselves see and want to do something about. Extension education is voluntary; carried on out of school; directed to adults; concerned with their livelihood. Based on sound principles of teaching and learning, it is carried on thoughtfully and systematically in an atmosphere of mutual trust and respect.

According to Saville (1965), the aim of all extension work is to teach rural people how to raise their standard of living, but with the minimum of assistance from government, and by their own efforts, using their own resources. It encourages progressive growth through local leadership, self-help, and civic pride. This broad

concept of the function of extension, to provide people with scientific knowledge so that they may solve their own problems, is gaining wide acceptance.

Extension has three basic tasks:

1. Disseminating useful information;
2. Applying it to the analysis of practical problems;
3. Helping people to use it to help themselves.

In agriculture, the scope of extension is very broad. It is not a mere matter of giving the farmer actual knowledge from new research and technology, to help him raise his efficiency. It is this, of course, but it is more. It hopes to change his view of life, to persuade him and his family that they may reach and enjoy a higher and richer existence. According to Leagans, it can be the primary means through which farmers learn about change – the reasons for it, its value, the results it can achieve, the process by which it is arrived at, and also the uncertainties inherent in it. Extension education, also, is the main way in which farmers can learn what alternatives exist in farming, so that among these they can select the best choices for themselves.

While extension work is educational, it differs from formal education. It is voluntary, not compulsory. Its classrooms are the fields or houses of the participants themselves, and they may join in or not, just as they choose. It is directed at practical problems. Working with people from very different educational backgrounds and attainments, levels of living, value systems, and range of interests, it attempts to improve not only their economic conditions, but also their social and cultural well being. Therefore, while the people who carry on this work must be technically well trained, it is no less important that they should understand rural people and enjoy working with them.

Extension education has three important functions. The first is to persuade the farmers of the value of change. In developing countries, as is generally known, most farmers are still bound by tradition. They are understandably afraid of costly risks, and will not take them until they are convinced that the new methods are safe, will pay, and will not violate their values. This is where the extension agent comes in. It is his duty to

educate the farmer to realize that the innovation will benefit him, his family, and Nigeria. Once the farmer comes to this realization, he will plant his own seeds and look after them by the new methods.

The second function of extension education is to transmit the results of research to farmers, and equally to transmit the problems of the farmers to the researchers. To carry this out will require effective communication between the research organization, the extension agency, and the farmer. The agents should have enough technical knowledge to understand the new practices, help the farmers adapt them to their own conditions, and, if failures occur, diagnose the reasons and offer solutions. In many developing countries, agents are not adequately trained in technology and have, consequently, failed to fulfill this function – a situation that needs to be remedied.

The third function reflects a major change in the national economy, and therefore is extremely important. It is to help the farmer learn to make wise decisions in farm management. For the subsistence farmer, this is a major change. He has had no decisions to make; he simply did as his father and forefathers had done. But in a modern commercial economy, prices and factors of production must be considered, and they require that the farmer make decisions, in many instances that are a new experience for him. He must learn to do so however, if agriculture in developing countries is to become increasingly productive. Therefore, to provide guidance here is one of the most important contributions that extension education can make.

In order for extension education to perform these functions, adequate financing is essential. Teaching equipment, supplies, and other facilities are good investments, which will yield good dividends. Moreover, the nature of the work requires mobility. If agents are to have any effect on the farmers, they need to be in constant contact. They must, therefore, be provided with transport facilities. Without these, their morale may decline, and justifiably so. Agents are expected to take pride in their work and care about it; they have the right themselves to expect to be furnished with the means to perform their tasks effectively.

3.6   SCOPE OF EXTENSION SERVICES

Although extension programmes may vary in their details from country to country, all extension services have common interests. These are as follows:

1. **Assisting in agricultural production**. The extension service is responsible for helping farmers make efficient use of land, labour, and capital to meet the nation's food needs. Through an educational programme, it is also responsible for helping farmers make wise decisions as to how these factors of production can best be combined. Furthermore, also through an educational programme, the extension service is responsible for helping farmers sell and distribute their products at reasonable costs and with maximum profit. Agents certainly should not engage in the actual implementation of marketing and distribution for the farmer; but they should provide a programme, which will enable him to make wise decisions in this area also. Their function is not executive, but educational.

2. **Wise use and development of natural resources**. The wealth of a nation depends on its natural resources, and how they are used and conserved for the common good. Again, extension can provide the leadership necessary to help in problems of resource management. In Nigeria, for example, it can present the relative merits of 'slash and burn' and of shifting cultivation and continuous cropping. Work should be done on how the limited water supply available in Nigerian villages can be best used and conserved. Present indiscriminate use may have serious future consequences; extension should prevent this. The goal for extension should not be merely the improvement of agriculture, as is presently the case in Nigeria, but of the community in its entirety.

3. **Family living**. Both in the home and on the farm, extension has services to render. The rapidly changing conditions of modern society have already resulted in requests for assistance. The management of the family income, child care, food and nutrition, problems arising from poverty, and available opportunities are all areas in which extension can help. We must remember that the farmers are not the

only people living in rural areas. They have wives and children, and all should benefit.

4. **Youth development**. In the developing countries, the majority of young people live in rural areas. There is great need to offer them opportunities to use their time well. In some cases, Young Farmers' Clubs have already been set up, which offer creative activities. But much more should be done. Perhaps the most difficult period in the lives of all of us is that in which young people grow into adults. They are confronted with countless questions. What career shall I choose? Shall I continue my education at a university? How can I best manage my income? When shall I marry? These questions are not easy to answer, and they are serious ones; all our future lives may depend on the answers we find. Extension has an almost limitless opportunity here to be of use in providing information and sympathetic interest.

5. **Leadership development.** Leadership is the keystone upon which the extension service is built. The agents themselves are leaders by virtue of their profession, providing leadership individually in specific situations and collectively for the whole state and national economy. But even more important is the fact that extension, by all its activities, is helping to develop a great pool of potential leaders who will raise the standard of living throughout rural Nigeria. Extension is charged with the specific responsibility of raising the level of living of Nigerian farmers. If this responsibility is to be completely fulfilled, every agent should be as familiar with the principles and uses of leadership as is the Nigerian farmer with his hoe.

4.0   CONCLUSION

In this unit, you have learnt about the concept and the nature of extension education, history of agricultural extension in Nigeria, the role of agriculture in Nigerian economy development, the meaning of extension, and functions of extension education and the scope of extension services.

5.0   SUMMARY

We have been taken through the basic concept and the nature of extension education. We have, also, been made to know the history of agricultural extension in Nigeria and the role played by agriculture in Nigeria's economic development. We have defined extension education as education that brings about improvement in a systemic way through carefully planned and organised programmes. Finally, we have known the functions of extension education and the scope of extension services.

6.0   TUTOR – MARKED ASSIGNMENT

(i)   What is agricultural extension?

(ii)   Enumerate the functions of extension education

7.0 REFERENCES/FURTHER READING

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UNIT II –   Phases of Extension Training

Content

1.0   Introduction

2.0   Objectives

3.0   Content

      3.1   Extension Training

      3.2   Learning Theories and Training

      3.3   Training Approach

      3.4   Phases of Training

4.0   Conclusion

5.0   Summary

6.0   Tutor – Marked Assignment

7.0   References/Further Readings

1.0   Introduction

Training is the process of acquiring specific skills to perform a job better (Jucious, 1963). It helps people to become qualified and proficient in doing some jobs. Usually an organization facilitates the employees' learning through training so that their modified behaviour contributes to the attainment of the organisation's goals and objectives. Training is the process of teaching informing, or educating people so that (i) they may become as well qualified as possible to do their job, and (ii) they become qualified to perform in positions of greater difficulty and responsibility.

Flippo (1961) differentiated between education and training, locating these at the two ends of a continuum of personnel development ranging from a general education to specific training. While training is concerned with those activities which are designed to improve human performance on the job that employees are at present doing or are being hired to do, education is concerned with increasing general knowledge and understanding of the total environment. Education is the development of the human mind, and it

increases the powers of observation, analysis, integration, understanding, decision making, and adjustment to new situations.

2.0   Objectives

A good extension objective is one which provides different opportunities for a large number of people to move in the direction their interests dictate. Thus, the objectives are to:

- ✓ Review Extension Training as the process of teaching
- ✓ Inform and educate people for career development and
- ✓ Ensure job performance in positions of greater difficulty and responsibility.

3.1   Extension Training

Process of increasing the knowledge scope of a target audience on a particular discuss by a subject matter specialist. It determines where they were and expected level of competence

3.2   Learning Theories and Training

Application of learning theories for   all educational and training activities will help to make decisions and apply them in achieving the objectives. The behaviourists, the cognitivists, and the humanists emphasize different aspects of the teaching-learning process in their approaches.   While the behaviourists stress external conditions (environment) resulting in observations and measurable changes in behaviour, the cognitivists are more concerned with how the mind works (mental processes such as coding, categorizing, and representing information in memory). The humanists, on the other hand, emphasize the affective aspects (e.g. emotions, attitudes) of human behaviour that influence learning (IRRI, 1990). In extension systems, effective training must be able to take care of all the theories of learning in order to change the action, belief, and knowledge components of a trainee simultaneously. Andragogy (a theory of adult learning) is usually used rather than pedagogy (a theory of child learning) in extension training.

3.3   Training Approach

There are three approaches to training: (i) the traditional approach, (ii) the experiential approach, and (iii) the performance-based approach (Rama, Etling, & Bowen, 1993).   In the traditional approach, the training staff designs the objectives, contents, teaching techniques, assignments, lesson plans, motivation, tests, and evaluation.   The focus in this model is intervention by the training staff.   In the experiential approach, the trainer incorporates experiences where in the learner becomes active and influences the training process.   Unlike the academic approach inherent in the traditional model, experiential training emphasizes real or simulated situations in which the trainees will eventually operate.   In this model, the objectives and other elements of training are jointly determined by the trainers and trainees. Trainers primarily serve as facilitators, catalysts, or resource persons.   In the performance-based approach to training, goals are measured through attainment of a given level of proficiency instead of passing grades of the trainees.   Emphasis is given to acquiring specific observable skills for a task. This performance-based teacher education (PBTE) model, developed by Elam (1971), is mostly task or skill centred and is also applicable to non-formal educational organizations such as extension.

3.3.1 Extension Personnel around the World in Need of Training

Worldwide, there are currently more than 600,000 extension workers comprised of administrative staff, subject-matter specialists (SMS), fieldworkers, and some multipurpose unidentified people. The Asian and Pacific countries have absorbed more than 70 percent of them (Bahal, Swanson, & Farner, 1992). The percentage of extension personnel by position, as reported by Swanson, Farner and Bahal (1990), was 7 per cent administrative, 14 per cent SMS, and 79 per cent field staff, with regional differences. Almost 13 per cent of extension workers are women, with significant regional differences (Bahal *et al*., 1992). The ratio of SMS to field staff is also low in Asia, Africa, the Near East, and Latin American countries, varying from about 1:11 to 1:14. The ratio for

countries of Europe and North America varies from 1:1.5 to 1:1.6. The worldwide ratio of SMS to field staff is 1:11.5 (Swanson et al., 1990).

Deficiencies in knowledge, skills, and ability among extension personnel, particularly those of Asia, Africa, and Latin America, are remarkable. About 39 per cent of the extension personnel worldwide have a secondary-level education and 33 per cent an intermediate-level education (Bahal et al., 1992). Moreover, within each region, there are variations in basic academic qualifications of the frontline extension workers. SMS, and administrators. Differences in training received are wide. In Africa, most frontline extension workers still have only a secondary school diploma (Bahal *et al.*, 1992). The poor educational background of extension personnel necessitates regular training.

3.4   Phases of Training

Training is a circular process that begins with needs identification and, after a number of steps, ends with evaluation of the training activity. A change or deficiency in any step of the training process affects the whole system, and, therefore, it is important for a trainer to have a clear understanding about all phases and steps of the training process. In the broadest view, there are three phases of a training process: planning, implementation and evaluation.

3.4.1 Planning Phase

The planning phase encompasses several activities; two of which – training needs identification and curriculum development – are very important.

Training Needs Identification: Training need is a condition where there is a gap between "what is" and "what should be" in terms of incumbents' knowledge, skills, attitudes, and behaviour for a particular situation at one point in time. This gap is called "a problem", which usually occurs when a difference exists between "desired performance" and "actual performance". The needs identification process assists trainers in making sure that they have matched a training programme to a training problem. For example, agricultural extension officers (AEOs) have been giving training to village

extension workers (VEWs), but performance of the VEWs is not improving. The reasons may be:

1. The AEOs lack subject – matter knowledge.
2. The AEOs do not conduct training well.
3. The training center lacks training facilities.
4. The VEWs are organized not to work properly until their demands are satisfied by the government.

The first two problems are related to knowledge and skills and can be solved effectively by a training programme, but the third and fourth problems need government attention to solve.

Training needs identification is possible through different analytical procedures. The major procedures used in determining training needs are the following:

Organizational analysis determines where training emphasis should be placed within the organization and is based on the objectives of an organization. Concerning what one should do in analyzing an organization suggest four steps: The 4 steps involved in organizational analysis phase of training are as follows:

1. Stating the goals and objectives of an organization
2. Analyzing the human resources
3. Analyzing efficiency indices
4. Analyzing the organizational climate.

The results of these analyses are then compared with the objectives of the organization. These comparisons point to specific areas in which training is needed.

Individual analysis aims at identifying specific training needs for an individual or group of employees so that training can be tailored to their needs. This analysis centers on individuals and their specific needs concerning the skills, knowledge, or attitudes they must develop to perform their assigned tasks. The possible methods or techniques for

individual analysis include performance appraisal, interviews, questionnaires, tests, analysis of behaviour, informal talks, checklist, counseling, critical incidents, recording, surveys and observations.

Group analysis includes a number of techniques in which a group of well-informed employees discuss different aspects of the organization, the employees and the tasks to identify the major discrepancies in achieving predetermined targets for each of them with a view to assessing training needs as distinguished from other necessary changes for removing these discrepancies. The major techniques, which are used in this approach, are brainstorming, buzzing, cardsorts, advisory committee, conferences, problem clinic, role-playing, simulation, task forces and workshops.

Many problems exist in an organization, but some problems cannot be solved by training. After a preliminary needs analysis, which gives probable causes and solutions, the results should be verified with the concerned personnel of the organization to determine whether training is an appropriate action to solve that problem.

3.4.2 Implementation Phase

If you plan to build a house but never actually get started with construction you will probably get wet when it rains. So it is with training when plans are not implemented. The best plan alone will not accomplish anything. The trainer has to actually try to accomplish the objectives developed during the planning phase.

Revision/Evaluation Phase

The professional builder learns from houses built and by learning, becomes a better builder. Good workers are identified, new materials are included, and scheduling becomes more realistic. The professional trainer is continually improving his or her training activities and individual training skills. In training, this involves determining how well the instructor met the objectives, and how well the objectives continue to fit the

requirements of the trainees. If discrepancies are detected, necessary modifications are made in the design of the training activity before the course is presented again.

4.0   Conclusion

In this unit, you have attempted to learn about the concept and the nature of Extension Training, Learning Theories and Training, Training Approach and Phases of Training.

5.0   Summary

We have been taking through the concept of Extension Training. You have defined extension training as process of increasing the knowledge scope of a target audience on a particular discussion by a subject matter specialist. Finally, we have known the various training approach and phases of training.

6.0   Tutor – marked Assignment

I.   What is Extension Training?

II.   Enumerate the basic learning theories and training approach?

III.   List the various phases of Extension training

7.0   REFERENCES/FURTHER READING

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MODULE 2 PRACTICES OF EXTENSION TRAINING

UNIT 3   Types of Extension Training

UNIT 4   Methods of Extension Training

UNIT 5   Personnel Training and Staff Development

UNIT 3   **TYPES EXTENSION TRAINING**

CONTENT

1.0   Introduction

2.0   Objectives

3.0   Content

4.0   Conclusion

5.0   Summary

6.0   Tutor – Marked Assignment

1.0   Introduction

Unit 3: Types of Training

Training may broadly be categorized into two types: **pre-service** training and **in-service** training.

2.0   Objectives

The main objective of this Module is to:

➢ Itemize and review the various types of Extension Training.

3.0 Types of Extension Training

- **Pre-service training** is more academic in nature and is offered by formal institutions of following definite curricula and syllabuses for a certain duration to offer a formal degree or diploma.

- **In-service training**, on the other hand, is offered by the organization from time to time for the development of skills and knowledge of the incumbents.

Pre-service Training

Pre-service training is a process through which individuals are made ready to enter a certain kind of professional job such as agriculture, medicine or engineering. They have to attend regular classes in a formal institution and need to complete a definite curriculum and courses successfully to receive a formal degree or diploma. They are not entitled to get a professional job unless they earn a certificate, diploma, or degree from the appropriate institution. Pre-service training contents emphasize mostly on technical subject matter such as crops, animal husbandry and fisheries as well as pedagogical skills to prepare the students to work in agriculture. In general, two types of pre-service training are available to agricultural staff. These are:

- Degree level (at least a bachelor's degree in agriculture or related field), which is usually offered for four years by a university or agricultural college; and
- Diploma level, which is mostly offered by the schools of agriculture for a period of two to three years. The entry point for the former is normally twelve years of schooling and for the latter ten years of schooling.

In-service Training and Staff Development

In-service training is a process of staff development for the purpose of improving the performance of an incumbent holding a position with assigned job responsibilities. It promotes the professional growth of individuals. "It is a program designed to strengthen the competencies of extension workers while they are on the job". In-service training is a problem-centred, learner-oriented and time-bound series of activities which provide the opportunity to develop a sense of purpose, broaden perception of the clientele, and increase capacity to gain knowledge and mastery of techniques.

In-service training may broadly be categorized into five different types:
(i) Induction or orientation training, (ii) foundation training, (iii) on-the-job training, (iv) refresher or maintenance training, and (v) career development training. All of these types of training are needed for the proper development of extension staff throughout their service life.

(i) Induction or Orientation Training

Induction training is given immediately after employment to introduce the new extension staff members to their positions. It begins on the first day the new employee is on the job. This type of training is aimed at acquainting the new employee with the organization and its personnel. Induction training for all new personnel should develop an attitude of personal dedication to the service of people and the organization. This kind of training supplements whatever pre service training the new personnel might have had. Concerning the characteristics of a new employee, Van Dersal (1962) said that when people start to work in an organization for the first time, they are eager to know what sort of outfit they are getting into, what they are supposed to do and whom they will work with. They are likely to be more attentive and open-minded than experienced employees. In fact, the most favourable time for gaining employees' attention and for moulding good habits among them is when they are new to the job.

(ii) Foundation Training

Foundation training is in-service training which is also appropriate for newly recruited personnel. Besides technical competence and routine instruction about the organization, every staff member needs some professional knowledge about various rules and regulations of the government, financial transactions, administrative capability, communication skills, leadership ability, coordination and cooperation among institutions and their linkage mechanism as well as assistance in report writing.

(iii) **Foundation training** is made available to employees to strengthen the foundation of their service career. This training is usually provided at an early stage of service life.

Maintenance or Refresher Training:

This training is offered to update and maintain the specialized subject matter knowledge of the incumbents. Refresher training keeps the specialists, administrators, subject-matter officers, extension supervisors, and frontline workers updated and enables them to add to the knowledge and skills they have already. Maintenance or refresher training usually

deals with new information and new methods, as well as review of older materials. This type of training is needed both to keep employees at the peak of their possible production and to prevent them from getting into a rut.

(iii)   **On-the-Job Training**

This is ad hoc or regularly scheduled training, such as fortnightly training under the training and visit (T&V) system of extension and is provided by the superior officer or the subject-matter specialists to the subordinate field staff. This training is generally problem or technology oriented and may include formal presentations, informal discussion and opportunities to try out new skills and knowledge in the field. The superior officer, administrator or subject matter specialist of each extension department must play a role in providing on-the-job training to the staff while conducting day-to-day normal activities.

(v)   Career or Development Training

This type of in-service training is designed to upgrade the knowledge, skills and ability of employees to help them assume greater responsibility in higher positions. The training is arranged departmentally for successful extension workers, at all levels, for their own continuing education and professional development. Malone (1984) opined that extension services that provide the opportunity for all staff to prepare a plan for career training will receive the benefits of having longer tenured and more satisfied employees, which increases both the effectiveness and efficiency of an extension service. Malone stated that "career development is the act of acquiring information and resources that enables one to plan a program of life-long learning related to his or her work life". Although extension workers are responsible for designing their own career development education, the extension organization sometimes sets some criteria and provides opportunities for the staff by offering options.

3.1 Induction Training

This is given to newly appointed extension staff, after they are hired but before they are given a specific work assignment. It is essential for all new staff. By it, they are protected from making costly mistakes; and equally important, by it they can gain self-confidence.

Induction training generally covers the objectives, scope, opportunities, programmes, and organization of the agency. It helps new agents understand what their own responsibilities will be; what job they are expected to do; and how it should be done. If the work requires some practical skills, which have not been sufficiently covered in their pre-service training, induction training will remedy the deficiency. Finally, and most importantly, it will familiarize them with the problems of the people in the area in which they are going to work.

The induction training itself is generally followed by some observation of work in progress, at workstations, demonstrations, field days, and the like. The nature and extent of both observation and induction training, of course, depend very much on the nature and extent of pre-service training. But in most states in Nigeria, extension administrators and supervisors do participate, to a greater or lesser degree, in induction courses, which have been found very useful by many new agents. No man can be expected to do his best if he goes into a situation cold. The more he knows about what is expected of him, the more likely he is to meet expectations.

3.2 In-service Training

The purpose of in-service training is to update extension agents at all levels. It goes without saying that in a developing country, and in a dynamic field like modern agriculture, this is of utmost importance. In-service training is of course useful in filling gaps in previous training which have become apparent after agents have gone to work; but it has the wider purpose of stimulating a continuous development for all engaged in the profession. It includes all forms of training for professional improvement which are

carried on while the person is actually employed, and may involve either training on the job itself, or training on study leave, away from it.

According to Williams, in-service training programmes should be looked upon as a supplement to, rather than as a substitute for the formal study programme. Professional staff should be willing to make some sacrifices, financial and otherwise, to take advantage of the opportunities thus offered them.

In-service training is an important feature of the many and varied activities of the Ministries of Agriculture of the States of Nigeria. It is organized for junior, intermediate and senior staff. For junior and intermediate staff, it is administered by divisional agricultural agents as the need arises. For agricultural agents, supervisors and administrators, it is organized in two ways.

First, under the ministries' in-service training scheme for higher degrees, officers are given an opportunity to undergo further training leading to the M.Sc. and the Ph.D. degrees. This offer is generally made only when the agents have had at least one or two years of practical field experience after graduation.

Second, some ministries periodically organize ad hoc training programmes for all senior extension agents in specialized areas of agricultural technology, extension principles and methodology.

Another general feature is that extension officers are given the opportunity to attend international conferences. This practice has yielded good dividends. Not only do those attending profit themselves by their experience, they also bring back new ideas which can stimulate and improve the whole organization with which they are connected.

Yet another form of in-service training exists in the opportunities for staff to attend refresher courses of perhaps a month or so. Such courses are offered on the campuses of agricultural institutions, which concentrate intensively upon one single subject. Some such courses are now being organized by local or international research institutes: International Institute of Tropical Agriculture (IITA) at Ibadan; Cocoa Research Institute of Nigeria (CRIN) near Ibadan; Nigerian Institute for Oil Palm Research (NIFOR) at Benin.

3.3 On-the-Job-Training

This method is used for teaching specific skills at a specific level .A good example is that of the Field Overseers (FO) who work with the farmer at the village level. This staff cadre has had only about six years of elementary education; but it was necessary to hire them because skilled and trained agriculture assistance are not be produce in sufficient number to meet the need of the ministries. The cadre is gradually being phased out as better trained man and woman become available. Some of the Field Overseers, however, have proved effective in extension work, and so they are sent to school of agriculture assistance; most have greatly profited from the opportunity.

4.0 Conclusion

In this unit, we have learned about the major types of Extension Training.

5.0 Summary

We have been taken through the types of Extension Training. We have defined Pre-service training as a process through which individuals are made ready to enter a certain kind of professional job such as agriculture, medicine or engineering. While we equally defined In-service training as a process of staff development for the purpose of improving the performance of an incumbent holding a position with assigned job responsibilities.

6.0 Tutor – marked Assignment

   (i)   What is Extension Training?

   (ii)   Enumerate the major types of extension training?

   (iv)   List the various types of In-service training

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UNIT IV   METHODS OF EXTENSION TRAINING

CONTENTS

1.0   Introduction

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      3.2   Keys to Successful and Effective Extension Trainings

      3.3   Preparation Task for Training Agricultural Agents

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6.0   Tutor-Marked Assignment

7.0   References/Further Readings

1.0   INTRODUCTION

The agricultural agent demands that he plays three vital roles. He is expected to be a scientist, a trainer and a friend to his clientele, all at the same time. The task of in-depth training for agricultural agents therefore becomes imperative in other to achieve the goals of extension education at the grassroots.

A variety of methods are currently in effect. Some are described below:

-        Pre-service Training

-        Practical Orientation

-        Skill Teaching

2.0   OBJECTIVES

At the end of this unit, it is expected that students will be able to:

- Enumerate the various methods of training agricultural extension agents in Nigeria.

3.1 METHODS OF TRAINING AGRICULTURAL EXTENSION AGENTS

Pre-service Training

This is the term usually given to professional training received by an extension agent before his appointment. It covers a wide range of programmes, culminating in the award of a diploma or certificate in agriculture, up to the award of the B.Sc. and higher degrees. By formal classroom and laboratory instruction, students are taught the natural, behavioural and social sciences. As they progress from primary to high school and university, their education becomes increasingly specialized, and greater emphasis is placed on theory and on research in their specialized areas of interest.

In Nigeria, the pre-service training of extension agents exists at two levels: non-degree but formal agriculture training, lasting two or four years, and leading respectively to a certificate or diploma; and formal training of three or four years leading to the B.Sc. degree.

The non-degree, or intermediate programmes, are designed for agents at the intermediate level who will work in the villages. The programmes include the lower level, leading to a certificate, and the higher level, leading to a diploma. The certificate course generally lasts for two years of both academic and practical training, and covers a wide range of subjects, both agricultural and others. The diploma course involves two additional years, and admission is secured either by selection of the best academic students from the graduating certificate class, or by later selection of certified graduates who have had two or more years of field experience as agricultural assistances. There are five such non-degree training schools in Nigeria – at Ibadan, Akure Zaria, Umudike, and Kabba. Their graduates are assigned to villages to work with the farmers.

The chief criticism levied against this programme is that it is far too theoretical, because not enough emphasis is given to practical experience. This weakness is sometimes glaringly revealed when the graduates actually find themselves out in the field. But efforts have been made to improve the situation, both by increasing the amount of time in the programme itself that is devoted to practical matters, and by providing

opportunities for students, before graduation, to work for short periods of time in actively operating agencies.

The training which ends in a B.Sc. degree lasts for three or four years. It includes all aspects of agricultural technology as well as such social sciences as Rural Sociology, Educational Psychology, Extension Concepts, and Communication Theory. Beyond this, in order to produce high level agricultural scientists, graduate programmes leading to the M.Sc. and the Ph.D. degree have been introduced in all the Faculties of Agriculture in Nigerian Universities.

The graduates of these university training courses form the nucleus of the professional extension staff. They are, generally, appointed as agricultural officers, supervisors and administrators. After they have completed their academic training, they usually receive an additional training of two months or so, called induction training.

Practical Orientation

All extension trainings must be practically oriented, focusing on recommendations that are relevant to the majority of the target audience and their needs. A most effective way of making training practical is to ensure that sessions are not confined to the lecture halls only but to hold most of the sessions on the experimental skill plots. This would enable the extension agents under training to identify relevant points in the field through actual practice.

SKILL TEACHING

Most of extension works involves interaction with a target audience and impartation of applied knowledge. Therefore ability to accurately, confidently and convincingly demonstrate a new skill will ensure that Agricultural agents are able to establish a good rapport and win the confidence of their target audience.

3.2 Keys to Successful and Effective Extension Trainings

Since most of the extension workers of Agricultural Agents involve Training of a target audience, knowledge of the basic principles in training is very important for a successful training outcome. The following are some important keys/principles for successful extension training.

- **Uses of Samples and Examples**

    Every recommended production package and problems discussed during training sessions must be illustrated with examples or accompanied by real samples.

- **The Use of Audio Visuals Aids**

    Copious, intelligent and skilful use of audio-aids and extension support materials play a very important part in extension training. They are particularly for:

    i. Emphasizing key points of a recommendation

    ii. Safeguarding messages from distortions

    iii. Serving as guide and aid for the instructor.

In general, there are five situations in which one needs to use training aids:

1. if the information is too complex to be conveyed by spoken word alone.

2. if the information must be numbered

3. words that may convey a different meaning to different people must be

4. visualized to ensure that all trainees know what is meant by these words

5. if trainees attention must be captured.

6. To summarise a number of points and link them together

PREPARATION TASK FOR TRAINING AGRICULTURAL AGENTS

Good training does not just happen it has to be prepared for i.e. "starting off on the right foot". There is a need to ensure the following:

- provision of detailed and updated lesson
- provision of appropriate and adequate resources
  Provision of training checklist

4.0   CONCLUSION

Training of Agricultural Agents should not be confirmed to lecture halls only; it should include sessions of practical demonstration for maximum comprehension.

5.0   SUMMARY

In this unit we have learnt about the various methods and importance of Training Agricultural Agents these include Pre-service, Practical Orientation, Skill teaching etc.

6.0   TUTOR MARKED QUESTION

1. Write short notes on 3 methods of training Agricultural Agents.

2. Why is it necessary to have training aids?

3. List 3 situations where training aids are needed.

7.0   REFERENCES/FURTHER READINGS

1.   Phipps J. (1954) "Successful Practices in adult farmers education", interstate
        Publishers, Dan-ville, Illinois, USA, pg41.

2.   Harris, B.M. (1980) QUOTED IN SWANSON, E.B. (Ed.) 1984.
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MODULE 3 CURRICULUM DEVELOPMENT AND EVALUATION

UNIT 6   TRAINING PROGRAMMES

CONTENTS

1.0   Introduction

2.0   Objectives

3.0   Main Content

        3.1   The Training Cycle

        3.2   The Roles of the Trainer

4.0   Conclusion

5.0   Summary

6.0   Tutor-Marked Assignment

7.0   References/Further Readings

1.0   INTRODUCTION

In many developing countries, training programmes have not been very satisfactory. They have been considered important, and yet they have met with comparatively little success. Why is this? We may list three important reasons.

One, in many cases, the programmes has not been geared to actual needs. Agents and specialists have been prepared for jobs which do not exist. Farmers have been taught methods which are unrealistic and impractical.

Two, the programmes are often planned top down instead of bottom up. Trainees are mere passive receivers, not active participants. Extension administrators at the head office may set up a programme to meet the needs of the government, but not those of the

agent or the farmer. Sometimes, there is no firm commitment to a thorough, well-planned, full training policy and, accordingly, programmes are ad hoc, haphazard, and ineffective.

Three, the programmes have received too little proper evaluation. Criteria for evaluation should be incorporated into the training programme – or for that matter into any programme – for without them it is easy to stray from original objectives, and it may be difficult to make necessary adjustments to changing needs.

Training is an important issue in any organization. In developing country, the public services, of which the various ministries of agriculture are an important part, must respond effectively to the demands of development, and in this, training has a vital part to play. With some exceptions, many ministries are short of the skilled manpower necessary to implement development. Training on a continuous basis is the best means of meeting this shortage. The ministries must train dedicated staff, who are able to recognize opportunities, meet challenges, and achieve results.

Training consists of the following:

1. Assessing needs;
2. Designing relevant means to meet them;
3. Selecting staff;
4. Conducting the actual training;
5. Evaluating it by studying them on the job effectiveness of those who have received it.

There can be no shortcut to effective training, nor can it be bought at cut-rate bargain basement prices. Training programmes must be sufficiently financed. Where they have been, they have yielded high returns in increased productivity, high morale, and organizational pride.

2.0   OBJECTIVES

It is expected that at the end of this unit that the students should understand the various stages involved in a training cycle.

3.0 Main Content

3.1   The Training Cycle

Training can be viewed and treated as a total system or cycle with interrelated phases. The various steps one would take in solving a problem are listed below**:**

1.   **Analysis/needs Assessment**- To determine "gaps" that is, the training requirements.

2.   **Design** – the training approach to be adopted; what learning opportunities are to be provided.

3.   **Development of Training Materials** – the selection and preparation of instructional materials and strategies, format and scheduling of learning events.

4.   **Conduct of the Training** - actual training execution

5.   **Evaluation and Appraisal –** to determine to what extent the stated objectives have been achieved.

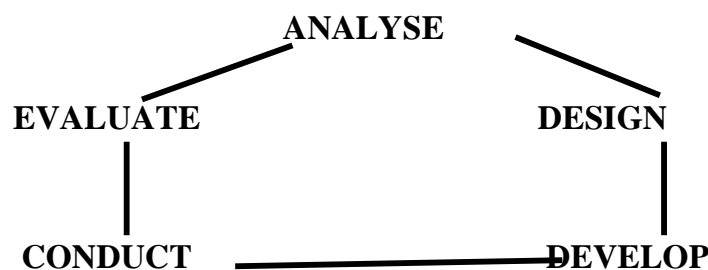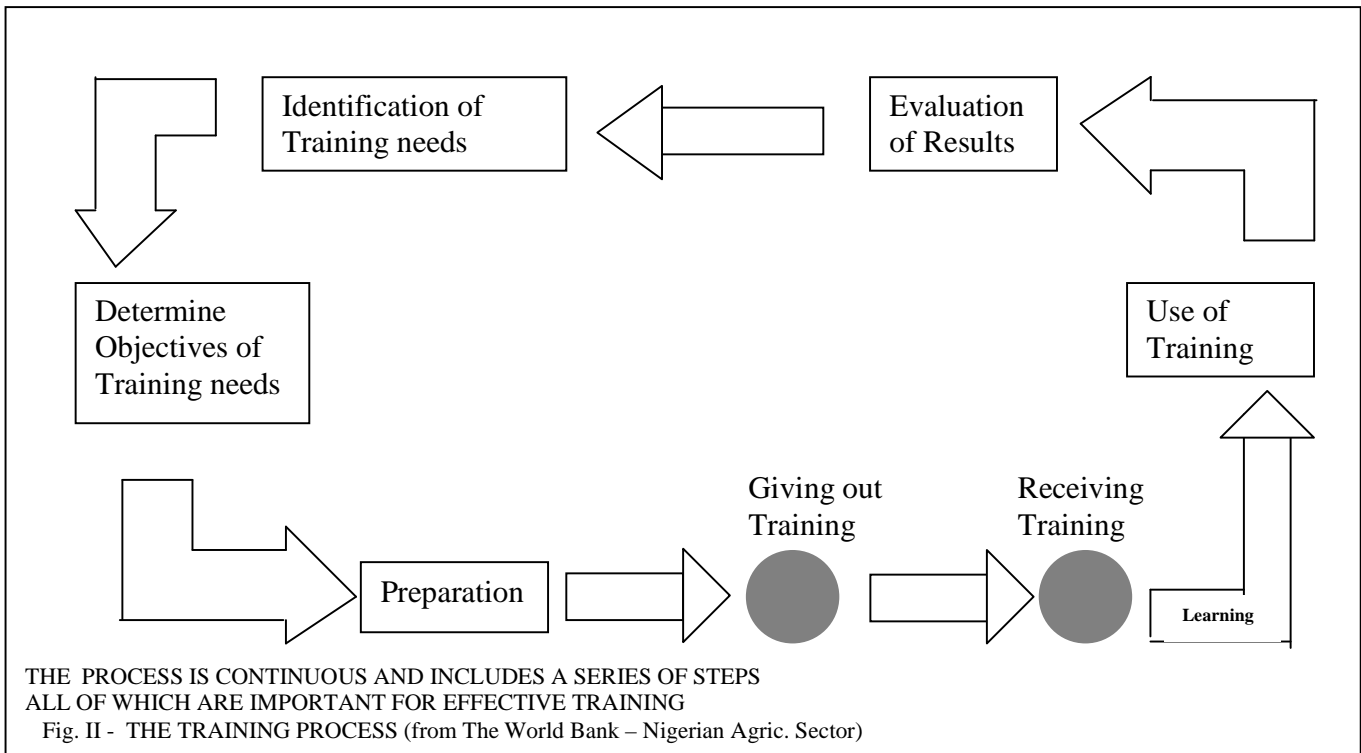*Fig. 1 The training cycle: A close-loop, continuous process*

THE PROCESS IS CONTINUOUS AND INCLUDES A SERIES OF STEPS
ALL OF WHICH ARE IMPORTANT FOR EFFECTIVE TRAINING

Fig. II - THE TRAINING PROCESS (from The World Bank – Nigerian Agric. Sector)

World Bank - 30146:6

3.2 THE ROLES OF THE TRAINER

As the purpose of training is to facilitate learning, trainers are often referred to as facilitators. A facilitator therefore, needs to utilize all his abilities and resources to provide the best access to knowledge and skills that the training is designed to impart. Playing the several different roles expected of a good and effective facilitator, comes with experience which will bring the best results. The several roles a facilitator may be called on to play include:

-       Subject-matter Specialist
-       Counselor   Human Being
-       Leader/Motivator   Follower
-       Learner   Evaluator
-       Psychologist   Investigator
-       Listener   Autocrat
-       Handy-person   Benevolent Dictator

Generally, the more necessary roles a facilitator, the more successful and effective the facilitator will be.

CONCLUSION

Training is one of the most effective extension methodologies for transferring technologies. The success of training, therefore, depends on a unified and strategic concept of certain fundamentals as highlighted in this unit.

SUMMARY

To strengthen subject- matter competencies, educational process skills and delivery of programmes to target audience must be clearly defined. This unit has clearly defined the cycle of training programme for an ideal training outfit.

6.0 TUTOR-MARKED QUESTION

1.   List five basic steps of a training program

2.   Write short notes on the training cycle

7.0 REFERENCES/FURTHER READINGS

1.   Phipps J. (1954) "Successful Practices in adult farmers education, interstate Publishers, Dan-ville, Illinois, USA, pg41.

2.   Goad T.W. (1982) Delivering Effective Trainings San Diego, Califonia: University Association INC

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UNIT 8   CURRICULUM DEVELOPMENT

CONTENTS

1.0   INTRODUCTION

Curriculum Development: This is the most important part in a training programme after a need for training has been identified. The curriculum specifies what will be taught and how it will be taught. It provides the framework and foundation of training. The first phase of curriculum development determines what will be taught, that is, the training content.

2.0   OBJECTIVES

At the end of this unit, you should be able to:

- itemize the various components of training needs analysis
- carefully select the best training method appropriate for a learning process
- design a curriculum for a training programme

3.1   Training Needs Analysis

Once training needs have been identified and training activities have been decided as part of the solution, a needs analyzes should be done to determine knowledge, skills, and attitude requirements as well as performance deficiencies. The needs analysis procedure involves breaking down the "training problem" into its basic parts in different successive phases to identify and understand the important components in each phase. Ultimately, it leads to identifying and understanding the training content. The training needs analysis process can be divided into three distinct analytical phases: job analysis, task analysis, and knowledge and skill-gap analysis.

1.   Identify the job that is to be the subject of the analysis. This involves defining the focal point for the job analysis. It may include the entire job of a group of employees or only a specific segment of their job.

2.   Prepare a list of tasks which can be done following different approaches and methods. Four approaches can be used to identify job tasks: (1) experts identify and list critical tasks, (2) observations and interviews are conducted with employees, (3) meetings are held with group representatives, and (4) a tentative list of task is reviewed by employees and their supervisors.

3.   Verify the tasks. The draft list of tasks should be verified by experts, workers, and supervisors in the analysis process. This can be done through expert review, small-group discussions, and interviews. When the tasks are verified, a final list of job tasks is prepared.

4.   Determine the frequency. The workers and supervisors can fill in a form indicating how frequently each task in a job is performed. Different scales

such as "seldom", "occasionally", "weekly to monthly", "daily to weekly", and "daily" can be used to quantify the intensity of a task accomplished.

Job Analysis Worksheet

Job: Agriculture Extension Officer

Tasks	Frequency performed [a]	Importance [b]	Learning difficulty [c]	Total score	Focus
1. Supervision	4	3	1	8	----
2. Conducting Training	4	3	3	10	yes
3. Planning programmes	2	3	2	7	-----
4. Research trial	2	2	1	5	-----
--------------------------------	-----	-----	-----	-----	-----
--------------------------------	-----	-----	-----	-----	-----
-------------------------	-----	-----	-----	-----	----

a 1 = Seldom   b 1 = Marginally important   c 1 = Easy

  2 = Occasionally   2 = Moderately important   2 = Moderately difficult

  3 = Weekly to monthly   3 = Extremely important   3 = Very difficult

  4 = Daily to weekly   4 = Extremely difficult

  5 = Daily

5. Determine the importance. Not all tasks are equally important to a job. An occasionally performed task may be very important. Therefore, a relative importance rating is useful along with frequency rating. A scale such as "marginally important", "moderately important", and "extremely important" may be used to determine the relative importance of the job tasks.

6. Estimate the learning difficulty. An estimate of learning difficulty is another dimension of the job-task analysis. It shows the trainer the employees' perception of difficulty, which may be different from the trainer's own perception. A scale such as "easy", "moderately difficult", "very difficult", and "extremely difficult" may be used to determine the difficulty indices of job tasks.

7. Calculate the total score. This can be done by simply adding the scores for frequency, importance, and learning difficulty for each task. The column for total score in a worksheet indicates the priority tasks for training if these are training problems.

8. Review the findings. The results of the job-task analysis should be discussed with significant people in the training system, including government leaders, programme directors, and others interested in related training.

Task analysis: The output of the job analysis is a list of broad job tasks, based on importance, learning difficulty and frequency of doing the task. Each task is a complex set of procedures in itself and, therefore, it needs further analysis to find out which specific segment of the task is critical in designing a training programme (see Task Analysis Worksheet). To do this, it is necessary to follow a method called task analysis, which is similar to job analysis.

Task analysis procedures include preparing a blank task analysis worksheet, writing down the name of the job at the top of each sheet, and then making copies. Each of these forms will be used for breaking down and analyzing each of the most important job tasks. Therefore, it is necessary to write one important task identified for training on each of the task analysis worksheets and to list all component parts of each task on its respective task analysis worksheet. This is followed by the steps used for job analysis to find out the frequency, importance, and learning difficulty for each step of the tasks. Then the score for each component part is put in the "total score" column, and the results are discussed with concerned personnel in the organization. The job analysis and task analysis processes are similar to each other, so the model for both worksheets is the same.

The important difference between these two steps of analysis is that "the job analysis helps us identify major blocks of content to include in training; the task analysis helps us understand what comprises an individual block". Both are very important to the curriculum development process. What needs to be taught and what steps are involved in

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the process are completed by these analyses and comprise the major steps in curriculum development.

Task Analysis Worksheet

Job: Agriculture Extension Officer

Task: Conducting training

Components/steps	Frequency performed [a]	Importance [b] Difficulty [c]	Learning score	Total	Focus
Establishing rapport	5	3	1	9	-
Introducing the topic	-	-	-	-	-
Presenting the subject	5	3	1	9	-
Maintaining sequence	-	-	-	-	-
Maintaining eye contact	-	-	-	-	-
Using A/V aids in time	5	3	4	12	yes
-- -----------	-	-	-	-	-
	-	-	-	-	-
Summarizing the lecture	5	3	3	11	yes

a 1 = Seldom   b 1 = Marginally important   c 1 = Easy

  2 = Moderately important   2 = Moderately important   2 = Moderately difficult

  3 = Weekly to monthly   3 = Extremely important   3 = Very difficult

  4 = Daily to weekly   4 = Extremely difficult

  5 = Daily

3.1.3 *Skill – Gap Analysis Worksheet*

Job: Agriculture Extension Officer

Task: Delivery Lecture in VEW's training.

Steps Components	Level of proficiency	Is proficiency a problem?	Can problem be solved by training?
Establishing rapport	1 2 3 (**4**) 5	[ ]	[ ]
Introducing the topic	1 2 (**3**) 4 5	[Y]	[Y]
Presenting the subject	1 2 3 (**4**) 5	[ ]	[ ]
Maintaining sequence	1 2 (**3**) 4 5	[ ]	[ ]
Maintaining eye contact	1 (**2**) 3 4 5	[Y]	[Y]
Using A/V aids in time	1 (**2**) 3 4 5	[ ]	[ ]
Supplying handouts	1 2 (**3**) 4 5	[Y]	[N]
----------------------------	1 2 3 4 5	[ ]	[ ]
---Summarizing the lecture	(**1**) 2 3 4 5	[Y]	[Y]

1 = Cannot do at all
2 = Can do less than half of the task
3 = Can do more than half but less than total
4   = Can do total but cannot maintain time schedule
5= Can do within time schedule.

Knowledge and skill-gap analysis: The knowledge or skill-gap analysis is a process of determining the training needs of individual employees in relation to the important tasks-steps or components of tasks identified for training (see Skill-Gap Analysis Worksheet). The skill-gap analysis determines how skilled or proficient individual employees are on these tasks-steps or components, how much individuals differ from desired performance, and whether or not they need training. It would be a waste of resources and frustrating to the trainer and trainees to design and deliver training on topics and skills where the trainees are already able and proficient. A priority list of the tasks identified for training according to the total score in the job analysis is made. Then, the steps or components that were identified on each task analysis worksheet are listed on the skill-gap analysis worksheet. This is followed by rating each step-

component in terms of the trainee's current proficiency on a scale of 1 to 5, as shown in the legend of the worksheet. Identifying the steps-components that appear to have low proficiency is required because there is a gap between what is desired and the current situation. After this, a review is done to ponder whether the gap can be decreased or removed through training or whether training is the most appropriate method. There may be some steps-components for which measures other than training are more appropriate. At this stage, key personnel such as subject-matter specialists, supervisors, and extension-training experts should discuss the findings before finalizing the curriculum. This helps to identify different perspectives and to avoid unnoticed mistakes or biases in curriculum development.

The training needs analyses provide many things to a trainer. The analyses determine the training contents and how deficient the trainees are in these contents, and the sequence of tasks provides the sequence of training activity.

3.2   Selecting a Training Method

A training programme has a better chance of success when its training methods are carefully selected. A training method is a strategy or tactic that a trainer uses to deliver the content so that the trainees achieve the objective. Selecting an appropriate training method is perhaps the most important step in training activity once the training contents are identified. There are many training methods, but not all of these are equally suitable for all topics and in all situations. To achieve the training objective, a trainer should select the most appropriate training method for the content to involve the trainees in the learning process. Four major factors are considered when selecting a training method: the learning objectives, the content, the trainees, and the practical requirements. According to Bass and Vaughan (1966), training methods should be selected on the basis of the degree to which they do the following:

1. Allow active participation of the learners.
2. Help the learners transfer learning experiences from training to the job situation.
3. Provide the learners with knowledge of results about their attempts to improve.

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4. Provide some means for the learners to be reinforced for the appropriate behaviour.

5. Provide the learners with an opportunity to practise and to repeat when needed.

6. Motivate the learners to improve their own performance.

7. Help learners increase their willingness to change.

These criteria indicate that a single training method will not satisfy the objectives of a training programme.

A variety of training methods are available to a trainer. The most commonly used methods include:

1. Instructor presentation: The trainer orally presents new information to the trainees, usually through lecture. Instructor presentation may include classroom lecture, seminar, workshop, and the like.

2. Group discussion: The trainer leads the group of trainees in discussing a topic.

3. Demonstration: The trainer shows the correct steps for completing a task or shows an example of a correctly completed task.

4. Assigned reading: The trainer gives the trainees reading assignments that provide new information.

5. Exercise: The trainer assigns problems to be solved either on paper or in real situations related to the topic of the training activity.

6. Case study: The trainer gives the trainees information about a situation and directs them to come to a decision or solve a problem concerning the situation.

7. Role-play: Trainees act out a real-life situation in an instructional setting.

8. Field visits and study tour: Trainees are given the opportunity to observe and interact with the problem being solved or skill being learned.

It is a waste of time and effort, according to knowledge and skills without imparting the art of utilizing them. They are valueless if they are not used. Effective training is not cramming information into the heads of trainees; it is a two-way process of interaction between trainees and teachers by which the trainees become fitted to act.

In many developing countries, training programmes have not been very satisfactory. They have been considered important, and yet they have met with comparatively little success. Why is this? It has three important reasons.

One, in many cases, the programmes has not been geared to actual needs. Agents and specialists have been prepared for jobs which do not exist. Farmers have been taught methods which are unrealistic and impractical.

Two, the programmes are often planned from the top down instead of from the bottom up. Trainees are mere passive receivers, not active participants. Extension administrators at the head office may set up a programme to meet the needs of the government, but not those of the agent or the farmer. Sometimes there is no firm commitment to a thorough, well-planned, full training policy and accordingly programmes are ad hoc, haphazard, and ineffective.

Three, the programmes have received too little proper evaluation. Criteria for evaluation should be incorporated into the training programme – or for that matter into any programme – for without them it is easy to stray from original objectives, and it may be difficult to make necessary adjustments to changing needs.

Training is an important issue in any organization. In our development country, the public services, of which the various ministries of agriculture are an important part, must respond effectively to the demands of development, and in this, training has a vital part to play. With some outstanding exceptions, many ministries are short of the skilled manpower necessary to implement development. Training on a continuous basis is the best means of meeting this shortage. The ministries must train dedicated staff, which is able to recognize opportunities, meet challenges, and achieve results.

Training consists of the following:

1. Assessing needs;

2. Designing relevant means to meet them;

3. Selecting staff;

4. Conducting the actual training;

5. Evaluating it by studying them on the job effectiveness of those who have received it.

There can be no shortcut to effective training, nor can it be bought at cut-rate bargain basement prices. Training programmes must be sufficiently financed. Where they have been, they have yielded high returns in increased productivity, high morale, and organizational pride.

3.2.1 Areas of Training Needs of Agricultural Agents in Nigeria.

The first problem is to identify the basic subject-matter fields necessary for effective rural extension work. Unfortunately, training programmes are often organized without sufficient planning. Williams has suggested the following areas.

1. Technical subject matter related to agriculture;

2. theory and principles of teaching; methods of imparting information and motivating people to use it;

3. customs, attitudes and values of rural Nigerians;

4. research techniques;

5. principles and methods of administration and supervision;

In addition, the following may well be included;

6. history, procedures and policies, and organization of the agency to which the trainees will be attached; study of various agencies and services supporting extension programmes;

7. national plans for rural development and extension work;

8. encouragement of agents to plan programmes themselves, to organize, to evaluate, and to improve their means of communication especially of research results;

9. special attention to the individual whenever necessary;

In a study conducted by Obi, it was suggested that the Eastern Nigerian Extension Service should give more attention in its training programmes to communication; evaluation; programme planning; leadership development; technical agricultural matters; and regional extension services.

Both authors agree that no training programme could be considered as completed or static. A programme should cover fundamentals, but should always be flexible enough to offer opportunity leading to improvement in the organization. Possession of technical agricultural knowledge, both authors also agree, is not by itself enough; training, too, is needed in the social and behavioural sciences.

Since training is so important, what tools may the policy makers use to identify the needs of their staff; which is the first step in the process? Let us consider some methods used in business and industry, which may turn out to be relevant.

3.2.2 Methods of Identifying Training Needs of Agricultural Agents

A. **Job Description**: This method, which is widely used in industry, is a detailed description of the duties and responsibilities a given position entails. Since, in our context, it would indicate what the extension officer should actually be doing on the job to perform it successfully, the job description would help to identify his training needs. In many developing countries, however, there appears to be a general reluctance to prepare job descriptions. Perhaps one reason is that extension activities are complex, and differ from season to season. Perhaps another is that responsibilities shift so often that a job description is very difficult to state. Notwithstanding, if we are to have an effective training system, job descriptions for all grades of positions within the organization are indispensable.

B. **Organization, Operations, and Man Analysis**: This is another useful method, which has been suggested by McGee and Thayer Organization analysis determines where within the organization training emphasis should be placed; this technique studies the entire organization or agency, including its objectives, its resources and their allocation. Operations analysis deals with what an employee must do to perform a job effectively; it

focuses on the task, not the man. Man analysis emphasizes the individual employee, determining the skills, knowledge and attitudes he will need to develop. The three are closely related, and cannot be used separately.

C.   **Critical Incident Technique**: This was developed by Flanagan a few years ago. It is a set of procedures for collecting direct observations of behaviour in order to solve practical problems and develop psychological principles. The incidents to be noted reveal the subject's behaviour at work, rather than his general traits.

The incidents must be described accurately, comprehensively, and objectively and must arise from observation of specific situations. Persons engaged in, or associated with the activity under investigation, are asked to give examples of both effective and ineffective behaviours. The examples are then categorized in major areas, and from them the critical requirements of the job in question can be developed, to serve as a basis for formulating training needs. It must be borne in mind, however, that this technique has its limitations. For example, when, the author used it with extension agents in Nigeria, he was given more examples of successful behaviour than of that which was not.

Really, there is no single ideal method for identifying training requirements. It is generally useful to explore a combination. The essential point is to ensure the active participation of the agents for whom the programmes is intended, which policy makers have often neglected with unfortunate results. For success, all persons involved must participate, and actively too.

4.0   CONCLUSION

In this unit, you have been exposed to an important part in a training programme. What will be taught and how it will be taught. The various analytical phases of Training needs Analysis were equally enunciated.

5.0   SUMMARY

Curriculum Development provides the framework and foundation of training. Having discovered training needs, an appropriate training method should therefore be selected and developed to determine knowledge skills, attitude requirements and performance deficiencies.

6.0   TUTOR-MARKED ASSIGNMENT

1.0   What do you understand by Curriculum development?

2.0   List 3 distinct analytical phases of training needs

3.0   What criteria will you consider in selecting training methods for a mentioned program?

7.0   REFERENCES/FURTHER READINGS

1.   Smith, B.O., Stanley, E. and Shores, J.H. Fundamentals of Curriculum Development. Harcourt, Brace and World, 1957.

2.   Doll, R.C. Curriculum Improvement: Decision Making and Process, Allyn and Bacon, 1970.

3.   Hooper, R. (ed.) The Curriculum: Context, Design and Development Oliver and Boyd, 1971.

UNIT 9 CONCEPTS EVALUATION TRAINING PROGRAMMES

CONTENTS

1.0   Introduction

2.0   Objectives

3.0   Main Content

3.1   Evaluation and Appraisal of Training Program

3.2   Methods for Evaluating Training Programmes

4.0   Conclusion

5.0   Summary

6.0   Tutor-Marked Assignment

7.0   References/Further Readings

1.0   INTRODUCTION

Training Agricultural Agents for what?

In developing countries in general, one of the most valuable contributions, which can be made to revolutionizing agriculture, is the development of component agricultural

agents, scientists, and scholars. Many developing countries, therefore, have made impressive efforts to provide a crop of well –trained extension workers at all level. But, much criticism has been levied against the result. Accordingly those concerned now must ask themselves seriously, 'For what, precisely are we training our agricultural students".

Some of the criticisms are as follows:

1. The curricula and course contents are unsuited to the future employment of the trainees. Often they are mere copies of courses to which instructors have themselves been exposed, in institutions where conditions, social and national, are quite different from those of Nigeria.

Many students tend to view the B.Sc. degree merely as a stepping stone to graduate instruction leading to teaching and research positions. But some of them are not equipped to profit by further instruction, while others could be of use in Nigerian agriculture without it. Others for whom the B.Sc. is the terminal degree, experience it as preparing them for positions only in the field and service units of the Ministry of Agriculture and other agencies. They do not consider becoming practical farmers managing their own farms.

At the intermediate level, the current training prepares men for service as field supervisors, technicians, or specialists, but gives little attention to practical aspects. Consequently, graduates are quite unable to cope with problems where subsistence farming is still practised, as it still widely is.

2. Both instructors and students lack exposure to actual farming experience. Therefore, they have never had the opportunity to develop the skills needed to farm efficiently or advise farmers wisely. Nor have they had the opportunity to develop proficiency in soil, crop, and livestock management. It is not unusual to find instructors encouraging students to do 'greenhouse' research projects in partial fulfillment of requirements for their diplomas or degrees. It would be far more useful for the students to work on field projects. As it is, they

generally end up knowing very little about crop and animal production, about which they need to know very much.

In testimony to this lack of practical knowledge, we may cite tests conducted by IRRI in the Philippines for rice extension agents. The tests consisted of identifying common diseases, insect pests, nutritional disorders, and common chemicals used by farmers. On a practical examination the average score was about 25 percent. In a similar test conducted at IITA in Nigeria, the average score was 22 percent for extension agents, 34 percent for supervisors. Employees with actual field experience who had been telling farmers to use ammonium sulphate were unable to identify a sample of it; about half of them could not even distinguish rice seedlings from ordinary grass.

3. A third criticism of current programmes is that most of the trainees are strangers to their own culture and to the problems of their own rural areas. The reason is that many of them, though born in the country, were raised in the city, where they acquired urban values which prevent them from developing empathy with the farmers with whom they are expected to work. Though when they graduate they are employed as agricultural agents, they dislike and resist postings to the rural areas.

It is possible for students to spend their whole university training without a single visit to the rural areas for which they are destined. This blatantly ignores the very heart of the matter. Toward the end of the training, study trips, it is true, are arranged so that students may visit important agricultural projects, and this arrangement has sometimes been supplemented by weekend visits, during term, to activities under private or government management. But very seldom indeed are visits scheduled to subsistence farms under traditional practices, and therefore, the students get no first hand experience at all of the problems of these farmers.

Many agents, consequently, find themselves square pegs in round holes when they actually undertake their work. They lack farming background and experience; they lack technical competence; and as a result, the farmer neither trusts nor believes them. They have little knowledge about aquaculture.

2.0   OBJECTIVES

It is expected that at the end of this unit, you should be able to:

- state reasons for evaluation of training programes
- develop strategies for evaluating training programes
- Practically simulate training methods based on a community based assessment need.

3.0   MAIN CONTENT

3.1   EVALUATION AND APPRAISAL OF TRAINING PROGRAMES

This is probably the often and most neglected phase of training. For effectiveness and for good training to continue to be good, it must be validated and then updated through some thorough evaluation and appraisal

The task to be achieved includes:

- Instructor/Facilitator evaluation after various segments has been completed.
- Learners evaluation of the training
- Field/Follow-up evaluation to determine if learners are performing well in the roles for which training has been provided.

Evaluation can hardly be meaningful without a proper and well set training objective.

3.2   Criteria for Evaluating Training Programmes

Objectives of a training programme should be designed using action words which are measurable. Evaluation should therefore be done based on the criteria specified by the trainer in the learning objective.   Three common criteria should be adopted when evaluating a training program.

1.   How has the trainee demonstrated that learning has actually taken place?
2.   To what degree has the demonstrated learning process, met the expected conditions.

3.   Has the quality of learning improved the knowledge base, practical skills and attitude of the trainee?

By the end of the training session, trainees should be able to list, describe, report and practically demonstrate what they have learned.

4.0   CONCLUSION

In this unit, you have learnt the importance of Evaluating Training Programmes and the Criteria for evaluating programs.

5.0   SUMMARY

Evaluation of Training programs becomes imperative to determine the level of achievement of set-objectives. The knowledge, skill and attitude of trainees to the training program should be appraised in order to justify the expected quality of learning.

6.0   TUTOR MARKED ASSIGMENT

1.   Why is it necessary to evaluate training programs?

2.   What are the measures you will consider in evaluating a training program.

7.0   REFERENCES/FURTHER READING

1   Tyler, R.W. Basic Principles of Curriculum and Instruction, University of Chicago Press, 1969.

2.   Wiseman, S. and Pidgeon, D. Curriculum Evaluation, N.F.E.R., 1970.

3.   Arokoyo Tunji (1989) "Delivery Effective Trainings." Paper presented at the AERLS communication skills workshop for extension staff of Research Institutes, AERLS/ABU, Zaria.

MODULE 10   Organisation of Causes and Evaluation of Training Programmes.

UNIT 10   Concept of Extension Evaluation

UNIT 11   Benefits of Extension Evaluation

UNIT 12   Scope of Extension Evaluation

UNIT 13   Principles of Effective Evaluation

   3.1 Introduction

   3.2 Objectives

   3.3   Content

   1.1   Concept of Extension Evaluation

   1.2   Benefits of Extension Evaluation

   1.3 Scope of Extension Evaluation

   1.4   Principles of Effective Evaluation

2.   Conclusion

3.   Summary

4.   Tutor – Marked Assignment

5.   References/Further Readings

1.0   Introduction

Extension has been defined as an educational process with the purpose of bringing about desirable changes in people's behavior (knowledge, skill and attitude) which will contribute to better farm and home practices and better family living. The conceptual

changes (thinking or feeling) must precede the technical change (action) and can best be brought about by education. Extension evaluation is the process of determining the extent to which these desired behavioral changes have been accomplished in ways of thinking, feeling and acting. Evaluation means ·to appraise carefully, and it not only helps to determine the effectiveness of a program but also clarifies what is really being done and how it is done. The extension worker, if properly trained, should be able, to judge if the program has been adequately planned and successfully accomplished, not only as to number of practices adopted, but also as to their permanence.

Evaluation determines the extent to which the objectives have been reached. How much of the planned program has been accomplished and how long has it taken? Was the information collected in the beginning sufficient and did it serve as a useful bench mark from which to judge the result? Has the desired change in people that was set out in the program been attained?

2.0   Objectives

The main objective of this module is

Examine the benefits, scopes and principles of extension evaluation

3.1   Concept of Extension Evaluation

Evaluation can be defined' as the process of determining the value or amount of success in achieving a predetermined objective. This includes the following steps: formulation of the objectives, identification of proper criteria to use in measuring success and in the determination and explanation of the degree of success. The key conceptual elements in evaluation the value or amount of success" and "predetermined objective," while the

significant operational terms are "objective," "criteria," and determination and explanation of the degree-of ·success." Thus inherent in evaluation is the process of assigning value to some objective and then determining the degree of success in attaining this valued objective.

 Evaluation is sometimes defined this way - The measurement of desirable and undesirable consequences of an action that has been taken in order to forward some goal that is valued. Value may be defined as any aspect of a situation, event, or object that is invested with a preferential interest of being "good," "bad," "desirable," "undesirable," or the like. Values principles by which priorities are established.

Evaluation should 'as' far as possible be a process which satisfies- scientific criteria such as -objective, systematic and comprehensive. It should be distinguished from all forms of· assessment - which take the form of one or more persons' judgment of the success or failure of a project, no matter how sensible and wise that judgment appears to be.

Evaluation can be visualized as a circular process, stemming from and returning to the formation of values. Evaluation always starts with some value for example, it is good t9 follow management principles in farming; and then a total is formulated from-this value. The selection of goals is usually preceded by or concurrent with "value formation." An example of "goal setting" would be the statement that more commercial farmers should have a-greater net return on their farming operation. As a -measure of this goal we find 'out how m~ farmers.- have what margins of profit or net returns on their farming operations. In identifying the current measure of this, goal the indicators to use in

determining the attainment of the goal are decided. Next, a goal-directed activity or program is planned. this case it is probably decided to have an in-depth management school to bring about understanding and adoption of management principles, partial budgeting, etc. to increase net profits. Now the goal-directed activity is put into operation - we conduct the in-depth training. Following this we want to find out the effect of the goal-activity or in-depth training - is it contributing to changes in farming operations that will lead to increased net returns. Finally we return to value formation and a resetting of goals or objectives.

3.2   Benefits of Extension Evaluation

- The evaluation process makes it necessary to state clearly the objectives of the program and to plan carefully.

- Program effectiveness - Evaluation of program progress reveals strengths and weaknesses and accordingly helps to improve the program.

- Eye opener to the teacher (extension worker) - Evaluation1JrOvides a critical view of the ongoing program, and makes the extension worker aware of any need for improvement.

- Public relations – Evaluation provide objective evidence and reliable information to be given to the public on progress and justify financial support.

- Extension personnel - Through program evaluation, extension personnel gain satisfaction by knowing the extent of achievement.

Even though assessment of programs is by no means a. new concept, it is often not planned as part of a program. There are many reasons or excuses for this, such as lack of

trained personnel to supervise evaluation, weak program planning and lack of well specified objectives, reluctance to face the responsibility of undertaking evaluation, fear of revealing weakness to the public as well as lack of time, and pressure of routine activities. But it is perhaps more the lack of understanding of the purposes and methods of evaluation and the role it plays in an educational program that prevents extension workers from using evaluation as an extension tool.

3.2 Scope of Extension Evaluation

Degrees of evaluation range from casual everyday observation and informal inquiries to systematic and formal investigations. The local extension worker in more concerned with the relatively simple evaluation process which give him an insight into his work and leaves the more complicated studies to evaluation specialists.

Everyday observation involves planned observation of the daily activities which gives an impression, even if subjective, that can helpfully guide the work. Such information is collected from, casual conversation and offhand remarks, farm and home visits, meetings, and individual discussions.

Informal studies may involve review and analysis of information obtained from records, annual reports, checklists, questionnaires, census data and the like. Extension workers should be trained for this type of evaluation which should form a fairly objective basis for judging a program.

Formal studies are more scientifically planned and carried out to provide objective information as a basis for assessment of the achievement of objectives or effectiveness of methods used. They may include extensive interviews, questionnaires, compilation of data by different devices and benefit from collaboration with rural sociologists and statistical institutions.

Principles of Effective Evaluation

Certain basic principles underlie effective evaluation:

1. Evaluation of extension work should be well planned and clearly defined in scope as to what phase of a program ~s to be evaluated.

2. Extension personnel themselves should take part in evaluation.

Self-appraisal helps those who carry out a program, and can be usefully combined with appraisal by an outside person.

3. Everyday evaluation 'should be continuous and integrated with the program development process from its planning stage to the end.

4. Reliable and effective devices should be used, and a representative sample chosen according to means available.

5. Evaluation should be more concerned with the achievement of behavioral changes than with the number of participants; meetings, hours, items prepared, etc.

Careful analysis and interpretation of findings should be considered when an evaluation study is being planned.

4.0   Conclusion:

In this module you have learnt about the concept of extension evaluation, benefits of extension evaluation, scoped of extension evaluation and principles of extension evaluation.

5.0   Summary

Evaluation is a fundamental part of extension programs. Every extension activity involves a conscious or unconscious appraisal of progress and effectiveness. Simple but objective and well organized extension studies, conducted by extension workers in cooperation with rural leaders help make the extension program realistic in terms-of peoples need justify the investment of --pub1.ic funds and are-educational to those who participate.

6.0   Tutor – Marked Assignment

1. What extension Evaluation

2. Outline the benefits of extension evaluation

3. Enumerate the scope of extension evaluation

4. What are the principles of extension evaluation?

7.0   References/Further Readings

i. Fred P. Frutchey – How to make an Evaluation Study – Federal Extension service, U.S. Department of Agriculture, Washington, D.C. USA.

ii. Borgo Mozzano, Technical Assistance in a Rural Community in Italy by L. E. Virone; Geographical Publications Ltd., The World Land Use Survey, Occasional papers, No. 4.

MODULE 6

UNIT 17   Factors to be considered in Extension Evaluation

UNIT 18   Criteria for Evaluating Extension Programmes

UNIT 19   Methods for Evaluating Extension Training Programmes.

1.0   Introduction

2.0   Objectives

3.0   Content

        3.1   Factors to be considered in Extension Evaluation

        3.2   Criteria for Evaluating Extension Programmes

        3.3   Methods for Evaluating Extension Training Programmes.

4.0   Conclusion

5.0   Summary

6.0   Tutor – Marked Assignment

     References/Further Readings

1.0 Introduction

For effective evaluation of extension programme, some factors are to be considered. There are also some stages in evaluating extension programme that needs to be followed. Some methods are involved in evaluating extension programme

2.0 Objective

The main objective of this module is to;

Examine factors to be considered in Extension Evaluation, identify Criteria for Evaluating Extension Programmes and Methods for Evaluating Extension Training Programmes.

3.0 Content

3.1 Factors to be considered in Extension Evaluation

There are certain factors involved in evaluation which must be duly considered when planning evaluation of a program.

Evaluation project leader- Evaluation should not be undertaken unless someone is trained in the procedure and can guide the process throughout.

Extension personnel - Local extension personnel should be trained in informal evaluation, how to look for evidence of progress or failure, and for reasons why a program is going well or not.

Outside resources -Collaborate with sociologists, statisticians, and other experts on formal studies. Avoid outside evaluation in which personnel themselves are not involved.

Local people - Inform local people about activities, such as interviews that may involve them, and enlist their cooperation.

Before an investigation is made find out what other studies can give needed information. Census data, reports and yearbooks are often useful resources.

The time Factor - Some technical changes require social changes development. Others can be accomplished only at certain seasons. behaviour may not have occurred when the program is finished. It is reasonable time for the accomplishment.

Choice of devices - The device chosen should fit the project to be evaluated. The devices most commonly used are interview-questionnaires, mail-questionnaires, and checklists.

Financial implications- Before a study is started determine the financial requirements to cover the scope of the project, obtaining the required information, tabulation and analysis of data.

3.2   Criteria for Evaluating Extension Programmes

Evaluation may be applied to each step used in program development. The major stages in the extension program cycle and their relationship to evaluation are as follows:

Program Determination

Situation analysis (for setting a baseline) - Study of conditions involves collection of the information (fact finding), including social, economic and cultural factors, which is needed for program planning, followed by careful analysis according to certain

standards in relation to the situation. The extension worker should ask - Are the facts adequate and accurate? For example, if a demonstration is planned on the development of a vegetable garden, one must know the kind of soil available, which vegetables are suitable for planting, etc., before a program is suggested. It is of no use to collect a number of facts if the data cannot be carefully analyzed. Fact finding, therefore, needs to be planned and limited accord.ing to available resources for analysis.

When analyzing the actual situation, it is also necessary to find 'out what other programs are being carried out or planned in order to ensure that the extension program fits in with them and does not overlap.

Identification of problems - On the basis of information collected, identify and analyze the problems. For example, which problems are of concern to people in the region and therefore come under the responsibility of the extension workers? Are the people (local leaders) involved in setting the objectives and drawing up plane?

Determination of objectives- Look carefully at the proposed objectives to make sure they are stated and defined in a way that is measurable. Are the objectives based on the needs of the people? Do the objectives clearly define what changes are-to be accomplished in relation to people involved? Are the objectives specific enough to serve as a basis for carrying out a specific program? Are the objectives within the limits of available resources and possible to achieve within a set time limit?

Program plan - During the program planning stage, evaluation is used to determine how the short-term programs fit into the long-term programs, whether the teaching methods are well chosen, and whether the extension staff are well prepared for their teaching

duties, or if outside persons need to be called upon. Are the local leaders involved in the program?

Progress Appraisal

During execution of the program, the extension worker should constantly consider whether the program is going in the right direction, and what measures need to be taken to adjust it.

- Is the program reaching the objectives? If not, are the objectives not clearly defined, were they too comprehensive for the means available, or has the situation changed so that it is necessary to adjust the original objectives? Were the objectives decided upon in collaboration with the people? Does the plan identify jobs to be done, persons responsible, teaching methods to be used, dates for events and activities? Is the plan being followed?

- Are the methods that are being used effective and particularly suited to the people, their education and interest?

Does the content of the program meet the needs of the people? program flexible so that it can be adjusted?

Is the time limit set attainable?

Are the efforts of the extension worker coordinated with those of other agencies?

Analysis of accomplishments

I. In physical situation; for example increased production, improvements of conditions or 'practices;

II. In people, i.e. changes in behaviour, knowledge, attitudes, and skills and by what

means have these changes been brought about?

If certain changes in practices, attitudes and skills have taken place are the changes of a temporary, occasional or more permanent nature?

Even long personal experience used as basis for planning a program can be misleading. It is more satisfactory to use careful observations and a more scientific method of appraising progress.

Planning and Conducting Evaluation Study

these steps are essential in planning an evaluation study: (1) select a problem demanding investigation; (2) clearly formulate what is to be measured; (3) determine the kind of information needed; (4) decide how to collect the information; and (5) Plan how the information is to be used.

The following points will serve as guidelines when planning and conducting evaluation of an educational program.

1. Determine what personnel and financial resources are available and needed for making an investigation

2. What cooperation is needed from outside as to personnel and money?

3. What time is required for carrying out a study?

4. Select and define a part of a program to study

5. What objectives or content of the extension program are to be evaluated?

6. Which phase of this program will be evaluated, i.e. program action, teaching methods, results, etc. will an evaluation of a certain program or aspect of a program be useful for the future?

7. Will it be necessary to -collect data for the evaluation or is some information already available from other sources?

3.2   Methods for Evaluating Extension Training Programmes.

The Methods used General Include the Following:

1. Personal Observation - Home economics and agricultural extension advisors have many opportunities to personal observations through seeing and hearing. Observations must be systematically planned, recorded and have a purpose~ The record should show who was observed, what was observed, how many times an activity took place, where, and for what purpose.

Some advantages of personal observations – are that they provide an opportunity for observing many details and for studying personal reactions, practices and conditions. Observations may be carried on as regular work is done without very much extra time and effort. However, there are disadvantages in that the observer makes subjective judgements in terms of what he thinks is important, and he may have difficulty in separating facts from subjective interpretation. If many observations need to be made which are not routine works, it can become rather costly. Observations may not be representative of the population, and if information is needed on many items this method of collecting is impractical.

➢ Checklists - Are often used in order to enable people to make one or more choices from a list of statements regarding a problem or an idea. Usually a statement of the problem is made followed by a list of several possible answers from which a

choice may be made.

The advantages of checklists; are that they are ee.sy to answer, tabulation is easy, they serve as reminders on items which the respondent may not think of, and respondents are more likely to check an interest than to state an interest in an open ended (or free response) question. Some disadvantages are that they provide for answers which the person wording them considers important, but they may omit important items from the respondent's own thinking, also the order of arrangement of items in a checklist may influence replies.

➢ Rating scales - In rating scales informants are asked to choose, among various degrees of opinion, a feeling or interest about a problem or idea. Descriptive words such as "good", "fair", "poor", and numerical. Ratings should be defined in terms of characteristics to be measured. Attitudes, opinions and degrees of interest in a subject are some types of behaviour changes that· can be checked by the use of rating scales.

The advantages are that they are easy to tabulate and provide an opportunity for people to state a degree or feeling or opinion which is not- provided for in "yes or no' questions. On -the other hand it is difficult to choose appropriate words for describing values as people's interpretations of words may be different, also people often choose the middle value rather than the extremes of "very good" and "'excellent" or "poor" and "of no value."

➢ Mail questionnaires- have the advantage of being a reasonable inexpensive method of collecting information and more people can usually be reached by

mail than by)personal contact; answers are not influenced by an interviewer if no signature is required, and the person answering the questions can take more time to think through Questions and possible replies. However, questionnaires are usufl.lly more limited in value than personal interviews. Questions may not be understood as there is no opportunity to explain them, returns are fewer, and follow-up is necessary in order to obtain replies from all to whom questionnaires are sent. (Obviously, mail questionnaires are impractical where respondents are illiterate or where mail service is unreliable.)

➢ Case studies- There are studies of a limited number of problems or situations which are valuable for providing concrete information on problems or solutions, end on sequences of events leading to problem solution. They are useful in testing approaches to a specific type of problem. However, they do not provide information for general conclusions and require a great deal of time for observing, recording facts and preparing reports. Relatively few cases can be observed and reported.

➢ Personal interviews - may be carried out in groups or individually. A study can be rendered useless or very valuable according to the way in which the interviewer collects the data.

Both group and individual methods of interviewing have their merits end limitations. The individual interview allows the interviewer to explain the questions and to keep the interest of the respondent for a considerable period of time. Reasons for resistance may be discovered and overcome. The personal

contact offers the interviewer opportunities to establish friendly relations, observe personal reactions, and to secure fairly complete answers. However, it is rather expensive to locate and contact individuals, and an untrained interviewer may be apt to bias replies by suggesting answers.

➢ Group interviews- This means bringing people together in a group and asking them to fill in individual questionnaires in writing. In this procedure the person collecting the data explains the questionnaire or record form to the entire group and gives an opportunity for questions to be asked and for clarification of the record form. Each individual member of the group then fills in the form. The interviewer is present to_ provide further help to understanding the form and to encourage completion of the record. The same explanations regarding the meaning of questions will be received by all group members.

There are some limitations to the group interview - respondents may feel less free to ask questions in the presence of others. There may be a problem of people communicating with each other and being influenced accordingly. There is little-- or no opportunity for individual probing-to-get-more complete replies if the record form includes free response questions.

Conclusion:

In this module, you have learnt about factors to be considered in extension evaluation, the criteria for evaluating extension programmes and the methods involved in evaluating extension programmes.

Summary:

There are different factors to be considered in extension evaluation, while there are Criteria and methods for Evaluating Extension training Programmes.

Tutor – Marked Assignment

I.What are the factors to be considered in Extension Evaluation?

II.Mention the Criteria for Evaluating Extension Programmes

III.Enumerate the Methods for Evaluating Extension Training Programmes.

References/Further Readings

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