Lecture Notes 1 : FUNDAMENTAL OF AGRICULTURER EXTENSION EDUCATION

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**Topic : Education definition and its Types**

**Education** is a gradual process which brings positive changes in human life and behavior.

We can also define education as “a process of acquiring knowledge through study or imparting the knowledge by way of instructions or some other practical procedure”.

**What is education?**

Education brings a natural and lasting change in an individual’s reasoning and ability to achieve the targeted goal.

It facilitates us to investigate our own considerations and thoughts and makes it ready to express it in various shapes.

Education is the main thing that encourages us to distinguish between right and wrong because in the absence of education, we can’t do what we need or we can’t achieve our goal.

Straightforwardly, we can say, “education is the passage to progress”. It is additionally the way to our fate as achievements can only be accomplished when individuals have information, aptitudes, and frame of mind.

Education goes beyond what takes places within the four walls of the classroom. A child gets the education from his experiences outside the school as well as from those within on the basis of these factors. There are three main
types of education, namely, Formal, Informal and Non-formal. Each of these types is discussed below.

**TYPES OF EDUCATION**

**Formal Education**

Formal education or formal learning usually takes place in the premises of the school, where a person may learn basic, academic, or trade skills. Small children often attend a nursery or kindergarten but often formal education begins in elementary school and continues with secondary school.

Post-secondary education (or higher education) is usually at a college or university which may grant an academic degree. It is associated with a specific or stage and is provided under a certain set of rules and regulations.

The formal education is given by specially qualified teachers they are supposed to be efficient in the art of instruction. It also observes strict discipline. The student and the teacher both are aware of the facts and engage themselves in the process of education.

**Examples of Formal Education**

- Learning in a classroom
- School grading/certification, college, and university degrees
- Planned education of different subjects having a proper syllabus acquired by attending the institution.
Characteristics of formal education

- Formal education is structured hierarchically.
- It is planned and deliberate.
- Scheduled fees are paid regularly.
- It has a chronological grading system.
- It has a syllabus and subject-oriented. The syllabus has to be covered within a specific time period.
- The child is taught by the teachers.

Advantages of Formal education:

- An organized educational model and up to date course contents.
- Students acquire knowledge from trained and professional teachers.
- Structured and systematic learning process.
- Intermediate and final assessments are ensured to advance students to the next learning phase.
- Institutions are managerially and physically organized.
- Leads to a formally recognized certificate.
- Easy access to jobs.

Informal Education

Informal education may be a parent teaching a child how to prepare a meal or ride a bicycle.

People can also get an informal education by reading many books from a library or educational websites.

Informal education is when you are not studying in a school and do not use any particular learning method. In this type of education, conscious efforts are not
involved. It is neither pre-planned nor deliberate. It may be learned at some marketplace, hotel or at home.

Unlike formal education, informal education is not imparted by an institution such as school or college. Informal education is not given according to any fixed timetable. There is no set curriculum required. Informal education consists of experiences and actually living in the family or community.

Examples of Informal Education

- Teaching the child some basics such as numeric characters.
- Someone learning his/her mother tongue
- A spontaneous type of learning, “if a person standing in a bank learns about opening and maintaining the account at the bank from someone.”

Characteristics of Informal Education

- It is independent of boundary walls.
- It has no definite syllabus.
- It is not pre-planned and has no timetable.
- No fees are required as we get informal education through daily experience and by learning new things.
- It is a lifelong process in a natural way.
- The certificates/degrees are not involved and one has no stress for learning the new things.
- You can get from any source such as media, life experiences, friends, family etc.

Advantages of Informal Education

- More naturally learning process as you can learn at anywhere and at any time from your daily experience.
It involves activities like individual and personal research on a topic of interest for themselves by utilizing books, libraries, social media, internet or getting assistance from informal trainers.

- Utilizes a variety of techniques.
- No specific time span.
- Less costly and time-efficient learning process.
- No need to hire experts as most of the professionals may be willing to share their precious knowledge with students/public through social media and the internet.
- Learners can be picked up the requisite information from books, TV, radio or conversations with their friends/family members.

Non-formal Education

Non-formal education includes adult basic education, adult literacy education or school equivalency preparation.

In nonformal education, someone (who is not in school) can learn literacy, other basic skills or job skills.

Home education, individualized instruction (such as programmed learning), distance learning and computer-assisted instruction are other possibilities.

Non-formal education is imparted consciously and deliberately and systematically implemented. It should be organized for a homogeneous group. Non-formal, education should be programmed to serve the needs of the identified group. This will necessitate flexibility in the design of the curriculum and the scheme of evaluation.

Examples of Non-formal Education
• Boy Scouts and Girls Guides develop some sports program such as swimming comes under nonformal education.
• Fitness programs.
• Community-based adult education courses.
• Free courses for adult education developed by some organization.

Characteristics of Non-formal Education

• The nonformal education is planned and takes place apart from the school system.
• The timetable and syllabus can be adjustable.
• Unlike theoretical formal education, it is practical and vocational education.
• Nonformal education has no age limit.
• Fees or certificates may or may not be necessary.
• It may be full time or part-time learning and one can earn and learn together.
• It involves learning of professional skills.

Advantages of Non-formal Education

• Practiced and vocational training.
• Naturally growing minds that do not wait for the system to amend.
• Literacy with skillfulness growth in which self-learning is appreciated.
• Flexibility in age, curriculum and time.
• Open-ended educational system in which both the public and private sector are involved in the process.
• No need to conduct regular exams.
• Diploma, certificates, and award are not essential to be awarded.
Lecture Notes 2: FUNDAMENTAL OF AGRICULTURE EXTENSION EDUCATION

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Topic: Extension Education

meaning, definition, scope and process.

Meaning of Extension Education:

“Extension education is an applied behavioural science dealing with the desirable changes in the behavioural complex of human beings, through various strategies and programmes, by applying the latest scientific and technological innovations.”

Definitions:

Extension education is an applied science consisting of content derived from research, accumulated field experiences and relevant principles drawn from the behavioural science synthesised with useful technology into a body of philosophy, principles, content and methods focussed on the problems of out of school education for adults and youths (J.P. Leagans (1961)).

Extension work is an out of school system of education in which adult and young people learn by doing. It is partnership between the government and the people, which provides service and education designed to meet the people. Its fundamental objective is the development of the people (Kelsey and Harne (1963)).
Extension is a programme and a process of helping village people to help themselves, increase their production and to raise their general standard of living (D. Ensminger (1961)).

We can define extension as the increased dissemination of useful knowledge for improving rural life (H.W. Butt (1961)).

Extension is a two-way channel; it brings scientific information to the village people and also takes the problems of the village people to the scientific institutions for solution, it is a continuous educational process, in which both learner and teacher contribute and receive (B. Rambhai (1958)).

Extension education is defined as an educational process to provide knowledge to the rural people about the improved practices in a convincing manner and help them to take decision within their specific local conditions (O.P. Dahama (1973)).

Agricultural extension is a professional methods of non-formal education aimed at inducing behavioural changes in the farmers for increasing their income through increased production and productivity by establishing firm linkages with research for solving farmer’s problems ensuring adequate and timely supply of inputs and usage proven methods of communication for speeding of the process of diffusion and adoption of innovations (V.C. Sanoria (1986)).

**Scope:**

- It includes all activities of rural development. So extension programmes should be dynamic and flexible. The areas indicating scope of Extension are listed below:
Increasing efficiency in agricultural production.
- Increasing efficiency in marketing, distribution and utilization of agricultural inputs and outputs
- Conservation, development and use of natural resources.
- Proper farm and home management
- Better family living.
- Youth development.
- Leadership development.
- Community and rural development.
- Improving public affairs for all round development.

EXTENSION EDUCATIONAL PROCESS

Extension education is a process and it is participatory in its approach. According to Leagans the sequence of steps involved in the process are

- Situation
- Objectives and Solution
- Teaching methods
- Evaluation
- Reconsideration Problem

The process of extension, as applied to development programmes, involves five essential phases. The sequence of steps that result in progress from a given situation to a new or a more desirable one.

- **Analyzing the Situation**: this requires a large amount of facts about all aspects of the situation where extension work is to be taken up. Information is needed about the peoples' interests, education, their
needs, social customs, farming systems, water bodies, etc. These details can be obtained by conducting participatory rural appraisal / rapid rural appraisal, and these details help in identifying suitable developmental programme to the problems

- **Objectives** the beneficiaries of development programmes must be involved in selecting a limited number of objectives which should state the behavioural changes in people as well as the economic or social outcomes desired.

- **Teaching**: teaching is the process of arranging situations in which the things to be learnt are brought to the notice of the people, their interest is developed, and a desire for change is aroused, i.e., they are stimulated to action. The essential role of an extension worker is to create effective learning situations with the following essential elements
  i) instructor - extension worker like you.
  ii) learners - all stakeholders of development programmes.
  iii) subject matter - planned developmental activity. Examples: participatory irrigation management, community forest management, mineral mixture feeding to livestock, etc.
  iv) teaching materials - flannel-board, black-board, charts, models, samples, slides, film show, etc., on participatory irrigation management.

- **Evaluating the Teaching**: evaluation is to determining the extent to which the objectives have been reached. Plans for evaluation should be built into the plans of work during earlier phases. Remember, a distinction should be made from mere records of accomplishments from original objectives stated.

- **Reconsidering**: this step consists of a review of previous efforts and results which reveal a new situation. If this new situation shows the need for further work, then the whole process may begin again, with new or modified.
Objective :

The literal meaning of the term, objectives, is the expressions of the ends towards which our efforts are to be directed. In other words, an objective means a direction of movement. Before starting any development programme, you should clearly understand the objectives of extension so that you know what to do, where to go, and what is to be achieved. In the context of development, the fundamental objective of extension is to stimulate desirable development. However, the role that extension plays in development depends on how one defines extension.

By applying the definitions given in the above section, we may arrive at a concept of extension that seems to synthesize diverse perspectives of development into five objectives:

- Transferring knowledge from researchers to people and end users.
- Advising people in their decision making.
- Educating people, he able to make similar decisions in future.
- Enabling people to clarify their own goals and possibilities and to realize them.
- Stimulating desirable developments within the framework of the national, economic and social policies involving all the sub sectors of development as a whole.
Principles of Extension Education

The principles of extension are relative and not necessarily fixed in importance or sequence. The principles discussed here are those which are either fundamental in nature or widely accepted in literature on the subject.

1. **Principles of interest and needs**: People's interests and people's needs are the starting points of extension work. To identify the real needs and interests of the people are challenging tasks. The extension agents should not pass on their own needs and interests as those of the people. Extension work shall be successful only when it is based on the interests and needs of the people as they see them.

2. **Grass-roots principle of organization**: Extension programme should start with local problems. Extension work should start with where people are and what they have. The establishment of the three-tier system namely, village panchayat, Block-samiti and Zila Parishad, followed by state legislatures and parliament satisfies the grass-roots principles of organization in the extension (Dhama and Bhatnagar, 2009).

1. **Principle of cultural difference**: In order to make extension programmes effective, the approach and procedures must be suited to the culture of the people who are to be taught different culture require different approaches. A blue print of plan of action designed for one region cannot be applied effectively to another region due to cultural difference.

2. **Principle of co-operation and participation**: Most members of the village community will willingly cooperate in carrying out a project which they helped to decide to undertake. It has been the experience of many countries that people become dynamic if they are permitted to take decisions concerning their own affairs, exercise responsibility for and are helped to carry out projects in their own village.

3. **Principle of applied science and democratic approach**: Extension is an applied science, it is a two way process. The problems of people/farmers are identified and taken to the concerned scientists, who on the basis of research and experimentation find out the solution best suited to their conditions. The extension worker then, with the various means
Disseminate these findings in such a way that the farm families can voluntarily adopt them to satisfy their own needs. However, it is democratic in a way that all possible solutions are placed before the participants, and their merits are highlighted through mutual discussions. Ultimately the people are left free to decide their line of action, what method to be adopted in their local situations with their own resources and available government assistance (Dhama & Bhatnagar, 2009).

1. **Principle of learning by doing:** "Farmers, like other people, hesitate to believe and set on theories; or even facts, until they see with their own eyes the proof of them in material form. We must in some way, bring this work to their personal attention. We must carry it home to them". However, learning by doing is most effective in changing people's behaviours. This develops confidence as it involves maximum number of sensory organs.

2. **Principle of trained specialists:** Trained specialist have to be provided, who keep themselves in touch with their respective research institutes on the one hand and extend to the extension worker, meaningful terms, the latest scientific developments, which have scope for adoption in particular areas.

3. **Principle of adaptability:** Extension work and extension teaching methods must be flexible and adopted to suit the local conditions. This is necessary because the people, their situation, their resources and constraints vary from place to place & time to time. (Singh et al., 2006)

4. **Principle of leadership:** The involvement of leaders in extension programmes is the one single factor that determines the success or failure of those programmes. Local leaders are the guardians of local thought and action and can be trained and developed to best serve as interpreter of new ideas to the villagers.

**Whole family principle:** The family is the unit of any society the members of the family have to be developed equally by involving all them, because:

- a. The extension programme affects all members of the family.
- b. Family members have great influence in decision making.
- c. It creates mutual understanding.
- d. It balances farm and family needs.
- e. It provides an activity outlet for all.
- f. It assures family services to the community and society.
Program:

A programme is a set of sequential operation for implementing a scheme for development. Therefore, a programme is a set up scheme usually designed for the welfare of the people and development through effective planning and implementation. It is a set of planned activity to bring about development and when these activities become an action of intent by the government or agency, it becomes a programme. There are a lot of rural and agricultural development programmes in Nigeria: it is a plan with a series of actions which are designed to achieve something important.

Planning:

“Planning” means “thinking carefully about something you want to do and decide how and when you will do it”. What can be lifted from this definition is that planning is setting up one’s mind in something or a project one wants to do, and choose how, where, what and when to do it. Dictionary.com, also defined planning as “a scheme, programme or method worked out before hand for the accomplishment of an objective”. We learned from this definition that planning is a set of activities put together to solve a particular problem. Hence, planning is a problem (objective) solving activity. Planning is created because there is an existing problem or expected target which needs to sort out through effective planning.
Programme Planning in Extension

Programme planning is the process whereby the people in the country through their leaders plans their extension programme, country and state professional extension staff member assist in this process (Lawrence, 1962).

The first step in any systematic attempt to promote rural development is to prepare useful programmes based on people’s needs. The development of such programmes, which harmonize with the local needs as the people see them and with the national interests with which the country as a whole is concerned, is an important responsibility of extension personnel at all levels-national, state, district, block & village.

Programme planning is the process of making decisions about the direction & intensity of extension-education efforts of extension-service to bring about social, economic & technological changes

Objectives of programme

The general objective of having an extension programme is to influence people to make changes in their way of life and making a living. The assumption is that there is a need for change and if people are not aware, it is necessary to make them aware of this; and to develop their needs. According to Kelsey and Hearne (1967), the following are reasons for having a programme:

- To ensure careful consideration of what is to be done and why.
- To furnish a guide against which to judge all new proposals.
- To establish objectives toward which progress can be measured and evaluated.
- To have a means of choosing the important (deep rooted) from incidental (less important) problems; and the permanent from the temporary changes.
- To develop a common understanding about the means and ends between functionaries and organizations.
- To ensure continuity during changes of personnel.
- To help develop leadership.
To avoid wastage of time & money and promote efficiency.
To justify expenditure and to ensure flow of funds.
To have a statement in written form for public use.

**STEPS/PROCESS OF PROGRAMME PLANNING**

Program development involves: analyzing the situation or context; setting objectives/priorities and; designing an action plan; implementing the plan; evaluating inputs, outputs, outcomes, and reconsider the weak and strong points of the programme.

The program development process is on-going and continuous. Each educational initiative, workshop or event we carry out modifies the initial situation. As a consequence, any plan of action continues to evolve and change as the situation or context changes.

*Steps of programme planning*
Collection of facts

Sound plans are based on availability of relevant & reliable facts. This includes facts about the village people, physical conditions, existing farm & home practices, trends & outlook. Besides, other facts about customs, traditions, rural institutions, peoples' organisations operating in the area, etc. should be collected. The tools & techniques for collecting data include systematic observations, a questionnaire, interviews & surveys, existing governmental records, census reports, reports of the Planning Commission, Central Bureau of Statistics, and the past experiences of people.

Analysis of the situation

After collecting facts, they are analysed and interpreted to find out the problems & needs of the people.

Identification of problems

As a result of the analysis of facts, the important gaps between 'what is' & 'what ought to be' are identified and the problems leading to such a situation are located. These gaps represent the people’s needs.

Determination of objectives

Once the needs & problems of the people have been identified, they are stated in terms of objectives & goals. The objectives represent a forecast of the changes in the behaviour of the people and the situation to be brought about. The objectives may be long-term as well as short-term, and must be stated clearly.

Developing the plan of work

In order to achieve the stated objectives & goals, the means & methods attaining each objective are selected; and the action plan, i.e. the calendar of activities is developed. It includes the technical content, who should do what, and the time-limit within the work will be completed. The plan of work may be seasonal, short-term, annual or long-term.
Execution of the plan of work

Once the action plan has been developed, arrangement for supplying the necessary inputs, credits, teaching aids, extension literature etc. has to be made and the specific action has to be initiated. The execution of the plan of work is to be done through extension methods for stimulating individuals and groups to think, act and participate effectively. People should be involved at every step to ensure the success of the programme.

Evaluation

It is done to measure the degree of success of the programme in terms of the objectives & goals set forth. This is basically done to determine the changes in the behaviour of the people as a result of the extension programme. The evaluation is done not only of the physical achievements but also of the methods & techniques used and of the other steps in the programme planning process, so that the strong & weak points may be identified and necessary changes may be incorporated accordingly.

Reconsideration

The systematic and periodic evaluation of the programme will reveal the weak and strong points of the programme. Based on these points, the programme is reconsidered and the necessary adjustments & changes are made in order to make it more meaningful & sound.