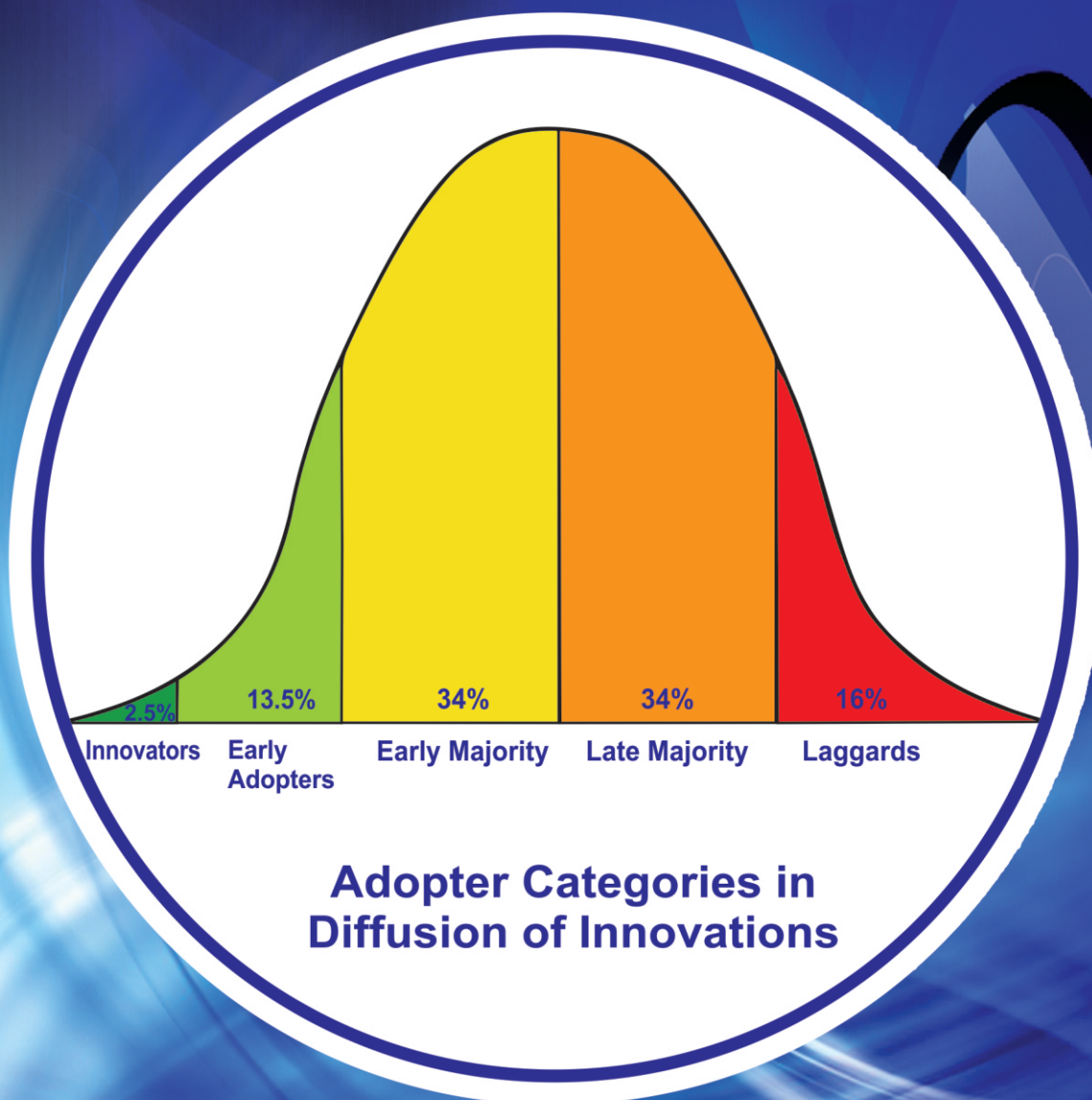




**Adopter Categories in
Diffusion of Innovations**

“शिक्षा मानव को बन्धनों से मुक्त करती है और आज के युग में तो यह लोकतन्त्र की भावना का आधार भी है। जन्म तथा अन्य कारणों से उत्पन्न जाति एवं वर्गगत विषमताओं को दूर करते हुए मनुष्य को इन सबसे ऊपर उठाती है।”

— इन्दिरा गाँधी



“Education is a liberating force, and in our age it is also a democratising force, cutting across the barriers of caste and class, smoothing out inequalities imposed by birth and other circumstances.”

— Indira Gandhi

Block

2

EXTENSION TEACHING METHODS AND AUDIO VISUAL AIDS

UNIT 1**Teaching - Learning Process****5**

UNIT 2**Extension Teaching Methods****23**

UNIT 3**Audio-Visual Aids****58**

PROGRAMME DESIGN COMMITTEE

Prof. Amita Shah Gujarat Institute of Development Research Ahmedabad	Prof. P. Radhakrishnan Madras Institute of Development Studies, Chennai
Prof. S. K. Bhati Jamia Millia Islamia University, New Delhi	Prof. Ramashray Roy (Rtd) Centre for Study of Developing Societies New Delhi
Prof. J. S. Gandhi (Rtd) Jawaharlal Nehru University, New Delhi	Prof. R. P. Singh (Rtd) Ex-Vice-Chancellor, MPUAT, Udaipur
Prof. Gopal Krishnan (Rtd) Punjab University, Chandigarh	Prof. K. Vijayaraghavan Indian Agriculture Research Institute, New Delhi
Prof. S. Janakrajan (Rtd) Madras Institute of Development Studies Chennai.	Dr. Nilima Shrivastava, IGONU, New Delhi
Prof. Kumar B. Das Utkal University, Bhubaneswar	Prof. B. K. Pattanaik, IGNOU, New Delhi
Prof. Nadeem Mohsin (Rtd) A.N.Sinha Institute of Social Sciences, Patna	Dr. Nehal A. Farooquee, IGNOU, New Delhi
	Dr. P. V. K. Sasidhar, IGNOU, New Delhi

PROGRAMME DESIGN COMMITTEE (Revised)

Late Prof. T S Papola(Rtd) Institute of Studies in Industrial Development New Delhi	Dr. S. Rubina Naqvi Hindu College, University of Delhi, Delhi
Prof. S. Janakrajan (Rtd) Madras Institute of Development Studies Chennai.	Prof. Nadeem Mohsin (Rtd) A.N.Sinha Institute of Social Sciences, Patna
Prof. S. K. Bhati Jamia Millia Islamia University, New Delhi	Prof. Rajesh, Delhi University, New Delhi
Prof. Preet Rustagi Institute of Human Development, New Delhi	Prof. B. K. Pattanaik, IGNOU, New Delhi
Prof. Gopal Iyer (Rtd) Punjab University, Chandigarh	Prof. Nehal A. Farooquee, IGNOU, New Delhi
Dr. S Srinivasa Rao Jawaharlal Nehru University, New Delhi	Prof. P. V. K. Sasidhar, IGNOU, New Delhi
	Dr. Pradeep Kumar, IGNOU, New Delhi
	Dr. Nisha Varghese, IGNOU, New Delhi
	Dr. Grace Don Nemching, IGNOU, New Delhi

COURSE PREPARATION TEAM

Units Writer:

Prof. P.V.K. Sasidhar
IGNOU, New Delhi (Units 1,2 & 3)

Editing and Proof Reading

Prof. S.K. Bhati (Content Editor)
Mr. Praveer Shukla (Language Editor)
Prof. P.V.K. Sasidhar, IGNOU, New Delhi
Prof. B. K. Pattanaik, IGNOU, New Delhi
Prof. Nehal A. Farooquee, IGNOU, New Delhi

Course Coordinator: Prof. P.V.K.Sasidhar, E-mail : pvksasidhar@ignou.ac.in

Programme Coordinators : Prof. P.V.K. Sasidhar, Prof. B.K. Pattanaik, Prof. Nehal A. Farooquee

PRODUCTION TEAM

Mr. S. Burman Dy. Registrar (Publication) MPDD, IGNOU, New Delhi	Mr. K.N. Mohanan Asst. Registrar (Publication) MPDD, IGNOU, New Delhi	Mr. Babu Lal Rewadia Section Officer (Publication) MPDD, IGNOU, New Delhi
--	---	---

February, 2019

© Indira Gandhi National Open University, 2018

ISBN : 978-93-88498-73-9

All rights reserved. No part of this work may be reproduced in any form, by mimeograph or any other means, without permission in writing from the Indira Gandhi National Open University.

Further information on the Indira Gandhi National Open University courses may be obtained from the University's office at Maidan Garhi, New Delhi.

Printed and published on behalf of the Indira Gandhi National Open University, New Delhi by the Registrar, MPDD, IGNOU, New Delhi.

Laser Typeset by Tessa Media & Computers, C-206, A.F.E.-II, Okhla, New Delhi.

Printed at : Raj Printers, A-9, Sector B-2, Tronica City, Loni (Gzb.)

BLOCK 2 EXTENSION TEACHING METHODS AND AUDIO VISUAL AIDS

Block 2 on ‘**Extension Teaching Methods and Audio-Visual Aids**’ with four units discuss the interrelationship between the concepts of extension teaching - learning process, teaching methods and audio-visual aids.

Unit 1 on ‘**Teaching - Learning Process**’ focuses on meaning of teaching and learning in the context of extension and development. It describes the concepts of learning experience, learning situation and learning principles. Later it discusses the role of teaching-learning process in development.

Unit 2 on ‘**Extension Teaching Methods**’ discusses the meaning, functions, and classification of extension teaching methods. It also describes the considerations in the Selection of Extension teaching methods.

Unit 3 on “**Audio Visual Aids**’ discusses meaning, functions, and classification of audio visual aids and describes factors influencing the selection of audio visual aids.



UNIT 1 TEACHING-LEARNING PROCESS

Structure

- 1.1 Introduction
- 1.2 Teaching in Extension
- 1.3 Learning in Extension
- 1.4 The Learning Experience
- 1.5 Learning Situation
- 1.6 The Principles of Learning
- 1.7 The Role of Teaching - Learning Process in Development
- 1.8 Let Us Sum Up
- 1.9 Keywords
- 1.10 References and Selected Readings
- 1.11 Check Your Progress - Possible Answers

1.1 INTRODUCTION

Dear learner, in the previous block, we discussed the meaning, components, philosophy, objectives, functions, scope, and principles of extension education. By studying these concepts, we understood that extension education is the process of teaching people that facilitate overall development. Since teaching and learning are always the keys to education, you must understand the basics of the teaching-learning process and be able to apply them in your development work.

After studying this unit you should be able to:

- Discuss the meaning, concepts, and steps in extension teaching.
- Describe the concepts of learning, learning experience, learning situations, and principles of learning.
- Summarize the importance of the teaching-learning process with implications related to extension and development work.

1.2 TEACHING IN EXTENSION

The development we aim for is based on what we know, what we think, what we actually did, and, what we can do with our physical, technological, and human resources. To make development progress, we must not stop at the present conditions of living and we must take the necessary actions to improve them. In this process, we must identify and perpetuate only the useful and successful developmental initiatives from the past, exercise concern only for the promising developmental ideas in the present, and focus on all of these practices on achieving a better and sustainable development for the future. We gain our ability to substitute the ‘good and new’ developmental ideas for the ‘old and outdated’ through learning.

Learning is most effective when done under the influence of skilfully organized teaching. The result of teaching and learning, if formal, is called education for development, and, if informal, they are referred to as extension education for development.

What is Extension Teaching?

Various psychologists defined teaching in different ways:

- Teaching is an intimate contact between a more mature personality, and a less mature one, which is designed to further the education of the latter (H.C. Morrison).
- Teaching is an interactive process primarily involving classroom talk, which takes place between teacher and pupil, and occurs during certain definable activities (Edmund Amidon) .
- Teaching is a task of a teacher, which is performed for the development of a child (T.F. Greens).

Teaching in the context of extension and development can be thought of as providing purposeful direction, and, the management of the learning process. Note that extension teaching is not giving knowledge or skills to people or communities; extension teaching is the process of providing opportunities for people or communities to produce relatively permanent change through their engagement in learning experiences that are provided by extension and development workers.

1.2.1 Steps in Extension Teaching

The following steps are involved in the extension teaching process (Fig.1.1)

- Attention
- Interest
- Desire
- Conviction
- Action
- Satisfaction

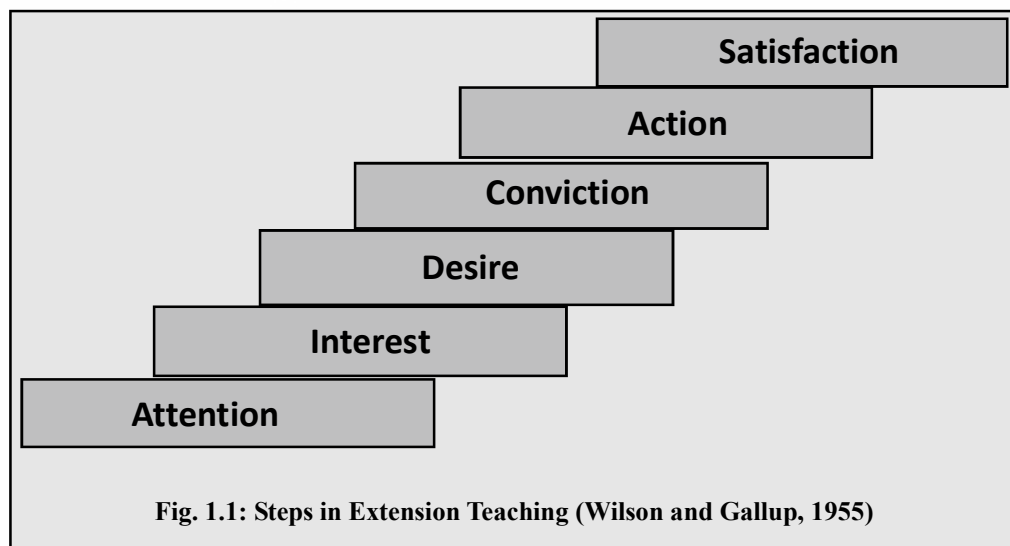


Fig. 1.1: Steps in Extension Teaching (Wilson and Gallup, 1955)

Attention : Your first task as an extension and development professional is to attract the attention of people to new and better ideas for development. People are to be made aware until their attention is focused on the desirable development change. Therefore, attention is the starting point to arousal of the interest. Research findings suggest that the attention of people is attracted by various senses in the following proportions (Reddy, 1998):

- Seeing - 87.0%
- Hearing - 7.0%
- Smell - 3.5 %
- Touch - 1.5 %
- Taste - 1.0 %.

The famous extension saying is, '*seeing is believing*'. Thus, seeing and hearing are the major senses involved to attract attention and increase learning.

Interest: Once attention is captured, extension and development professionals can bring the audience's attention to developmental needs and arouse their interest in further consideration of ideas. Extension and development professionals should make them understand how development contributes to the overall wellbeing of the total community.

Desire: It concerns about the continuation of the audience's interest in the developmental ideas or better practices, until that interest becomes a desire, or, a motivating force.

Conviction: In this step, people know what action is necessary and just how to take that action. The extension worker also makes sure that people visualize the action in terms of their own situation and acquire confidence in their own ability to participate in the people-centred developmental initiatives.

Action: Unless this conviction is converted into action, the efforts of extension for development will go unrewarded. It is the job of extension and development agents to make it easy for the people to act. For example, if the adoption of a new high yielding wheat variety is the action needed by farmers, that variety should be available within the reach of farming communities, along with other recommended package of practices. If the action does not quickly follow desire and conviction, the new idea may fade away. Therefore, this phase should never be ignored.

Satisfaction: Satisfaction is the end product of extension teaching process. Follow up by extension and development workers helps people to learn and evaluate the development progress. The saying, '*a satisfied customer is the best advertisement*', also applies to development work. Satisfaction helps the people to continue development work with increased attention, interest, desire, conviction, and action.

Note that the six steps in teaching discussed above often blend with each other and lose their clear cut identity. As an extension and development worker, you need to arrange the learning situations in all the six teaching steps with the help of suitable extension teaching methods and audiovisual aids. The different teaching methods and audio-visual aids are not equally suited for every step in teaching. Every method and aid under certain circumstances makes a contribution to each

step. It depends on the extension and development worker how (s)he handles the situation.

Please refer to the other units of this block for details on extension teaching methods and audio-visual aids.

Activity 1: Ask some of your colleagues what they mean by extension teaching? Compare their views with those given in this unit, and identify the common features.

.....

.....

.....

.....

Check Your Progress 1

- Note:** a) Use the spaces given below for your answers.
- b) Check your answers with those given at the end of the unit.
- 1) What is the relationship between teaching, learning, and development?

.....

.....

.....

.....

.....
- 2) What do you mean by teaching, in the context of extension and development?

.....

.....

.....

.....

.....

.....
- 3) Write the six steps in extension teaching.

.....

.....

.....

.....

.....

.....

1.3 LEARNING IN EXTENSION

In the previous section, we discussed the concept of teaching in extension. The concept of learning is closely associated with teaching. To learn means to gain or acquire knowledge through experience. Learning refers to the change in a subject's behaviour, or, behaviour potential in a given situation brought about by the subject's repeated experiences in that situation, provided that the behaviour change cannot be explained on the basis of the subject's native response tendencies, maturation, or temporary states.

What is Learning in Extension?

Various psychologists defined learning in different ways.

- Learning is modification of behaviour through experience (Gates).
- Learning involves the acquisition of habits, knowledge, and attitude (Crow and Crow).
- Learning is a process of progressive behaviour adaptation (Skinner).
- Learning is a process by which a person becomes changed in his / her behaviour through self activity (Leagans).

Learning vs. Extension and Development

Learning, in the context of extension and development, can be stated as the relatively permanent change in the behaviour, or, behaviour potential of people as a result of extension teaching efforts. This can be compared with the other primary processes producing relatively permanent change *viz.*, maturation, that results from biological growth and development. Therefore, when we see a relatively permanent change in others, or ourselves, we know that the primary cause was either maturation (biology) or learning (experience). As extension and development workers, there is nothing we can do to alter an individual's biology; however, we can provide an opportunity for individuals to engage in learning experiences that will lead to relatively permanent change.

Activity 2: Ask some of your colleagues what they mean by learning? Compare their views with those given in this unit, and identify the common features.

.....

.....

.....

.....

Check Your Progress 2

Note: a) Use the spaces given below for your answers.

b) Check your answers with those given at the end of the unit.

1) What do you mean by learning in the context of extension and development?

.....

.....

1.4 THE LEARNING EXPERIENCE

In the previous two sections we learnt that through extension teaching and learning, we can alter people's behaviour by providing them opportunities to engage in learning experiences that will lead to relatively permanent change. Therefore, the crucial point in the process of teaching and learning, regardless of its content, form, or objectives, is to enable learners to have an effective learning experience. This is the criterion by which all teaching and learning must be judged.

What is a Learning Experience?

‘A learning experience is the mental and, or, physical reaction that a learner makes to seeing, or, hearing, or, doing the things to be learned through which s(he) gains meanings and understandings useful in solving new problems’ (Leagans).

An effective learning experience is one that results in a maximum of desirable changes in behaviour on the part of the learner.

“Tell me and I will forget.

Show me and I may remember.

Involve me and I will understand.”

~ Chinese Proverb

You can infer from the above definition and proverb that an effective learning experience involves far more than simply being physically present in a learning situation, or placing oneself in a position to learn. It is what a learner does in the learning situation that is the important aspect of learning. Learning therefore, takes place through the experience which the learner has, i.e., through the reactions s(he) makes to the content which is to be learned. Hence, it should be emphasized again, that it is what the learner does, not what the instructor does, that is important in a learning situation. A learning experience, then, is not the same as merely attending a meeting, or, a class, or, a demonstration.

Different Learning Experiences

The learning experience can be demonstrated, for example, by activities such as reading a book, attending a class, listening to an extension specialist, or observing extension work. Undoubtedly, these activities constitute experiences that offer opportunities for learning, but exposing oneself to them does not ensure that learning will actually result. These actions are usually not enough, by themselves. For example, while listening to an extension specialist explain new research findings to village level workers, two participants may have very different learning experiences, even though they have an equal need for the material and an equal opportunity to learn. Worker A gives undivided attention to the new facts as the specialist presents to understand the relationship of the new facts to each other, to those (s)he already knows about, and to the problems back in his/her village area. S(he) asks questions to clarify points that are not clear. As a consequence of this kind of mental action, this worker understands the new ideas and feels that (s)he can help farmers. S(he) has high praise for both the content and method used by the specialist and wants to find out even more about the subject. In

short, worker A clearly has an effective learning experience. In contrast, worker B participates quite differently and, consequently, has a very different reaction to the specialist's presentation. Worker B allows his/her thoughts to range widely over many subjects, giving the speaker only fleeting, and, often, interrupted attention. Because of this, worker B learns very few of the new facts presented and does not recognize their basic significance. S(he) learns little or nothing (Source : Leagans, 1961) .

1.4.1 How to Make Effective Learning Experiences

From the foregoing discussion, we realized that a major problem in changing a development programme into action is that of deciding on the kinds of learning experiences that are effective and most likely to help the learner attain the objectives specified for the extension teaching. Then how does one provide effective learning experiences? There are several useful research-based guidelines to make learning experiences effective, irrespective of methods employed by extension and development workers. It is important, therefore, that the following guidelines are be considered by extension and development workers like you, to set up learning experiences.

- i) *Learners must have experiences that give them an opportunity to practice the kinds of behaviour implied by the objective :* when extension and development programme objective imply either mental or manual skills, the opportunity must be provided for learners to practice those skills, since practice is the most effective way for effectively developing skills.

Example: The health extension specialist can teach a trainee health assistant how to administer injections to patients, but only through continued practice will the trainee become skilled in this.

- ii) *Learning experiences implied by an objective must be satisfying to the learner when he, or, she carries them out.*

Example: Not only is it important that people be asked to utilize the mass transport system by explaining the benefits, viz., low cost, reduction of traffic and pollution, but the people must find it satisfying in terms of convenience. If they first try public mass transport system and find the experience unsatisfying, the expected learning is not likely to take place, and the practice is not likely to be continued.

- iii) *Outcomes expected from the learning experience should be within the range of both mental and physical abilities of the learner:* Extension teaching must begin where the learner is. There must be time, opportunity, financial resources, and necessary materials available for action by the learner. If the learning experience involves the kind of action which the person is not yet able to make, then it fails in its purpose. The extension teachers need to know much about their learners' economic, social, and physical situation to avoid drawbacks.
- iv) *Many learning experiences can be used to attain the same educational objective:* There could be a number of experiences that could be used to attain a good objective. This is one of the most fortunate aspects of the educational process.

- v) *A single learning experience can contribute to the attainment of more than one objective:* This fact also is fortunate for those who attempt to promote learning.

Example: While collecting livestock census, a livestock extension worker concurrently observes the socio-economic conditions of farmers, availability of feed and fodder, health of the animals, and their interrelationships for livestock development.

- vi) *Learning experiences must be such that the extension worker can provide them effectively:* If an instructor is unable to master his, or, her method, or, technology, or teaching aids, s(he) is professionally incompetent to provide an effective learning experience.

Example: if an extension worker attempts to use the campaign method to disseminate family planning measures and is not successful as a campaign leader, s(he) is not likely to provide an effective learning experience for the learners.

By studying these guidelines and the discussion on learning experience in this section, we can conclude that the process of selecting learning experiences and providing them properly is not a mechanical, but a highly professional and creative process.

Activity 3: Enquire about different learning experiences that your colleagues have had in different learning situations. Compare them with your experiences.

.....

.....

.....

.....

Check Your Progress 3

- Note:** a) Use the spaces given below for your answers.
b) Check your answers with those given at the end of the unit.

- 1) What do you mean by the term, learning experience?

.....

.....

.....

.....

- 2) What are the guidelines for providing effective learning experiences?

.....

.....

.....

.....

In the previous section, we discussed that an effective learning experience can only be gained in a well structured and skilfully executed learning situation. Therefore, the essential role of the development worker is to create learning situations that stimulate and guide learning activity. After the objectives of the learning experiences have been decided, the problem, then, is to arrange a learning situation which will provide the opportunity and stimulation that cause the desired mental and physical action on the part of the learners. Arranging a learning situation is the function of extension and development workers. The task is a highly professional one that calls for deep insight into the extension educational process, and great skills in teaching and the use of teaching methods. Teaching methods must be wisely selected, properly combined, and skilfully executed in order to convey the subject matter to learners in a way that they really learn. Please refer to Unit 2 for a detailed discussion on extension teaching methods.

What is a Learning Situation?

A learning situation is a condition or, an environment in which all the elements necessary for promoting learning are present (Fig. 1.2 and 1.3). These elements are given below.

- i) Learner (community / beneficiaries of development)
- ii) Instructor (extension and development worker)
- iii) Subject matter (development ideas useful to the community)
- iv) Physical facilities (appropriate environment)
- v) Teaching methods and aids (instructional material)

As an instructor, the role of the extension and development worker is to manipulate the other four elements so that the learners have an effective learning experience.

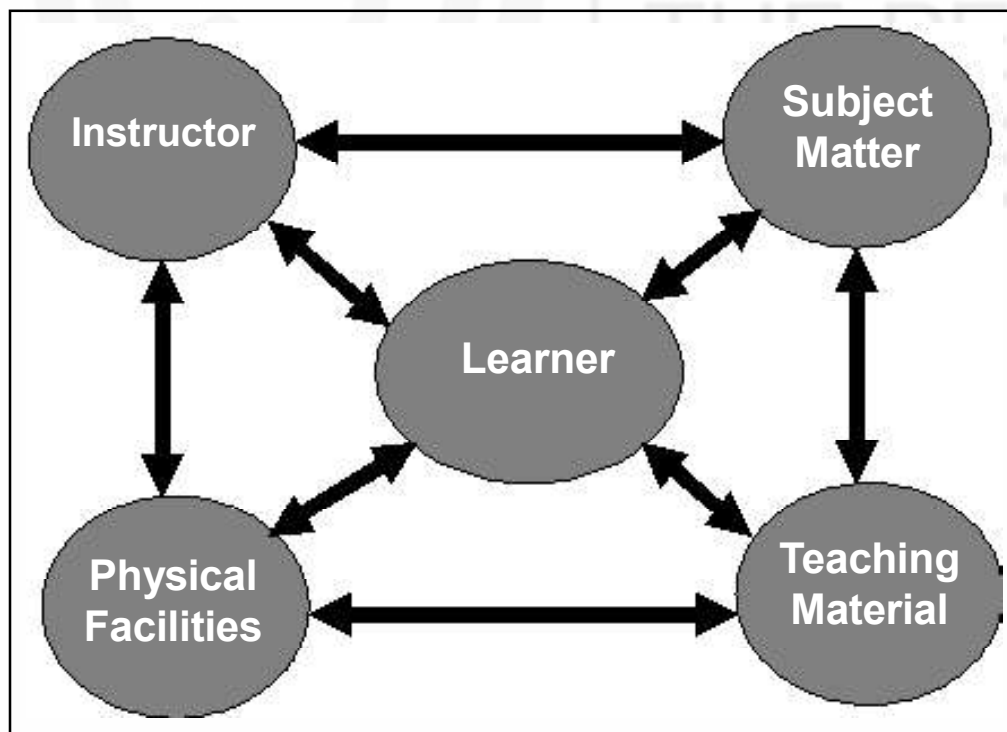


Fig. 1.2: Elements of Learning Situation

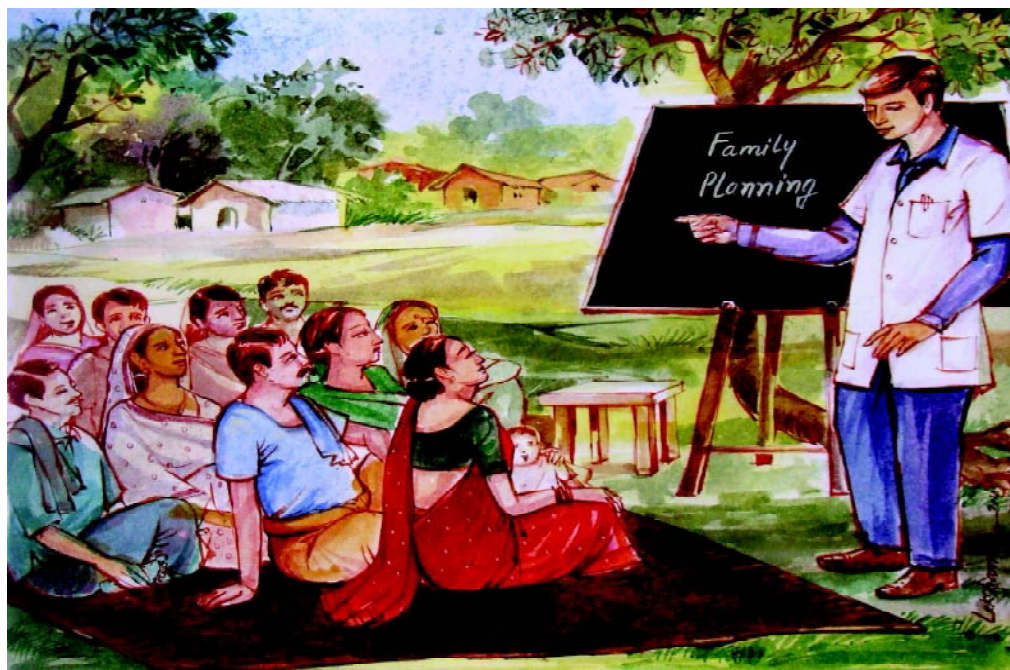


Fig. 1.3: A Learning Situation in Health & Family Welfare Extension

1.5.1 Learner

From Fig.1.2, you can understand that the learner is the central element in the learning situation, since the entire purpose is to make him or her learn. Learning on the part of learner, therefore, becomes the objective, while the other four elements become the means for achieving this end. Learning by learners depends upon their:

- need for information
- interest
- level of aspiration
- nature and level of understanding
- capability to attach desired meanings
- ability to use information.

1.5.2 Instructor

The quality of the learning will depend upon the quality of the conditions created by the instructor. A successful extension and development worker or instructor is one who takes into account the following important considerations:

- selection of learning experiences that suit the abilities and needs of the learners, and the needs of the community at large
- skill in the use of extension methods and aids
- understanding of learners, their needs and abilities
- ability to react appropriately to the feelings, emotions, and attitudes of learners
- ability to encourage the learners' participation in the learning situation
- ability to arrange and manage the learning situation so as to prevent, or minimize distractions within and outside the learning situation.
- good composure, sincerity, and human relations

- clear objectives, and knowledge of the subject matter
- good communication skills and democratic leadership.

Good Extension Worker / Instructor

A good extension worker is the one who has deep faith in people / community, a broad and forward vision of extension educational process, a thorough and current knowledge of useful technology, a willingness to serve people beyond the minimum requirements and the one who is effective in bringing together people, technology and teaching methods with optimum effect in promoting development.

In short, the effective extension worker is the one who can create and manage learning situations in which learners have effective learning experiences.

1.5.3 Subject Matter

The subject matter is the content of any teaching and learning process. The transfer of the subject matter will be easy and effective if it fulfils the following:

- valid and correct, based on empirical facts
- applicable in practical development situations
- organized according to the needs, interests, and the level of understanding of the learner
- timely and appropriate
- important and related to specific teaching objectives.

1.5.4 Teaching Material

Without the help of suitable teaching methods and aids, the subject matter cannot be effectively transferred to learners. Proper selection and skilful handling of teaching aids facilitate the creation of a desirable learning situation. Therefore, the teaching methods and aids should be:

- simple and easy to handle
- suitable to the subject matter
- readily available
- in good working condition
- diversified, flexible, and suited to the environment and needs of the learners.

1.5.5 Physical Facilities

Physical facilities, viz., place, light, ventilation, seating arrangements, etc., must be satisfying both to the instructor and learners. It is the responsibility of the instructor to ensure that suitable physical facilities are available for creating good learning situation.

Activity 4: Enquire about learning situations that have been created by your colleagues, or in which they have participated. Compare them with your experiences.

.....

Activity 5: Study the Fig. 1.3 under this section, identify and write the elements of learning situation.

.....

.....

.....

.....

Check Your Progress 4

Note: a) Use the spaces given below for your answers.
b) Check your answers with those given at the end of the unit.

1) Write what do you mean by the term, learning situation?

.....

.....

.....

.....

.....

2) What are the elements of a learning situation?

.....

.....

.....

.....

.....

3) What are the characteristics of good subject matter in a learning situation?

.....

.....

.....

.....

.....

4) What are examples of subject matter for different extension learning situations?

.....

.....

.....

.....

.....

1.6 THE PRINCIPLES OF LEARNING

As an extension and development worker, you are expected to know the following basic principles of learning which can be applied in extension and development work.

- i) *The principle of association* - Learning is continuous and therefore, you must know the state of the learners' minds and capacity, and begin teaching at their level for better learning. New development ideas must be related to those already known to the community, and, often, you must repeat new ideas from time to time to emphasize their importance.
- ii) *The principle of clarity* - learning should be purposeful, and, as extension and development professionals, we deem that '*seeing is believing*'. So, your clients will realize the importance, or value, of a practice only when they can actually see the results in practice. Teach the community when there is need for the knowledge, and then retention will be greater. Practice must be continuously evaluated and redirected. Objectives must be clear to you, and to the learner.
- iii) *The principle of self activity* - learning engages the maximum number of senses.
- iv) *The principle of rewards* - learning must be challenging and satisfying.
- v) *The principle of practice* - learning must result in functional understanding.
- vi) *The principle of nurturing environment* - learning is affected by the physical and social environment. Congenial environment creates a favourable background for successful learning.
- vii) *The principle of variable learning ability* - learning abilities varies widely among individuals. Some may be slow learners, and some could be fast learners. You should be skilled in different levels of communication, and select your subject matter so as to suit the learning ability of learners.
- viii) *The principle of multiple exposure* - learning is a gradual process and needs multiple exposure for change to occur. You are aware that the ultimate aim of learning is for people to adopt improved practices, or new developmental ideas. No single attempt or method can carry information to all the people. By using a combination of teaching methods, your teaching will have a cumulative effect on the learners. The percentages of learning and adoption will be higher with multiple exposures.
- ix) *The principle of learning capacity* - the assumption on which extension education programmes are based is that adults have the capacity to learn. Learning ability, starting at the age of six, rapidly grows until the age of 20, and then it begins to level off until around 50. The rate of learning declines at the rate of about one percent a year after the age of 35. The main reasons attributed for this decline is physical problems, low external motivation, habits, and the impact of a particular ideology. Among the tools that create suitable physical situations for adult learners are the good audio-visual aids, clarity in teaching with an appropriate speed, step by step presentation of topic, repetition, and, providing rewards and motivation.

- x) *The principle of active process* - to learn new skills, the learner must practice them and relate them to each other, as well as to a particular problem. For this purpose they should change their attitude as well. As an extension and development worker, you can create an atmosphere for learning, but your clients will have to learn by themselves. Hence, learning is an individual or personal choice.
- xi) *The principle of theory and practice* - the 'why' and 'how' of an idea are explained by theory. Often, though the learner understands theory, (s)he cannot use it in practice. Sometimes, (s)he knows how to do it, but does not know the theory behind it. As an extension and development worker, you should balance theory and practice for better learning by the learners.
- xii) *The principle of effective communication* - as an extension and development worker, you should have good communication skills in order to share your knowledge with your clients, and bring about the desired change. You can acquire this skill provided you have real interest in teaching. Better learning can be achieved by integrating suitable audio visual aids in teaching-learning process.

1.7 THE ROLE OF TEACHING - LEARNING PROCESS IN DEVELOPMENT

The teaching - learning process is the heart of extension education, and the fulfilment of the aims and objectives of development depends on it. It is the most powerful instrument in education for bringing about desired changes in the people. Teaching and learning are closely related terms, and, in the teaching - learning process, the teacher (an extension and development worker, like you), the learner, the curriculum (extension education content / subject matter), and other variables (teaching methods, audio-visual aids, physical facilities, etc) are organized in a systematic way to obtain pre-determined goals.

The great task of extension teaching is to help people gain a clear vision of what can and should be done for development, and then, to assist them with the ways and means of attaining people-centred development.

Extension and development professionals need to create opportunities and situations in which people gain the abilities and the stimulation necessary for successfully meeting their needs and interests in such a way that it is possible to attain sustainable development. The great task of the extension teaching - learning process is to help people gain a clear vision of what can and should be done for development, and then, assist them with the ways and means of attaining development. This requires opening the minds of people to great vistas of development knowledge as well as the actions required to attain sustainable development. As the extension teaching-learning process is made more effective, development work becomes more successful in closing the gap between the discoveries of knowledge through research, and using these findings for development. Helping the all-round development of people, society, and country as a whole, is the central challenge for extension and development workers. Physical and economic accomplishments are sterile without the development of people. These are only by products, or, a result of people's development. Therefore,

Teaching-Learning in Organized Forms are Most Educative

In recent years, a significant initiative in many developing and underdeveloped countries is the implementation of organized extension and development programmes. These programmes differ somewhat in name, form, scope and emphasis on different sub-sectors of development, but, in general, their purpose is the same – to help people to help themselves for their development as well as, for the development of country as a whole. Successful development programmes in democratic societies use the process of extension education as the activating force. These programmes have effectively used the principle of organized forms of promoting learning for educating its stakeholders.

Examples: The Green Revolution programme and the Operation Flood programme have used the principle of organized forms of promoting learning in India. Similarly the micro credit movement in Bangladesh, promoted organized micro credit learning experiences for development to millions of poor people.

Check Your Progress 5

Note: a) Use the spaces given below for your answers.

b) Check your answers with those given at the end of the unit.

- 1) Write about the role of the organized teaching-learning process in development.

.....

.....

.....

.....

.....

1.8 LET US SUM UP

Dear learner, in this unit we started by looking at the meaning of teaching in the context of extension and development, and understood that extension teaching is the process of providing opportunities for the people or community to produce relatively permanent change through their engagement in learning experiences. We discussed six steps in extension teaching, and learnt that we need to arrange the learning situations in all the teaching steps with the help of suitable extension teaching methods and audio-visual aids. We examined the concept of learning in the context of extension and development, and understood it as the relatively permanent change in the behaviour, or, behaviour potential of people as a result of extension teaching efforts. We also studied the concepts of learning experience and how to make effective learning experiences, and understood that an effective learning experience is the one that results in a maximum of desirable change in behaviour on the part of the learner. We discussed the concept and elements of the learning situation and the principles of learning. In the end, we examined the

role of the teaching-learning process in development and concluded that the fulfilment of the aims and objectives of extension education depends on the teaching - learning process.

The overall objective of the unit on the teaching - learning process is to enable you to create and manage learning situations that provide effective learning experiences in extension and development work. Indeed, this task calls for a totally professional approach on your part. Therefore, to become a professional extension and development worker, you must constantly work at the tasks of analyzing problems in development: knowing your audience, gaining new development technologies to extend, gaining further understanding of the teaching-learning process, and developing greater skill in selecting, combining, and using the methods of extension education.

1.9 KEYWORDS

Teaching	: Teaching is an intimate contact between a more mature personality and a less mature one, which is designed to further the education of the latter.
Extension Teaching	: The process of providing opportunities for people to produce relatively permanent change through the engagement in learning experiences.
Learning	: A process by which a person becomes changed in his, or her behaviour through self activity.
Learning Experience	: The mental, and, or, physical reaction a learner has to seeing, or hearing, or doing the things to be learned through which she, or he gains meaning and understandings that are useful in solving new problems.
Learning Situation	: The condition, or environment in which all the elements necessary for promoting learning are present.
Teaching - Learning Process	: In the teaching-learning process, the teacher (extension and development worker), the learner (people, or community), the curriculum (extension education content / subject matter), and other variables (teaching methods, audio visual aids, physical facilities, etc.) are organized in a systematic way to attain a pre-determined goal.

1.10 REFERENCES AND SELECTED READINGS

The following resources were used in writing this unit.

Dahama, O.P. and Bhatnagar, O.P. (2007). Education and Communication for Development. Oxford & IBH Publishing Co.Pvt,Ltd., New Delhi.

GFRAS. (2017). The New Extensionist Learning Kit. Thirteen Learning Modules for Extension Professionals. Lausanne, Switzerland, Global Forum for Rural Advisory Services GFRAS.

Leagans, J.P. (1961). Characteristics of Teaching and Learning in Extension Education. In: Extension Education in Community Development, Directorate of Extension, Ministry of Food and Agriculture, Government of India, New Delhi.

Reddy, Y.N. (1998). Audio-Visual Aids in Teaching Training and Extension. Haritha Publishing House, Hyderabad.

Suvedi M., and Kaplowitz M.D. (2016). Process Skills and Competency Tools – What Every Extension Worker Should Know – Core Competency Handbook. Urbana, IL, USAID-MEAS.

Wilson, M.C. and Gallup, G. (1955). Extension Teaching Methods, Federal Extension Service, USDA, Washington D.C.

1.11 CHECK YOUR PROGRESS – POSSIBLE ANSWERS

Check Your Progress 1

- 1) We gain our ability to substitute the ‘good and new’ developmental ideas for the ‘old and outdated’ through learning. Learning is most effective when done under the influence of skilfully organized teaching. The result of teaching and learning, if formal, is called education for development, and, if informal, they are referred to as extension education for development, globally.
- 2) Teaching, in the context of extension and development, is the process of providing opportunities for the people to produce relatively permanent change through their engagement in learning experiences.
- 3) The six steps in the extension teaching learning process are: attention, interest, desire, conviction, action, and satisfaction.

Check Your Progress 2

- 1) Learning in the context of extension and development can be stated as the relatively permanent change in the behaviour, or behaviour potential of people as a result of extension teaching efforts.

Check Your Progress 3

- 1) A learning experience is the mental and, or, physical reaction a learner makes to seeing, or hearing, or doing the things to be learned, which results in a maximum of desirable change in behaviour.
- 2) The guidelines include : learners must have experiences that give them an opportunity to practice the kinds of behaviour implied by the objective; learning experiences implied by an objective must be satisfying to the learner when (s)he carries them out; outcomes expected from the learning experience should be within the range of both mental and physical abilities of the learner; many learning experiences that can be used to attain the same educational objective; a single learning experience can contribute to the attainment of more than one objective; and, learning experiences must be such that the extension worker can provide them effectively.

Check Your Progress 4

- 1) A learning situation is a condition or environment in which all the elements necessary for promoting learning are present.
- 2) The elements of learning situation are: learner, instructor, subject matter, physical facilities, and teaching methods and aids.
- 3) The characteristics of good subject matter in a learning situation are: valid and correct - based on facts; applicable in practical development situations; well organized according to perceived needs, interests, and the level of understanding of the learner; timely and appropriate; and, important and related to a particular specific teaching objective.
- 4) Examples of subject matter for different extension learning situations are:
 - a) livestock extension: advantages of full-hand milking, benefits of artificial insemination over natural service, etc.
 - b) agricultural extension: the system of rice intensification, integrated pest management practices, etc.
 - c) home science extension: how to bathe babies, how to make nutritious food with commonly available food ingredients, etc.
 - d) health extension: how to conduct the pulse polio programme on campaign mode, benefits of family planning, etc.
 - e) primary education extension: benefits of the mid-day meal scheme to reduce school drop outs, advantages of the *Sarva Shiksha Abhiyan* scheme, etc.

Check Your Progress 5

- 1) Successful development programmes in democratic societies use the process of extension education as the activating force. These programmes have effectively used the principle of organized forms of promoting learning for educating its stakeholders. Examples include: the Green Revolution programme for agriculture development and food security; the Operation Flood programme for dairy development; the Pulse Polio programme to eradicate Polio disease, etc.

UNIT 2 EXTENSION TEACHING METHODS

Structure

- 2.1 Introduction
- 2.2 The Meaning and Functions of Extension Teaching Methods
- 2.3 Classification of Extension Teaching Methods
- 2.4 Individual Contact Methods
- 2.5 Group Contact Methods
- 2.6 Mass, or Community Contact Methods
- 2.7 The Selection of Extension Teaching Methods
- 2.8 Considerations in the Selection of Extension Teaching Methods
- 2.9 Let Us Sum Up
- 2.10 Keywords
- 2.11 References and Selected Readings
- 2.12 Check Your Progress - Possible Answers

2.1 INTRODUCTION

In the previous unit, we discussed development extension as an education process aimed at bringing a desirable change in behaviour (opinions, knowledge, skills, and attitudes) of all the stakeholders, so as to involve them actively in the process of development. We also understood from the same unit that the purpose of extension is to help people to help themselves. This help varies according to the field of application in development.

Example : It can be a help in the application of a technology to improve agricultural yield, or, it can be the transfer of information that helps in the prevention of a communicable disease.

This planned, intentional help from development worker which is aimed at providing a learning experience among the intended audience is often termed as teaching. Teaching, in the context of extension and development, is providing information and opportunities for people to bring relatively permanent change through the engagement in learning experiences.

The provision of information / opportunities can happen, broadly, in three ways:

- i) People, or communities coming to the extension and development worker
- ii) The extension and development worker going to the people, or communities
- iii) The extension and development worker sending information through some media.

The extension worker may adopt one, or, a combination of these methods. All these ways of providing information and opportunities to improve knowledge, or skills are called extension teaching methods. A proper understanding of extension teaching methods and their selection for a particular type of extension and development programme is necessary. Keeping this in view, different extension

teaching methods are discussed in this unit for your understanding.

After studying this unit you should be able to

- Discuss the meaning and functions of extension teaching methods
- Classify extension teaching methods with examples
- Describe important individual, group, and mass extension teaching methods
- Select extension teaching methods for various teaching occasions.

2.2 THE MEANING AND FUNCTIONS OF EXTENSION TEACHING METHODS

Extension is an educational process in which teaching has a pivotal role. An extension worker can teach people about new varieties of rice, the right method of milking a cow, the implications of export of sugar to a country, climate change and environmental issues, applying the right fertilizers in appropriate quantities, the importance of family planning, etc. The list can go on, depending on the field of development. All this makes us understand that teaching helps in transferring knowledge and skills. Teaching can also make differences in the attitude of a learner. Extension teaching methods are used to improve extension teaching, i.e., to increase the concreteness, clarity, and effectiveness of the ideas and skills to be transferred.

2.2.1 Meaning

Extension-teaching methods are the tools and techniques used to create situations in which communication can take place between the extension workers and the beneficiaries of development. These methods extend new knowledge and skills to the beneficiaries of the development by drawing their attention towards them, arousing their interest, and helping them to have a successful new learning experience and practice.

Useful Concepts

Dear learner,

Some useful concepts discussed in other units of this course that are related to extension teaching methods are briefly given below for recapitulation and reinforcement.

Extension Education: an applied science consisting of content derived from research, accumulated field experiences, and relevant principles drawn from the behavioural sciences, and synthesized with useful technology into a body of philosophy, principles, content, and methods focused on the problems of out of school education for adults and youth.

Development Extension: aimed at bringing about a desirable change in behaviour (opinions, knowledge, skills, and attitudes) of all the stakeholders of different sub sectors of development, so as to involve them actively in the process of development.

Teaching: an intimate contact between a more mature personality and a less mature one, which is designed to further the education of the later.

Teaching in Extension: the process of providing opportunities for the people or communities to produce relatively permanent change through their engagement in learning experiences provided by the extension and development workers.

Learning: Is the modification of behaviour through experience.

Learning in Extension: is the relatively permanent change in the behaviour, or behaviour potential of people as a result of extension teaching efforts.

Learning Situation: a condition, or environment in which all the elements necessary for promoting learning are present.

Elements of Learning Situation: learner (community / beneficiaries of development); instructor (extension and development worker); subject matter (development ideas); physical facilities (appropriate environment); and teaching methods and aids.

Learning Experience: the mental, and, or physical reaction a learner makes to seeing, or hearing, or doing the things to be learned.

Teaching Methods: the tools and techniques used to create situations in which communication can take place between the extension workers and people.

Audio Visual Aids: the instructional devices which are used to communicate message more effectively through sound and visuals.

2.2.2 The Functions of Extension Teaching Methods

The major functions of extension teaching methods are

- to provide communication so that learner may see, hear, and do the things to be learnt
- to provide stimulation that causes desired mental and physical action on the part of the learner
- To take the learner through one, or more steps of the teaching-learning process, viz., attention, interest, desire, conviction, action, and satisfaction.

Activity 1: Ask some of your colleagues what they mean by the extension teaching methods? Compare their views with those given in this unit and write features that common.

.....

.....

.....

.....

.....

.....

.....

.....

Check Your Progress 1

Note: a) Use the spaces given below for your answers.

b) Check your answers with those given at the end of the unit.

1) What do you mean by extension teaching methods?

.....

.....

.....

.....

.....

2) Write the functions of extension teaching methods.

.....

.....

.....

.....

.....

2.3 CLASSIFICATION OF EXTENSION TEACHING METHODS

The extension teaching methods can be classified under the following two heads.

- According to Use
- According to Form

2.3.1 Extension Teaching Methods According to Use

One way of classifying the extension methods is according to their use and the nature of the contact. In other words, whether they are used for contacting people individually, in groups, or, in masses. Based on this, they are divided into

- a) individual contact methods
- b) group contact methods
- c) mass contact methods.

Let us look at the following three situations.

- i) Example of the individual contact method: a farmer comes to the extension worker and says that some parts of his paddy field looks scorched. The extension worker usually asks a few questions, the answers to which will help him, or her in arriving at the solution, which could be caused by an insect, the Brown Plant Hopper. A solution to the problem will then be offered - the farmer needs to apply appropriate insecticide for saving the crop.
- ii) Example of the group contact method: the extension worker finds many people coming to him, or her with a similar problem. Then, he, or she realises that answering each individual will be time consuming. The worker may

think of calling groups of people who face this problem and explaining to them the ways in which this problem can be solved.

- iii) Example of the mass contact method: there is an outbreak of swine flu affecting people in different regions of the country. The best way to reach large numbers of people and to clear their concerns about this infection would be to pass on information through internet, television, newspapers, or the radio.

All of the above mentioned ways of reaching people are examples of extension methods. The tasks in these three situations can be accomplished through the skilful application of sound principles of teaching and learning, the use of extension teaching methods, audio visual aids, and adult learning principles which are discussed in the previous, present, and subsequent units in this block.

Important extension teaching methods under the individual, group, and mass contact methods are listed in Table 2.1.

Table 2.1: Classification of extension teaching methods according to use

Individual contact	Group contact	Mass contact
• Farm and home visits • Office visits • Telephone calls • Personal letters	• Method demonstration • Result demonstration • Leader training meetings • Conferences • Discussion meetings • Workshops • Field trips	• Bulletins • Leaflets • Circular letters • Radio • Television • Exhibitions • Posters

2.3.2 Extension Teaching Methods According to Form

Extension teaching methods are also classified according to their form, as written, spoken, and, objective or visual methods. Important methods under each of these categories are given in Table 2.2.

Table 2.2: Classification of extension-teaching methods according to form

Written	Spoken	Objective or Visual
• Bulletins • Leaflets • Folders • News articles • Personal letters • Circular letters	• Meetings • Farm and home visits • Official calls • Telephone calls • Radio	• Result demonstration • Posters • Motion picture or movies • Charts • Television • Slides • Models • Exhibits

Activity 2: Visit your nearest development department, and identify and write the teaching methods they are using in extension work.

.....

.....

.....

.....

Check Your Progress 4

Note: a) Use the spaces given below for your answers.

b) Check your answers with those given at the end of the unit.

1) Write the three types of extension teaching methods according to

i) Use :

ii) Form :

2) Write examples for

i) Individual contact methods :

ii) Group contact methods :

iii) Mass contact methods :

iv) Written methods :

v) Spoken methods :

vi) Objective or visual methods:

2.4 INDIVIDUAL CONTACT METHODS

Extension methods under this category provide opportunities for face-to-face or person-to-person contact between people or the community and the extension workers. These methods are very effective in teaching new skills and creating goodwill between people and the extension workers.

Advantages

- i) Helps the extension worker in building rapport with people.
- ii) Facilitates firsthand knowledge of developmental problems.
- iii) Helps in selecting administrators and local leaders.
- iv) Helps in changing the attitude of the people.
- v) Helps in teaching complex practices.
- vi) Facilitates transfer of technology effectively.

Limitations

- i) Time consuming and relatively expensive.
- ii) Have low coverage of people due to time constraints.
- iii) Extension worker may develop favouritism or bias towards some individual beneficiaries of development.

2.4.1 Farm and Home Visit

What is it?

This is direct face-to-face contact by the extension worker with the people, or members of their family at their home, farm, or work place for specific extension work.

Objectives

- To get acquainted with and gain the confidence of people.
- To obtain, or to give first hand information on matters relating to developmental initiatives.
- To advise and assist in solving specific problems.
- To teach skills.
- To arouse interest and motivate the people, for people-centred development.

Planning and Preparation

- The visit should be made with a definite purpose.
- Decide on the people and the objective of visit – whom to meet and for what?
- Get adequate information about the topic – take good extension material and the complete benefits of family planning.
- Punctuality should always be borne in mind.
- A schedule of visits should be worked out to save time.
- Remote and disadvantaged people should always be kept in view.
- This method should be used to reinforce other methods, or when other methods cannot be used.

Implementation

- Visit on the scheduled date and time, or, according to convenience of the people and when they are likely to listen.
- Create interest among the people and allow the individual to talk first.
- Talk in terms of their interest.
- Use natural and easy language; speak slowly, clearly and cheerfully.
- Be accurate and sincere in teaching, as well as learning.
- Avoid arguments.
- Let the people take credit for good developmental ideas.

Follow-up

- Keep records of your visits, their purpose, the accomplishments and commitments.
- Send information, material, or relevant literature, or assist in getting further help.

For what jobs?

This method could be used:

- To teach skills – individualised teaching.
- To create the desire to adopt new developmental ideas and practices.
- To help people analyse their problems, and to prepare them for intelligent action.

Examples: Some of the jobs that could be worked out by this method are: family planning; solar energy utilization; water harvesting at the household level; child care; vocational education activities; integrated pest management; soil testing; green fodder cultivation, etc.



Fig. 2.1(a): Farm and Home Visit by Health & Family Welfare Extension Worker for data on ICDS.



Fig. 2.1(b): Farm and Home Visit by Livestock Extension Worker for data on Livestock Farming.

- Firsthand knowledge of developmental problems is gained.
- Goodwill and confidence are acquired when development interventions work out.
- Local influential leaders are identified for developmental activities.
- People who have not been reached by other methods can be contacted.
- Percentage of adoption (takes) to advices (exposures) rendered is high.

Limitations

- Only limited number of contacts may be made.
- Concentrated visits to responsive and progressive people might prejudice other people against the extension workers.
- Time consuming and costly.

2.4.2 Office Visit

This is a visit made by people at the office, or workplace of the extension worker to obtaining information, assistance, or to develop an acquaintance.

Objectives

- To get quick solutions to developmental problems.
- To enable people to discuss developmental issues with the extension worker and other related officials.

Example: Construction of a community health centre.

- To enable people to bring live or model specimens for examination and to be advised.

Example: Dead poultry birds for post mortem examination, or faecal sample for parasite examination, or, soil sample for nutrient examination.

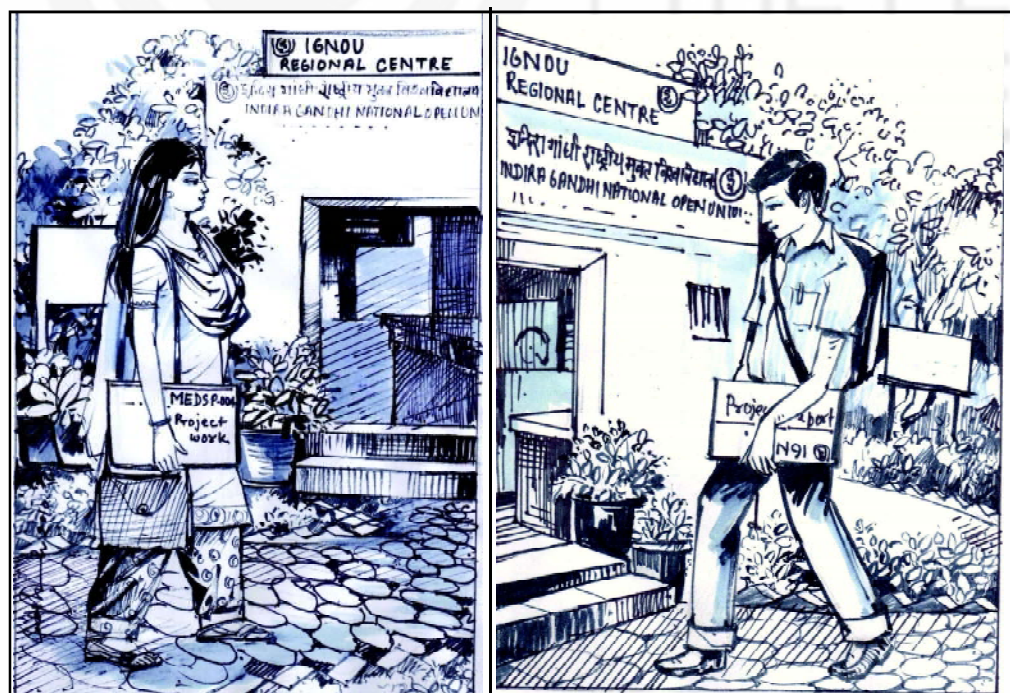


Fig. 2.2: IGNOU Students Visiting the Office of Regional Director for Project Work

Planning and Preparation

- Keep the office neat and clean with displays of information on extension activities and development programmes.
- Remain present in the office on fixed days and hours, which have been communicated to all concerned in advance.
- Make arrangements for providing information to visitors in your absence.

Implementation

- Allow the visitor to talk first and make the point.
- Discuss the problems and suggest solutions.

Example: Examine the dead birds, or faecal material, or soil sample, and suggest solution. If necessary, take the visitor to a specialist.

Follow-up

- Record the call and material in the register, and give the entry details to the visitor for future reference.
- If required, refer the problem to higher officials or research organizations for solutions.

Advantages

- A number of contacts can be made.
- Time saving and economical.
- Enhances the credibility of the extension worker.
- Indicates the confidence reposed in the extension worker by the people.

Limitations

- Being away from the situation, it may be difficult for the extension worker to understand the problem in its proper perspective.
- The extension worker may not be available all the time at the office or workplace.

2.4.3 Personal Letter

This letter is written by the extension worker to a particular individual in connection with development work. It is a substitute for personal contact.

Objectives

- To answer enquiries relating to common developmental problems.

Example: Communicating a polio vaccination schedule to school principals.

- To send information, or to seek cooperation on important extension activities.

Example: To invite experts for a focus group discussion on the community radio programme.

Planning and Preparation

- Send the letters in time, or, reply promptly if a letter has already been received.
- Content should be clear, complete and applicable to the individual's own situation.

Activity 3: Make an office visit to your nearest development department and enquire about extension activities. Write your observations.

.....

.....

.....

.....

Check Your Progress 3

Note: a) Use the spaces given below for your answers.

b) Check your answers with those given at the end of the unit.

1) Write any three advantages of individual contact methods.

.....

.....

.....

.....

.....

2.5 GROUP CONTACT METHODS

In this method, the extension agent communicates with the people in groups, which usually consist of 20 to 25 persons. Group contact methods also involve a face-to-face contact with the individual members of the group, and provide an opportunity for deciding a future course of action.

Advantages

- i) Enables face to face contact with a number of individuals at a time.
- ii) Can reach a select target group of people for specific development work.
- iii) Facilitates sharing of knowledge and experience and, thereby strengthens learning by the group.
- iv) Satisfies the basic urge of people for social contact.
- v) Motivates individuals to accept a change due to group influence.
- vi) Less expensive than individual methods because there is more coverage.

Limitations

- i) Diversity in the interests of the group members may create a difficult learning situation.
- ii) Holding the meeting may be regarded as an objective in itself.
- iii) Hidden interests, group dynamics and factions may hinder free interaction and decision making.

A group is an aggregate of a small number of people in reciprocal communication and integration around common development interest.
Example: Women's Self Help Groups, formed for livelihood security through income generating activities.

2.5.1 Method Demonstration

Method demonstration is a relatively short-time demonstration given by extension worker before a group of people to show how to carry out entirely new practice, or, an old practice in a better way. This method is not concerned with proving the worth of a practice, but with how to do something. It is essentially skill training, where the emphasis is on effectively carrying out a job, which will improve the result. It is not an experiment or a trial, but a teaching effort.

Example: Teaching how to bathe baby in a health and family welfare extension, preparing a milk replacer, taking a dung sample for examination, etc.

Objectives

- To teach skills and stimulate individuals to action.
- To get rid of inefficient, or defective practices.

Planning and Preparation

- Decide on the topic, target audience, and venue for demonstration.
- Select a topic which is important and needed by the group, for immediate use.

Example:

Topic: Proper bathing of baby.

Target audience: House wives with small kids.

Venue: Any house in a village convenient to all.



Fig. 2.3: Health and Family Welfare Extension Worker Teaching Village Housewives How to Bathe Baby Properly.

- Be at the venue early to check equipment and materials.
- Make physical arrangements, so that all participants can have a good look at the demonstration and take part in discussions.
- Start the demonstration on the scheduled date and time, and conduct it step by step, explaining clearly why and how it is being done.
- Encourage questions at each stage.
- Give an opportunity to individuals to practice the skill.
- Distribute literature related to the demonstration.

Follow-up

- Get the names of the participants and list those who are considering the adoption of the practice. This helps in the follow up, and increases the number of persons desiring the change.
- Assist the participants in getting the required materials and equipments.

For what jobs

Smokeless ovens in villages, soap making, sewing and knitting, fumigation of poultry sheds, seed preservation, seed treatment, etc.

Advantages

- Effective in teaching skills.
- Stimulates action.
- Builds confidence.
- Serves publicity purpose.
- Increases the acquaintance of extension workers with the local people.
- Introduces change of practice at low cost.

Limitations

- Not suitable to all subject matter.
- Needs a great deal of preparation, equipment, and skill on the part of the extension workers.
- Causes a set back to whole programme, if improperly implemented.

2.5.2 Result Demonstration

Result demonstration is a way of showing people the value of a new practice by showing its distinctly superior result. The result demonstration may be for a single recommended practice, or for a series of practices that come in sequence with respect to a problem. It is an educational test to prove the advantages of recommended developmental practices, and to demonstrate their applicability to the local conditions. It is conducted by a member of the group under the direct supervision of the extension worker. It is designed to teach others, in addition to the person who conducts the demonstration. It helps the individuals to learn an improved practice by seeing and doing. It is a very effective method for technology transfer in a community.

Objectives

- To show the advantages and applicability of a newly recommended practice in an individual's own situation.
- To motivate groups of individuals in a community to adopt a new practice by showing its result.

Planning and Preparation

- Discuss issues with the people and uncover their interests.
- Analyze individual situations and select relevant development ideas.
- Select a few responsible and cooperative individuals who have adequate resources and facilities, with acceptance in the local community for conducting the demonstration. This, however, does not mean that wealthy and influential people are to be selected.

Implementation

- Explain the objectives and steps to the demonstrating individuals.
- Organize inputs and equipment necessary for conducting the demonstrations.
- Conduct the demonstration in the presence of the community.

Follow-up

- Encourage demonstrating individuals to share their experiences with others in meetings and training programmes.
- Summarise, record, and establish proof of the practice.
- Use the result of the demonstrations in future extension work, and, pass the results on to the mass media for further dissemination.
- Enlist other people into the new practice.

For what jobs

Improved kitchen, compost making, better livestock feeding practices, improved fertilizer application methods, etc.

Advantages

- Helps in introducing a beneficial new practice.
- Convinces hesitant people and workers through the principle '*seeing is believing*'.
- Provides factual data.
- With the experience, extension workers can recommend the practice with greater conviction.
- Convince people that the extension workers are practical.

Limitations

- Finding a suitable individual who is willing for the demonstration is difficult.
- Need more time, energy, and funds.
- Unsuccessful demonstrations may cause some setbacks to extension work.
- Not suitable for all developmental ideas and practices.

2.5.3 Group Meeting

This is a method of democratically arriving at certain decisions from a group of individuals by taking into consideration all their points of view. Group meetings and discussions aim at collective decision making and at improving individual decision making by using the knowledge and experience of groups of people.

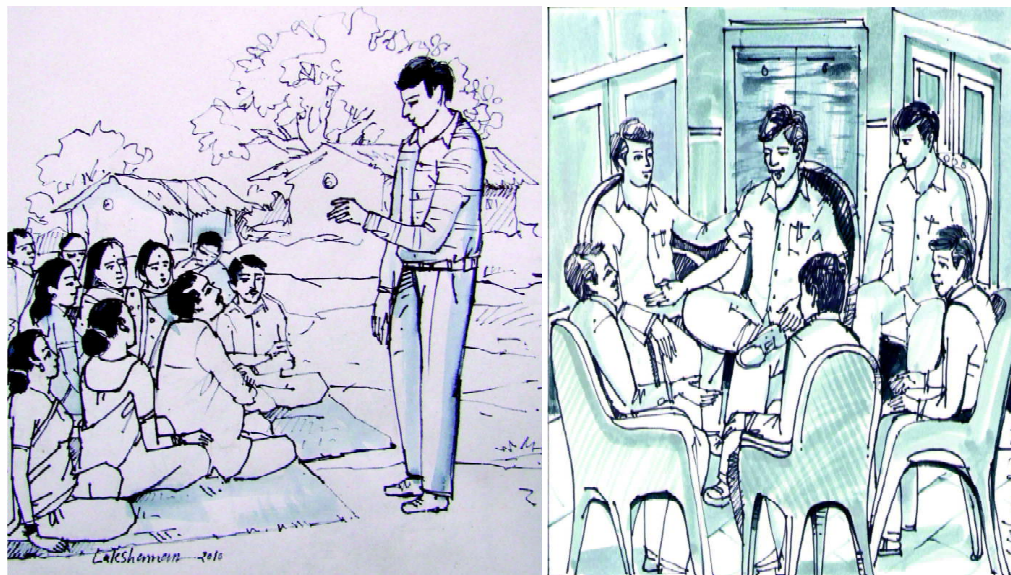


Fig. 2.4: Group Meetings

Objectives

- To prepare a favourable climate for discussion and to help better understand the problem by pooling the knowledge and experience of a number of individuals.
- To facilitate in depth discussion by involving a small number of people.

Planning and Preparation

- Decide on the topic to be discussed and the individuals to be involved.

Example: Discussion on problems of contact farming.

- Collect relevant information.
- Contact researchers, if required.

Implementation

- Start the meeting on the scheduled date and time.
- Introduce the topic to the group and initiate discussion.

Follow-up

- Remind the people of the decisions, encourage and assist them to take action.
- Facilitate in obtaining the required inputs consistent with the decisions taken.

Limitations

- Requires skill and understanding of group dynamics on the part of the extension worker.
- Group factions may hinder successful use of this method.

2.5.4 Small Group Training

This is a technique for imparting specific skills to a group of people who need them by creating appropriate learning situations. It is an effective method for the transfer of technology.

Example: Two days training programme on implementation of NREGA.

Objectives

- To impart the needed skills to a small group of people.
- To motivate individuals to adopt new practices through skill training.

Planning and Preparation

- Identify a technology for which there is a need.
- Decide on the time and duration of the training programme.

Implementation

- Start the training programme on the scheduled date and time.
- Distribute publications and materials for taking notes.

Follow-up

- Maintain contact with the trainees.
- Encourage and assist them to apply the new practice.

Limitations

- Only a small number of people can be trained at a time.
- Follow up requires more staff and time.



Fig. 2.5: Small Group Training

2.5.5 Study Tours, or Exposure Visits

In a study tour, a group of interested people accompanied and guided by one, or more extension agents, moves out of their neighbourhood to study and learn significant improvements in other areas.

Example: Visit to a successful entrepreneur, or to a successful self help group (SHG).

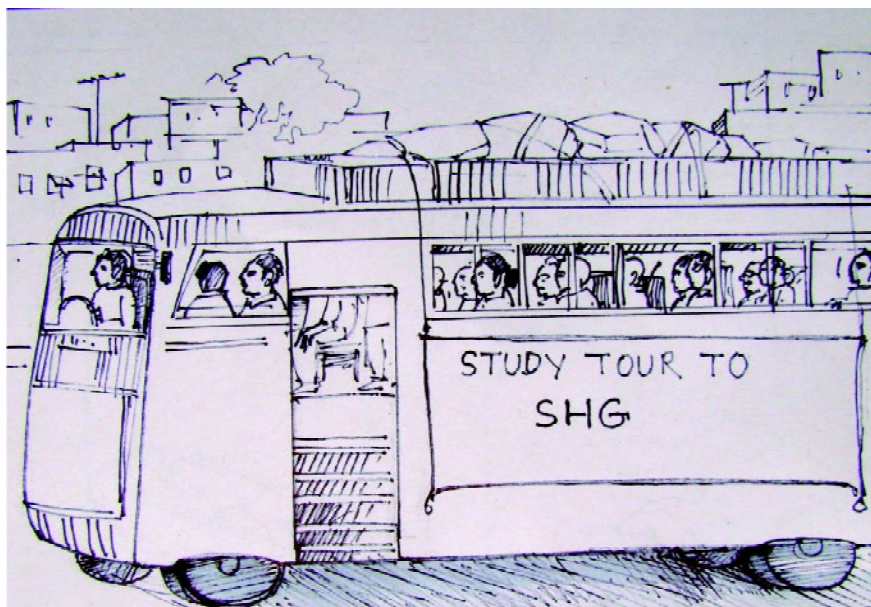


Fig. 2.6: Study Tour

Objectives

- To expose individuals to a new and different situation, and to help in changing their outlook, and extend their mental horizon.
- To make them understand the gap in the adoption of recommended practices.

Planning and Preparation

- Decide on the objective, number, and type of participants, duration, and places of visit.
- Communicate, in advance, get confirmation of the programme, and other logistics.

Implementation

- Keep the interests of the group uppermost in mind.
- Let everyone see, hear, discuss, and, if possible, participate in the activities at the places of visit.

Follow-up

- Keep in contact with the participants.
- Encourage the adoption of practices by arranging necessary inputs.

Limitations

- Due to the limitations of funds and time, study tours cannot be held frequently.
- The possibility of sub-ordinating educational aspect to sight-seeing and recreation.

Check Your Progress 4

Note: a) Use the spaces given below for your answers.

b) Check your answers with those given at the end of the unit.

1) Write any three advantages of group contact methods.

.....

.....

.....

.....

.....

2) Write the differences between method and result demonstrations.

.....

.....

.....

.....

.....

2.6 MASS, OR COMMUNITY CONTACT METHODS

As an extension worker, you need to approach a large number of people for disseminating new information and helping them to use it. This can be done conveniently with mass contact methods. These methods are more useful for making people aware of new practices or technology quickly by communicating with a vast and heterogeneous mass of people, without taking into consideration their individual or group identity. These methods are valid when large and widely dispersed target audience are to be communicated with, in a short time. The size of the audience may be a few hundreds in a mass meeting, a few thousands in campaign, or a few lakhs in newspaper, radio and television.

Advantages

- Suitable for creating general awareness among the people about new practices.
- Helps in transferring knowledge and changing opinions.
- Facilitates quick communication in times of emergency.
- Large numbers of people are communicated with, in a short span of time.

Limitations

- Less intensive methods.
- Little scope for personal contact.
- Generalized recommendations hinder application by individuals.
- Little control over the responses of the audience.
- Difficulty in getting feedback information, and evaluating results.

2.6.1 Publications

Publications are prepared by the extension workers in printed form with development programme information. Publications are of various types such as *leaflet, folder, bulletin, newsletter, journal, and magazine*. Publications may be used singly or in combination with other extension methods.

Objectives

- To reach a large number of people quickly and simultaneously at a low cost.
- To provide accurate, motivating, credible, and distortion-free information.

Planning and Preparation

- Select a topic of economic and practical importance, for which information is needed by a community.
- Estimate the time required to prepare the manuscript, print, and dispatch the publication so that it reaches people in time.

Implementation

- Collect relevant information on the topic from all available sources.
- Contact specialists relating to relevant disciplines.

Follow-up

- Arrange timely dispatch of the publication to the target people.
- Dispatch publications to media persons and others according to a mailing list.

Limitations

- Cannot be widely used in areas of low level of literacy.
- May lose their significance if not carefully prepared and used.

Leaflet: A leaflet is a single sheet of paper used to present information on only one developmental idea in a concise manner and simple language.

The preparation of leaflets

- select a suitable topic based on the felt needs of a community
- present one idea, technique, or practice in one leaflet
- collect all relevant information and select only most essential points
- use short, simple and familiar words, include relevant pictures and illustrations, and refer to local situations wherever possible
- give the source or contact details for further information
- printing on yellow or pink paper attracts attention
- usually, a leaflet is 4" x 8", with 14-16 font size letters.

Folder: A folder is a single piece of paper folded once or twice, and, when opened, the material presented is in sequence.

The preparation of a folder

- the points regarding leaflet preparation holds good for leaflet also

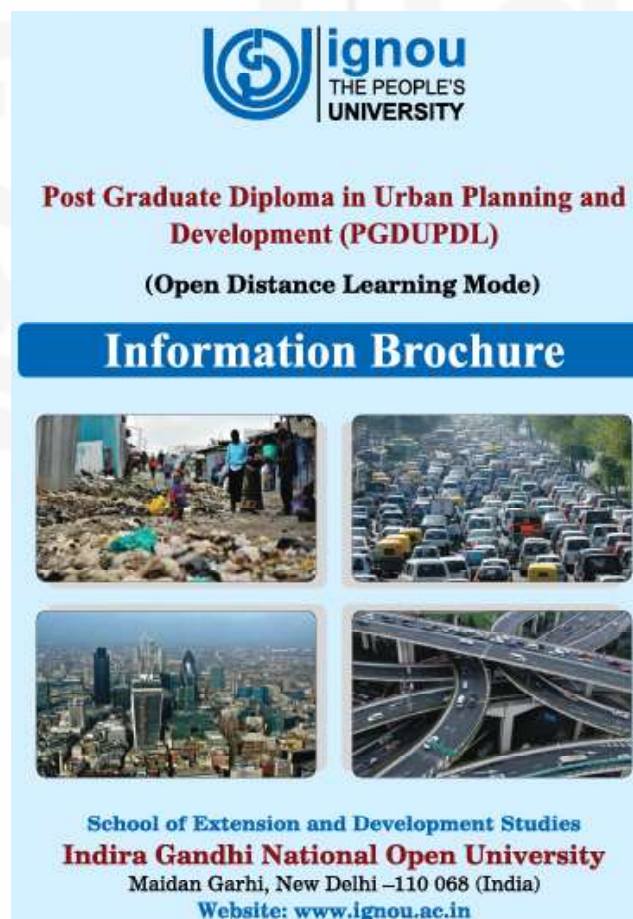
- in addition, consider making your folder attractive by using photographs, line drawings, coloured paper, and inks
- the front page of the folder should contain a title, a single photograph, and the details of your extension organization
- print the folder on heavier paper than the leaflet with 1:1½ size width to length ratio.

Pamphlet: A pamphlet size varies from 2-12 pages. The first cover page should be printed in 2-3 colours with some action pictures. In contrast to the leaflet and folder, full information is presented about the topic in greater length in pamphlet. Compared to leaflets and folders, a pamphlet serves to meet the needs of people at different stages of extension and developmental programmes.

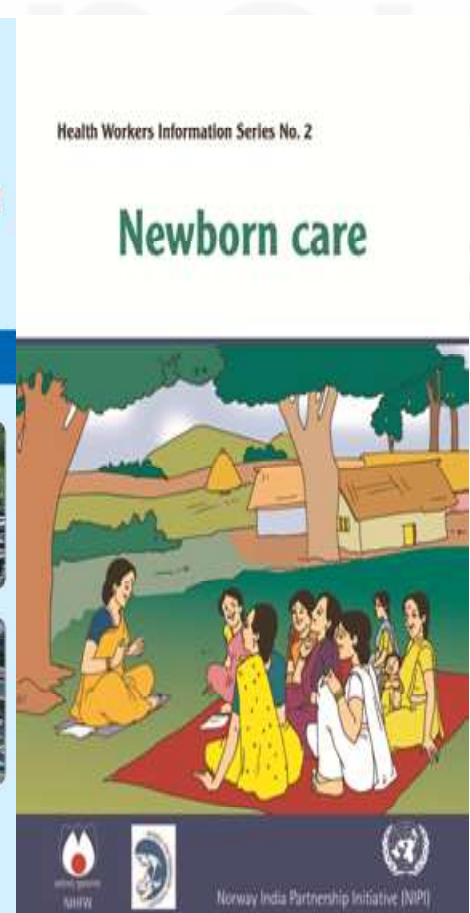
Bulletin: A bulletin contains a large amount of information and could have 12-20 pages. Its primary objective is to give complete information which the intended readers can apply to their own situations.

Booklet: when a large amount of extension material is published, and ranges between 20 and 50 pages, then it is called a booklet.

Circular Letter: a circular letter is written by an extension worker and sent to many people, periodically, or, on special occasions. The objective of the circular letter is to maintain regular contact with extension beneficiaries, or to communicate general information which could be put in the form of a letter.



(a) Folder



(b) Bulletin

2.6.2 Mass Meeting

Mass meetings are held to communicate interesting and useful information to a large number of individuals at a time. The size of the audience for mass meeting may be a few hundreds, and, at times, it may be a few thousand.

Objectives

- To focus the attention of people on some important topic.
- To create general awareness about a development programme or project, and to announce its progress.

Planning and Preparation

- Decide on the topic, occasion, and audience.
- Select a limited number of speakers, including one, or two local leaders.

Implementation

- Select a suitable chairperson.
- Start the meeting in time and cut down formalities to a minimum.

Follow-up

- Stay in contact with the interested audience.
- Sustain wider interest through mass media.

Limitations

- In depth discussion of the topic is not possible.
- Cannot be held frequently.

2.6.3 Campaign

A campaign is an intensive teaching activity that is undertaken at an opportune moment for a brief period, focussing attention in a concerted manner towards a particular problem to stimulate the widest possible interest in the community. The duration of a campaign may be for a single day on a theme like 'tree plantation', for a few days, as in 'voter registration', or, for several months at fixed dates and times, as in the 'pulse polio' campaign.

Objectives

- To create mass awareness about an important problem, or felt need, and to encourage people and organizations to solve it.
- To induce the emotional participation of the community as a whole, and to create a conducive psychological climate for the adoption of a practice, or, technology.

Planning and Preparation

- Consult with the local leaders about important problems or needs of the community.
- List out specialists and local leaders who could be involved in solving it.
- Train the required personnel.
- Select the time and venues suitable to the community, announce the dates well in advance, and build up the enthusiasm of the people.

Implementation

- Carry out the campaign according to a set programme.
- Hold a group meeting with the community and discuss the origin and nature of the problem.
- Suggest a practical and effective solution.

Follow up

- Contact participants and invite their reactions.
- Assess the extent of adoption of the practice.

Advantages

- Maximum number of people can be reached in a short time.
- Quick results at lower costs.
- Successful campaigns create an atmosphere that is conducive to popularising other development methods.
- Builds up community confidence in the extension system.
- Useful for practices which are effective when only the entire community adopts them.

Limitations

- Applicable only for topics and practices of interest to a community.
- Success depends on the cooperation of the community and local leaders.
- Cannot be adopted while advocating complicated technologies.



Fig. 2.8: Tree Plantation Campaign



Fig. 2.9 : Exhibition

2.6.4 Exhibition

An exhibition is a systematic display of models, specimens, charts, photographs, pictures, posters, information, etc., in a sequence around a development theme to create awareness and interest among a community. This method is suitable for reaching all types of people and can be held at the village, block, sub-division,

district, state, national, and international levels. Exhibitions cover three stages of extension teaching steps, viz.,

- i) arousing interest
- ii) creating a desire to learn
- iii) providing an opportunity to take a decision.

Objectives

- To promote visual literacy.
- To influence people to adopt better practices.
- To create interest in a wider range of people.
- To promote understanding and create goodwill towards extension work and workers.

Planning and Preparation

- Decide on the theme and the organizations to be involved.
- Give advance publicity.
- Make it simple and understandable, working upon one idea at a time, or, place.
- Arrange the sequence and continuity of the exhibits.
- Use few rather than many objects, with adequate spacing, and providing eye appeal.
- Label the exhibits legibly and briefly.
- Interpreters should be thoroughly informed and precise in their explanation.

Suggestions

- Use local material as far as possible, since specimens from the locality will have greater significance.
- Take advantage of local festivals and fairs.

Implementation

- Organize the opening of the exhibition by a local leader, or a prominent person.
- Arrange for a smooth flow of visitors.

Follow-up

- Meet some visitors personally and maintain a visitors' book for feedback.
- Distribute relevant extension literature.
- Assess success and effectiveness of the exhibition by analysing attendance, enquiries, and by making note of the suggestions.

For what jobs

An exhibition is broadly suitable for a wide range of topics such as: improved home living, products of village industries, developments in agriculture, animal husbandry, horticulture, industry, family healthcare, etc.

Advantages

- One of the best media to reach illiterates.
- Caters to the needs of mixed groups.
- Fits into festive occasions, and serves recreation purposes, as well.

Limitations

- Requires more funds and preparation.
- Cannot be held frequently.

2.6.5 Newspaper

A newspaper is a bunch of loose printed papers, properly folded, which contains news, views, events, advertisements, etc., and is published at regular intervals, particularly, daily, or, weekly. By establishing a good rapport with editors and reporters, reasonable support for extension work may be obtained by extension workers. Newspapers may support extension work by publishing news of extension activities and achievements, extension recommendations, packages of practices, success stories, news focusing on development problems and interventions. A newspaper is a good medium of communication in times of crises and in urgent situations.

Limitations

- Only literate people can take advantage of this medium.
- Increases in the price of newspapers may restrict their circulation.

2.6.6 Radio

A radio is a system of wireless communication with clear objectives to inform, educate and entertain the masses. The radio is suitable for creating general awareness among the people, helping to change their attitude and reinforce learning. The medium is extremely convenient for communication in times of crises and urgent situations. People with no education, or, very little education, and those who are not in a position to attend extension programmes personally, can take advantage of this medium and build up adequate knowledge. The radio can be used in extension and development work for

- i) announcements – meetings, demonstrations, etc.
- ii) intimation, or information dissemination
- iii) advice – weather, outbreak of diseases, seasonal hints, etc.
- iv) news reviews
- v) interviews, questions and answers, features, documentaries, short talks, etc.

Advantages

- Can reach more people faster than any other means of communication.
- Disseminate timely and emergent information at low cost.
- Can reach illiterates on par with literates.
- Builds enthusiasm and maintains interest.

Limitations

- Frequently loses the educational purpose to entertainment.

- Difficult to check results and impact.
- Influence limited to people who can listen intelligently.

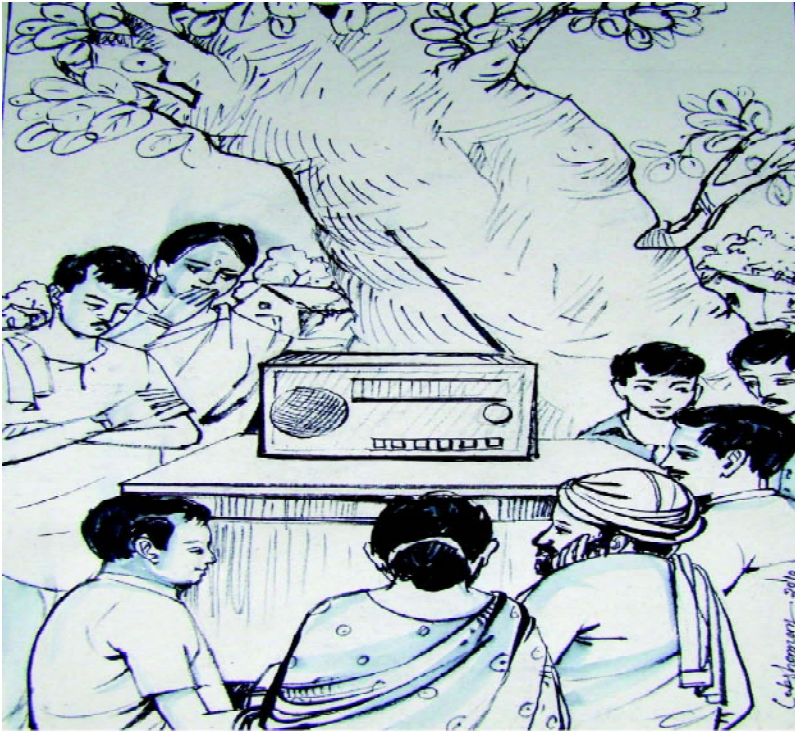


Fig. 2.10: Community Radio Club

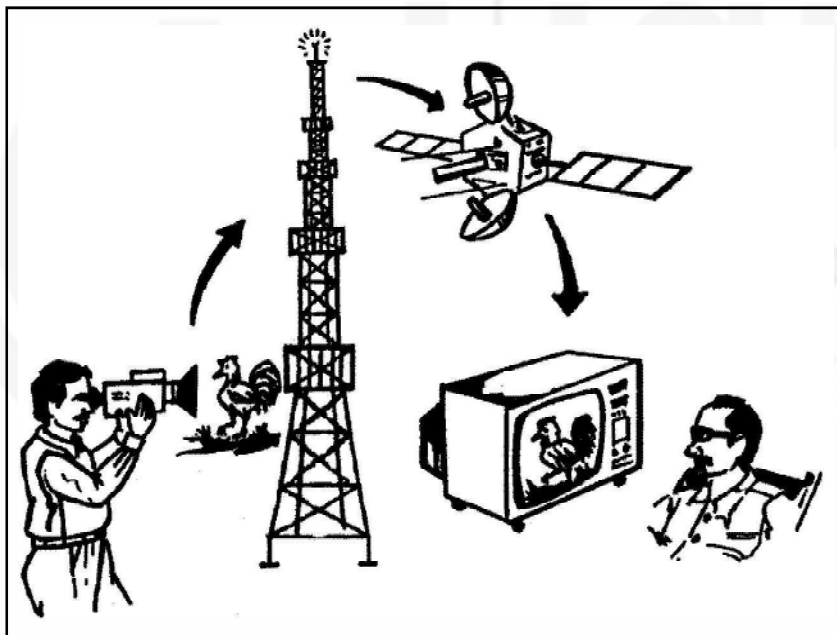


Fig. 2.11: Television (Source: RAGACOVAS, Puducherry)

2.6.7 Television and Video

Among all the mass methods, television and video occupy special status due to their potential to communicate to the two most important senses, i.e., sight and hearing, simultaneously, and to be broadcast to a large audience. Now it is possible to view programmes through an LCD projector, computer, or television monitor. Video cassettes provide motion, colour, sound, and, in many cases, special effects with advanced graphic and animation techniques. High quality, commercially produced educational video cassettes are available on almost every subject.

Guidelines

- i) Note that television and video presentations are not designed to replace the instructor.
- ii) Rehearse to determine the important points that should be stressed.
- iii) Prepare learners by telling them what to watch carefully, what is important, or possibly, what is incorrect.
- iv) Make yourself available to summarize the presentation and answer any questions.

Advantages

- The ability to easily stop, freeze, rewind, and replay is particularly helpful for both, instructors and learners.
- Cost with associated equipment is fairly economical.
- Useful for purposes other than instructional.

Limitations

- Learners are often accustomed to dramatic, action packed films, or videos that are designed as entertainment.
- Instructional television and video, in comparison to entertainment, are normally perceived as less exciting and less stimulating. This, coupled with a distracted viewing style, can diminish the instructional value of the television or video.

Interactive Video

This solves one of the main problems of passive video in that it increases the involvement of the learner in the learning process. Well-designed interactive video, when properly used, is highly effective as an extension method.

Note: Radio, television, and video are basically extension teaching devices. They can also be used as audio and /or visual aids as well, along with other teaching methods, such as campaign and exhibition.

Activity 4: Visit a nearest development department, collect their extension publications, and write your observations.

.....

.....

.....

.....

Check Your Progress 5

- Note:** a) Use the spaces given below for your answers.
- b) Check your answers with those given at the end of the unit.

- 1) Write any three advantages of mass contact methods.

.....

- 2) Write what is meant by campaign with examples?

2.7 THE SELECTION OF EXTENSION TEACHING METHODS

One way of understanding the selection of extension teaching methods is by recollecting the concept of steps in extension teaching. In Unit 1 on the ‘Teaching-Learning Process’, we outlined the six steps in extension teaching: attention, interest, desire, conviction, action, and satisfaction.

If we want people to adopt a new technology, or, a development idea, they have to be taught about this. The first step in such a teaching is catching hold of their attention. People have to be made *attentive* that there is something new. Once they come to know that there is something new, the newness, or, probable usefulness of the information develops an *interest* in them to understand more about it. When they learn more about it and find its relevance in their situation, there is a *desire* to use the information. At this stage, many who have desire are hesitant to practice something unless they are *convinced*. The extension worker has a crucial role to play in all these stages. Once people are convinced, they will *act*. If this action provides the results that they were anticipating they get *satisfied*. This satisfaction, in fact is a motivator for people to attend to further related teachings. Dissatisfaction, at this level, has to be analysed well by the extension worker and the people or community together, to find the reasons for the dissatisfaction.

According to research findings and accumulated experience, certain extension teaching methods contribute effectively to attain desirable action on the part of the beneficiaries of development.

2.7.1 Methods for Getting Attention

To provide learning experiences for people, extension worker must get their attention. This is the fundamental stage for successfully making the ideas enter the minds of people, and requires planned and frequent use of a variety of teaching methods, viz., pictures, demonstrations, news stories, survey results, slogans, posters, radio talks, cartoons, displays, exhibits, etc.

2.7.2 Methods for Developing Interest

The amount and direction of developmental accomplishments of extension teaching are largely determined by the interests of the people. Learning without interest does not take place to any appreciable degree. People who are interested in solving developmental problems acquire more information about them. Interest usually represents the objectives or goals of an individual. Development means comparatively little to people until they are able to connect it to their interests. The factor of interests tends to control the influence of extension education, because only those people who are interested will take part in developmental activities. The methods that are useful in developing people's interest are: meetings, radio talks, publications, tours, result demonstrations, photographs, charts, etc.

Teaching Steps vs. Teaching Methods

Mass methods of extension are applied at the attention stage (and, to some extent, in the interest stage) to create awareness about a practice or a technology.

Example: In the outbreak of Swine Flu, the precautions to be taken are best communicated, in a short period, to large number of people through mass media.

Group methods work out better in later stages, like interest and desire, since the extension worker has direct contact with people, and can answer their doubts and raise their motivation levels. Among the group methods some are suited to specific stages.

Example: A result demonstration can help in the conviction stage and the method demonstration in action stage.

2.7.3 Methods for Developing Confidence

Development and maintenance of confidence should be parallel to all other changes in people's attitudes and behaviour. Confidence is the key to achieving results from extension education, because action taken by people is voluntary. Confidence corresponds to the goodwill of the extension and development worker. Once broken, confidence is difficult to restore, either in oneself, or, in the community as a whole. It is, therefore, necessary for extension and development workers to safeguard the factor of confidence in all the steps of teaching. In ideal extension teaching, confidence should grow in intensity as desire is created and followed by action and satisfaction. Methods that are useful in developing and maintaining confidence are: economical and practical recommendations, readily adoptable developmental practices, widely seen demonstrations, and personal visits.

2.7.4 Methods for Creating Desire

Desire has a definite focus, unlike attitudes which are general, and interests which are specific to the objects to which they are attached. Desire comes only when a developmental idea, or intervention, suggested by extension worker is considered favourable by people. Note that desire is an outgrowth of interest and confidence. In creating desire, appeal to the feelings and emotions of people should be employed to support the interest they already have. A desire is a want, and to make that want felt and to satisfy the want, the right teaching methods must be used to stimulate feeling and emotion, viz., exhibitions, demonstrations, pictures, working models. For *example*: solar water heating devises, circulars suggesting

2.7.5 Methods to Ensure Action

Action follows desire. If action does not follow soon after the desire has been created, the desire soon fades away, and people continue as before. Consequently, a variety of extension teaching methods must be planned and used to assure action that results in development. The following methods are useful for promoting action.

- Make action easy by: inputs and services for development available; removing non-essential steps and delays; setting out clear cut and definite steps to be taken.
- Use reminders.
- Ensure the participation of leaders in development work.
- Cooperative action.
- News stories and radio talks about, and, by people taking action.

2.7.6 Methods for Maintaining Satisfaction

Satisfaction depends upon the confidence, pride and success as a result of adoption of developmental initiatives. After a developmental practice has been adopted by people, it is important to remain in touch with them till they experience real satisfaction and continue with the practice. Continuation of the practice and recommendations to others is an indication of satisfaction. Methods that are useful in maintaining satisfaction are: personal contact, whenever possible; timely hints; showing the value of results; giving more information; and publicity in media.

The six steps in extension teaching are the behaviour changes that we are aiming for among people. In this process, they often overlap each other. Also, the extension teaching methods complement and supplement each other with varying degree of intensity in the attainment of the objectives of extension and development programmes.

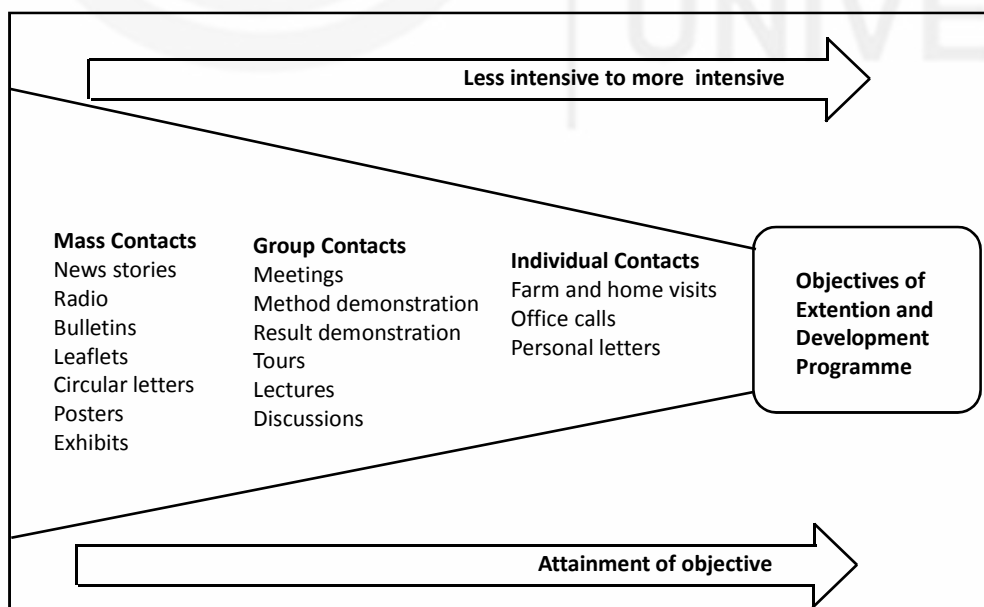


Fig. 2.12: Extension Methods as per Intensity of Influence (Source: Leagans, 1961)

2.8 CONSIDERATIONS IN THE SELECTION OF EXTENSION TEACHING METHODS

The following guidelines are helpful in the selection of suitable extension teaching methods.

- i) Education level of the audience
 - For illiterates - Personal visits.
 - For educated - Written materials.
- ii) Size of the audience.
 - For less than 30 - Lecture, Group discussion.
 - For more than 30- Mass methods.
- iii) Teaching objective
 - To bring awareness - Mass methods.
 - To change attitude - Group discussion.
 - To impart skill - Demonstration.
- iv) Subject matter
 - To prove value of a recommended practice - Result demonstration.
 - To teach a new skill, or an old one in an improved way - Method demonstration.
 - To disseminate simple technology – News article.
 - To teach a complex technology – Face-to-face contact with audio visual aids.
- v) Extension organization's credibility
 - New organization, yet to gain confidence of people – Result demonstration.
 - Well established organization with proven success- Circular letter.
- vi) Size of extension staff
 - Few staff members - Group and mass contact methods.
 - Large number of staff - Individual contact methods.
- vii) Availability of media
 - For creating awareness and reinforcement of ideas – Television, radio, newspaper.
- viii) Time of dissemination
 - Emergency for an individual – Phone call.
 - Emergency for a group of people, or a large number of people – Radio, television, public address system.

Combination of Extension Teaching Methods

Dear learner, from the foregoing discussion, it is clear that each teaching method has its advantages and limitations and we cannot reach the entire intended audience with a single method. One method supplements and complements other methods, and, hence, more than one method is required to communicate developmental messages. It is a cumulative effect, i.e., exposure to more methods during a given period of time that provides good results. Skilful manipulation or handling of various methods by extension workers will later determine the effectiveness of extension teaching.

Relative costs, the extension worker's familiarity with teaching methods, the needs of the people, the length of time the extension programme has been going on in the area, availability of physical facilities, and weather conditions, are some of the other factors to be considered while selecting extension teaching methods.

Activity 5: Visit your nearest development department and enquire about different combinations of extension methods that they use in their work. Write your observations.

.....

.....

.....

.....

Check Your Progress 6

Note: a) Use the spaces given below for your answers.

b) Check your answers with those given at the end of the unit.

1) Write the teaching methods that are useful in the following teaching stages.

i) Attention :

ii) Interest :

iii) Desire :

2) Write the factors to be considered while selecting extension teaching methods.

.....

.....

.....

.....

.....

2.9 LET US SUM UP

Extension teaching methods are the instruments available to you as an extension worker to direct the learning activity of the people, in the process of development. The foregoing discussion, when properly understood and applied, should contribute to your skill in the selection and use of extension teaching methods. In this unit

we started by looking at the meaning and functions of extension teaching methods and understood that they are the tools and techniques used to create situations in which communication can take place between the extension workers and the people. We classified extension teaching methods and discussed important methods under individual, group, and mass contact categories, along with their merits and limitations. We also realized that a proper understanding of these methods and their selection for a particular type of extension programme is necessary in order to extend new knowledge and skills to the people by drawing their attention, arousing their interest, and helping them to have a successful experience of the new developmental practices and ideas. At the end, we discussed the guidelines in the selection of suitable extension teaching methods.

2.10 KEYWORDS

Extension Teaching Methods: These are the tools and techniques used to create situations in which communication can take place between the extension workers and people.

Individual Contact Methods: They provide opportunities for face-to-face or person-to-person contact between extension workers and people.

Office Visit : This is a visit made by people at the office or workplace of the extension worker for obtaining information, assistance, or, to develop an acquaintance with the worker.

Personal Letter : A letter written by the extension worker to a particular individual, in connection with development work.

Group Contact Methods : The methods used by the extension agent to communicate with the people in groups of 20 to 25 persons.

Method Demonstration : A relatively short demonstration given before a group of people to show how to carry out an entirely new practice, or an old practice in a better way.

Result Demonstration : A way of showing people the value of a new practice by showing its distinctly superior result.

Group Meeting : A method of democratically arriving at certain decisions from a group of individuals by taking into consideration all their points of view.

Study Tour, or Exposure Visits : In a study tour, a group of interested people, accompanied and guided by one or more extension agents, moves out of their neighbourhood to study and learn about significant improvements.

Mass Contact Methods	: In mass contact methods, the extension worker communicates with a vast and heterogeneous mass of people without taking into consideration their individual or group identity.	Extension Teaching Methods
Leaflet	: A leaflet is a single sheet of paper used to present information on only one developmental idea in a concise manner, using simple language.	
Folder	: A folder is a single piece of paper folded once or twice, and, when opened, the material is presented in sequence.	
Pamphlet	: A pamphlet is a 2-12 page publication, printed in 2-3 colours with some action pictures, giving full information about a topic in greater length than in a folders and leaflets.	
Bulletin	: A bulletin is a 12-20 page publication with the primary objective of giving complete information which the intended readers can apply to their own situation.	
Booklet	: When the extension material is exceeds 20 pages and is less than 50 pages, it is called booklet.	
Circular Letter	: This is a letter written by an extension worker, and sent to many people periodically, or, on special occasions.	
Mass Meeting	: This is held to communicate interesting and useful information to a large number of individuals at a time.	
Campaign	: A campaign is an intensive teaching activity undertaken at an opportune moment for a brief period, focussing attention in a concerted manner towards a particular problem, so as to stimulate the widest possible interest in the community.	
Exhibition	: An exhibition is a systematic display of models, specimens, charts, photographs, pictures, posters, information, etc., in a sequence around a development theme to create awareness and interest among a community.	

2.11 REFERENCES AND SELECTED READINGS

The following resources were used in writing this unit.

Dahama, O.P. and Bhatnagar, O.P. (2007). Education and Communication for Development. Oxford & IBH Publishing Co.Pvt,Ltd., New Delhi.

GFRAS. (2017). The New Extensionist Learning Kit. Thirteen Learning Modules

for Extension Professionals. Lausanne, Switzerland, Global Forum for Rural Advisory Services - GFRAS.

Leagans, J.P. (1961). Extension Teaching Methods. In: Extension Education in Community Development, Directorate of Extension, Ministry of Food and Agriculture, Government of India, New Delhi.

Mathialagan, P. (2007). Textbook of Animal Husbandry and Livestock Extension, International Book Distributing Co, Lucknow.

Reddy, Y.N. (1998). Audio Visual Aids in Teaching Training and Extension. Haritha Publishing House, Hyderabad.

Suvedi M., and Kaplowitz M.D. (2016). Process Skills and Competency Tools – What Every Extension Worker Should Know – Core Competency Handbook. Urbana, IL, USAID-MEAS.

2.12 CHECK YOUR PROGRESS – POSSIBLE ANSWERS

Check Your Progress 1

- 1) Extension teaching methods are the tools and techniques used to create situations in which communication can take place between the extension workers and people.
- 2) The major functions of extension teaching methods are: to provide communication so that learner may see, hear, and do the things to be learnt; to provide stimulation that causes the desired mental and physical action on the part of the learner; and, to take the learner through one or more steps of the teaching- learning process.

Check Your Progress 2

- 1)
 - i) Extension teaching methods, according to use are: individual, group, and mass contact methods.
 - ii) Extension teaching methods according to forms are: written, spoken, and objective or visual methods.
- 2) Examples of teaching methods.
 - i) Individual contact methods : farm and home visits, office visit.
 - ii) Group contact methods : lecture, demonstrations.
 - iii) Mass contact methods : campaign, meetings.
 - iv) Written methods : leaflet, bulletin.
 - v) Spoken methods : meetings, radio.
 - vi) Objective / visual methods : result demonstration, pictures.

Check Your Progress 3

- 1) Individual contact methods help in building rapport with people, facilitate gaining firsthand knowledge of developmental problems, help in selecting administrators and local leaders, and help in changing the attitude of the people.

- 1) The advantages of group contact methods are: enable face-to-face contact with a number of individuals at a time; can reach a select target group of people; facilitate sharing of knowledge and experience, and thereby, strengthen learning by the group; satisfy the basic urge of people for social contact.
- 2) Result demonstration is an educational test to prove the advantages of recommended practices, and to demonstrate their applicability to the local condition. It is a method of motivating the people to adopt a new practice by showing its distinctly superior result. It is conducted by an individual member of a community under the direct supervision of an extension worker. Method demonstration is relatively short demonstration given before a group of people by extension worker to show how to carry out entirely new practice or an old practice in a better way. It is essentially skill training, where the emphasis is on effectively carrying out a job, which shall improve upon the result.

Check Your Progress 5

- 1) Mass contact methods facilitate quick communication, and are suitable for creating general awareness, transferring knowledge, changing opinions.
- 2) A campaign is an intensive teaching activity undertaken at an opportune moment for a brief period, focussing attention in a concerted manner towards a particular problem so as to stimulate the widest possible interest in the community. The duration of the campaign may be for a single day for, say, 'tree plantation', for a few days, as in 'voter registration', or, for several months at fixed dates and time as in the 'pulse polio' campaign.

Check Your Progress 6

- 1) Teaching methods for: (i) attention stage -pictures, news stories (ii) interest stage - meetings, radio talks (iii) desire stage - demonstrations, exhibitions.
- 2) Factors to be considered while selecting extension teaching methods are: level of education and size of the audience; teaching objective; subject matter; extension organization's credibility; size of the extension staff; availability of media, etc.

UNIT 3 AUDIO-VISUAL AIDS

Structure

- 3.1 Introduction
- 3.2 The Meaning and Functions of Audio Visual Aids
- 3.3 Classification of Audio Visual Aids
- 3.4 Audio Aids
- 3.5 Non Projected Visual Aids
- 3.6 Projected Visual Aids
- 3.7 Audio Visual Aids
- 3.8 Factors Influencing the Selection of Audio Visual Aids
- 3.9 Let Us Sum Up
- 3.10 Keywords
- 3.11 References and Selected Readings
- 3.12 Check Your Progress - Possible Answers

3.1 INTRODUCTION

A common goal of extension and development workers is to make presentation vital, alive, and memorable for their learners. This goal can be met most effectively with the use of audio visual aids for communication of knowledge and teaching of skills. In Unit 2 of this block, we discussed extension teaching methods as the tools and techniques used to create situations in which communication of knowledge and teaching of skills can take place between the extension workers and the people. In the same way, audio visual aids also contribute directly in improving the effectiveness of learning through communication of knowledge and teaching of skills.

The major ways by which people learn are by seeing, hearing, and doing – looking, listening, and acting. Audio visual aids offer the extension worker unique opportunities to increase the effectiveness and clarity of developmental ideas being transferred. They enable learners to see and hear, look and listen more fully, and with greater understanding. To a large extent, the extension workers' success and the degree of progress made by their learners will be determined by their ability to communicate ideas. To achieve progress and development, extension workers must communicate and their learners must understand. Audio visual aids play a crucial role in this communication, so as to take the learners through the steps in teaching learning process. Keeping this in view, important audio visual aids that are helpful in extension teaching are discussed in this unit for your understanding.

After studying this unit you should be able to:

- Discuss the meaning and functions of audio visual aids
- Classify audio visual aids, with examples
- Describe important audio visual aids

- Select audio visual aids for various teaching occasions.

3.2 THE MEANING AND FUNCTIONS OF AUDIO VISUAL AIDS

3.2.1 What are Audio Visual Aids?

We learnt from Unit 1 in the section on the *Teaching Learning Process* that the attention of people is attracted by various senses in the proportions of : seeing - 87.0%; hearing - 7.0%; smell- 3.5 %; touch -1.5 % ; and, taste -1.0 %. Thus, seeing and hearing are the major senses involved to attract attention and increase learning.

“If I hear – I forget

If I see – I remember

If I do – I know”

- An old Chinese proverb

‘Seeing is believing’

- Famous extension quote

‘The best way to peoples’ heart is through their stomach, but the best way to their brain is through their eyes and ears’

- An old proverb

Audio visual aids are instructional devices in which the message can be heard and seen simultaneously

Examples: television, video films, documentary films, etc.

Audio visual aids help in stimulating the ears and eyes. Hence, in the strict sense a teaching aid is any device that can be used to help reinforce new information or skills. Instructional aids are devices that assist an instructor in the teaching-learning process. Instructional aids are not self-supporting - they are supplementary teaching devices.

What do the above proverbs, definitions, and discussion suggest to you? They suggest that, hearing alone is not enough, in the learning process, to result in action. The use of audio visual aids in extension teaching is based on the principle that one must see and try to do, along with hearing, in order to go through all the six steps in the extension teaching learning process.

7 Rs of Audio Visual aids

1. Right aid
2. Right place
3. Right way
4. Right time
5. Right people
6. Right message
7. Right extension worker

3.2.2 Functions of Audio Visual Aids

When properly used, audio visual aids contribute one or more of the following functions.

- i) Convey meaning clearly
- ii) Capture attention, arouse and sustain interest
- iii) Increase the correctness, clarity and effectiveness of the idea and skills being transferred
- iv) Help in learning more, faster, and with thoroughness
- v) Help in remembering longer
- vi) Reach more people, irrespective of their level of literacy, or language
- vii) Save the instructor's time
- viii) Reduce the possibility of misinterpreting concepts
- ix) Clarify the relationship between material objects and concepts
- x) Supplement the spoken word – the combination of audio and visual stimuli is particularly effective since the two most important senses are involved
- xi) Highlight the main points of the message clearly.

Audio visual aids offer extension workers a fast, accurate, and direct approach to understanding on the part of learners. They give the extension workers a reliable assurance that they are making their:

Expression = Impression and Impression = Expression

3.2.3 Limitations of Audio Visual Aids

- i) Learners may sometimes form distorted impressions, unless audio visual aids are supplemented with required explanations
- ii) They may tempt the extension worker to narrow down his teaching to only a few big ideas, not giving the complete picture of a subject
- iii) There is the possible risk of 'spectatorism' instead of the attitude of thoughtful enquiry. Some extension workers acquire the mistaken idea that they have little to do when audio visuals are used.

Activity 1: Visit a nearby development department and enquire about how audio visual aids are helpful in their extension work. Write your observations.

.....

.....

.....

.....

Check Your Progress 1

Note: a) Use the spaces given below for your answers.

b) Check your answers with those given at the end of the unit.

- 1) Write what you mean by audio visual aids.

2) Write four functions of audio visual aids.

3) Write two limitations of audio visual aids.

3.3 CLASSIFICATION OF AUDIO VISUAL AIDS

There are many ways to classify audio visual aids

- according to progress
- according to sense involved
- according to projection, or show

Figure. 3.1, gives a general classification involving the above three types for your comprehensive understanding.

3.3.1 According to Progress

First Generation: handmade charts, graphs, exhibits, models, etc.

Second Generation: printed or illustrated texts, printed graphics, workbooks, etc.

Third Generation: photographs, slides, films, radio, tape recorder, telecast, etc.

Fourth Generation: television, language laboratories, information communication technology based aids like computers, multimedia, touch screen kiosks, mobiles, etc.

3.3.2 According to Sense Involved

Audio Aids: instructional devices through which the message can only be heard are known as audio aids. *Examples:* radio, tape recorder, CD player, etc.

Visual Aids: instructional devices through which the message can only be seen are known as visual aids. *Examples:* posters, flashcards, charts, etc.

Audio Visual Aids: instructional devices through which message can be heard and seen simultaneously. *Examples:* television, video film, documentary film, etc.

3.3.3 According to Projection, or Show

Non projected Aids: Visual instructional devices which are simply presented without any projection equipment are non projected aids. *Examples:* blackboard, chart, etc.

Projected Aids: visual instructional devices which are shown with a projector are called projected aids. *Examples:* slides, filmstrip, silent films, cartoons, etc. projected through an opaque projector (epidiascope), or an over head projector.

Display Aids: visual aids which are spread before the audience for viewing information, and instruction. *Examples:* poster, bulletin, board, models, exhibits, etc.

Presentation Aids: visuals aids presented or projected before the audience for viewing, and at the same time explain, or present the message of the visuals, so that the audience get meaningful understanding of a subject. *Examples:* flashcards, slides, filmstrips, etc.

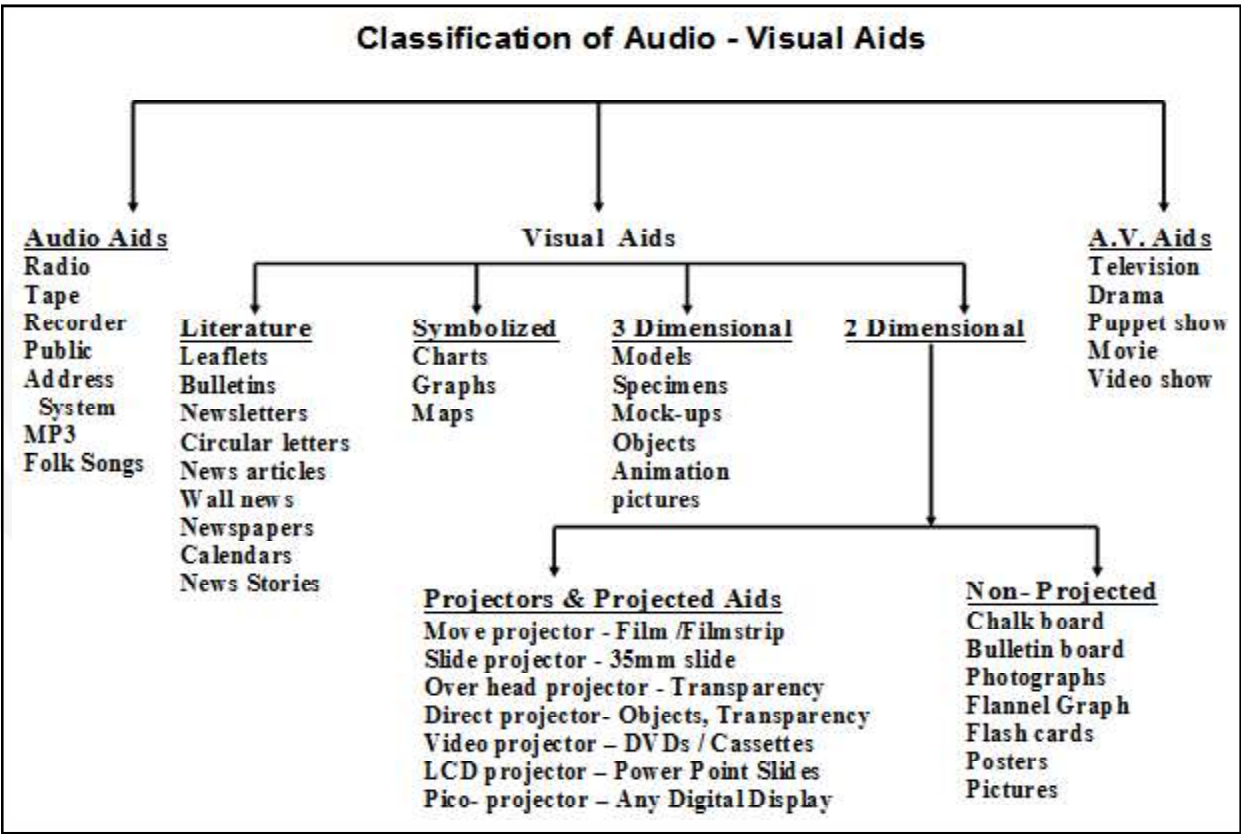


Fig. 3.1: Classification of Audio Visual Aids

Activity 2: Visit a nearby development department, and identify and write the audio visual aids they are using in the extension work.

.....

.....

.....

Note: a) Use the spaces given below for your answers.

b) Check your answers with those given at the end of the unit.

1) Write the three ways of classifying audio visual aids.

.....

.....

.....

.....

.....

2) Write examples for :

i) Audio aids :

ii) Visual aids :

iii) Audio visual aids :

iv) Non projected aids :

v) Projected aids :

3.4 AUDIO AIDS

Audio aids are the instructional devices through which message can only be heard. It is said that we spend more than 50% of our time in hearing. This shows the importance of audio media in our life. Therefore, as an extension worker, it is necessary for you to understand important audio aids and their application in extension and development work.

Advantages

- Flexible, inexpensive, simple to use, and readily available.
- Recorded and used again and again - Editing and duplication is easy.
- Useful in individual, group, and mass teaching methods.
- Overcomes the illiteracy barrier.
- Audio messages are more dramatic than print messages.
- Portable and can be used in field situations.

Limitations

- The sequence of presentation is fixed.
- Comprehension of the presentation can be a constraint.
- The development of audio aids is time consuming.
- Storage and retrieval of audio tapes and records is tiresome.

Important audio aids that are useful for extension work, along with their specific advantages and limitations, are discussed next for your understanding.

3.4.1 Tape Recorder

A tape recorder is suitable for extension work in meetings, training programmes, campaigns, recording radio programmes, etc.

Advantages

- Facilitates on-the-spot recording of sound.
- Helps in duplication and dissemination of sound.
- Recorded tape can be immediately played back without any processing.
- Helps in synchronization of sound with picture.
- Easy to operate and preserve.
- Low operational cost, as the same tape may be used again.

3.4.2 Public Address System

A public address system amplifies sound so that it is audible to a large audience, over a distance. It consists of three segments, viz., microphone, amplifier and speaker. The microphone converts sounds into electrical waves which are fed into an amplifier. The amplified electric current is fed into a speaker to convert into sound waves, and the magnified sound is heard through speakers. It is very useful in meetings and campaigns to disseminate information.



Fig.2 : Public Address System(Source : RAGACOVAS, Puducherry)

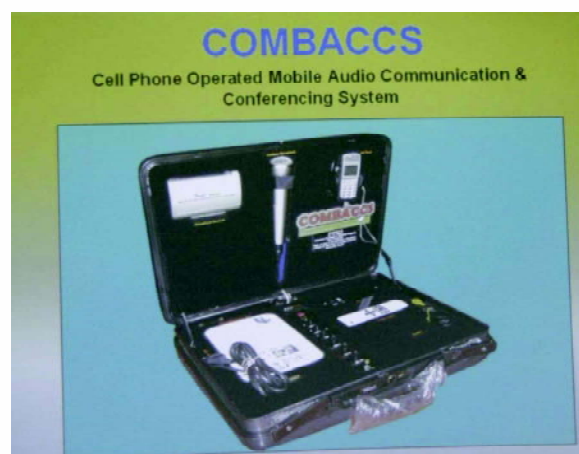


Fig. 3: COMBACCS(Source : RAGACOVAS, Puducherry)

3.4.3 Telephone and Mobile

The telephone allows people to talk to each other, from distant places. It provides for instant interpersonal communication, in which the communicator and the person who is communicated to change roles while giving and getting information. This improves speed of communication and involves considerable saving of time, money, and labour. Though, usually, only two persons can communicate at a time through a telephone, the system serves many people in a given area if a speaker is attached to it, like Cell Phone Operated Mobile Audio Communication and Conference System (COMBACCS). This technology is seeing a phenomenal growth in many developing countries. Short Message Service (SMS) and Wireless Application Protocol (WAP) enabled cell phones with cameras can be effective in offering 'always available extension' between experts and people. COMBACCS can help community members at different locations build relationships and understanding.

KISAN CALL CENTER
DIAL TOLL FREE NUMBER
1800-180-1551

By Mobile Phones or any Landline Telephone



FOR EXPERT ADVICE
ON ALL
AGRICULTURE RELATED
PROBLEMS/ENQUIRIES

Nodal Agency
Directorate of Extension Education
Tamil Nadu Agricultural University
Coimbatore - 641 003




Kisan Call Centers for Agriculture Development

The Ministry of Agriculture and Farmers Welfare launched Kisan Call Centers on January 21, 2004 across the country to deliver extension services to the farming community. The purpose of these call centres is to respond to issues raised by farmers, instantly, in the local language. There are call centres for every state which are expected to handle traffic from any part of the country on the number 1800-180-1551. Queries related to agriculture and allied sectors have been addressed through these call centers since 2004.

Fig. 3.4 : Kisan Call Center

3.4.4 Digital Audio Player

A digital audio player is sometimes referred to as an MP3 player, and has the primary function of storing, organizing and playing audio files. Some digital audio players are also referred to as portable media players as they have image-viewing and/or video-playing support.

Example : iPod (fourth generation audio aid).

Digital audio players are playing a major role in Information and Communication Technology based extension work in all development sectors due to their very compact size, use of very little power, and extremely small designs with long battery life.

Activity 3: Visit your nearby development department and enquire about the audio aids that they use in extension and development activities. Write your observations.

.....

.....

.....

.....

Check Your Progress 3

Note: a) Use the spaces given below for your answers.

b) Check your answers with those given at the end of the unit.

1) Write any three advantages of audio aids.

.....

.....

.....

.....

.....

3.5 NON-PROJECTED VISUAL AIDS

Non projected visual aids are those aids which are used without projection.

Advantages

- Abundant and are easily obtainable.
- Requires no electricity and appropriate for low budget extension work.
- Not much artistic ability is required in the use of these visual aids.
- Useful in small group situations.
- Many of them can be converted into projected aids. For example, charts, flannel graphs, and flash cards can be photographed or scanned and converted into slides.
- Some of them can be projected through an opaque projector.

3.5.1 Chalkboard, or Blackboard

The chalkboard is probably the simplest, cheapest, most convenient, and widely used non projected visual aid in extension teaching. A black wooden board is mostly used, hence, it is also known as blackboard. However, ground glass, roll-up materials, coloured in black, olive green, or blue may also be used. Roll-up materials are made of heavy cloth canvas coated with chalkboard paint. For extension teaching under field conditions, inward folding wooden boards or roll-up materials are convenient. The chalkboard is suitable for use in lectures, training programmes, group meetings, etc. As one of the oldest aids to teaching known for the past four hundred years, the chalkboard is known for its ubiquitous presence in classrooms. It is a vehicle for a variety of visual materials.

Purpose

- To write important points to support oral presentation.
- To put illustrations for visualization of facts.
- Serve as base for recording learner's inputs and help them in practice.
- Serve as surface for displaying other non projected visuals such as photographs, charts, graphs, diagrams, etc.

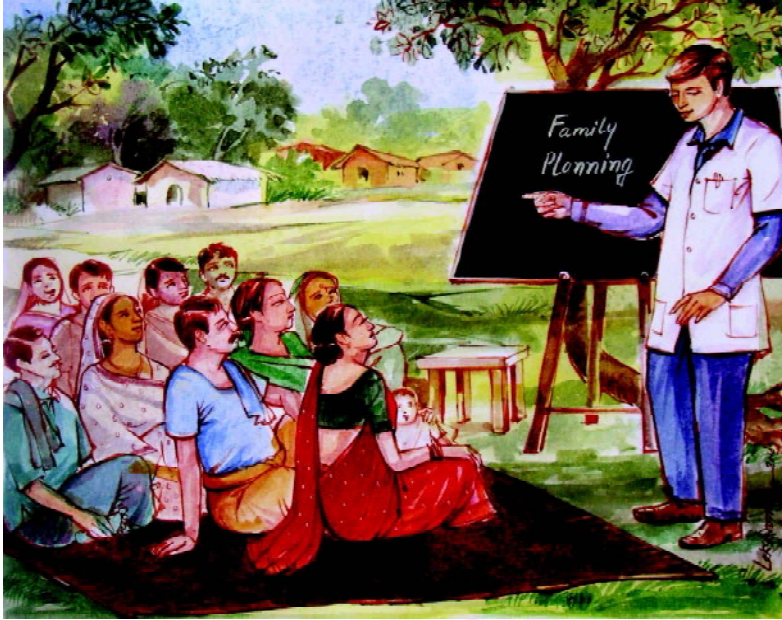


Fig. 3.5 : Chalkboard or Blackboard in Extension Teaching

Guidelines

- The letter size should be large enough so that viewers in the last row can see the text clearly. The recommended letter sizes are
 - a) 3 cm tall can be read up to 10 meters distance from the board
 - b) 6 cm tall can be read up to 20 meters distance from the board
 - c) The thickness of the letters should be $\frac{1}{5}$ th of the height of the letter.
- Write slowly with even pressure on the chalk in a straight line.
- Don't speak while writing on the board.
- The lower edge of the chalkboard should be at the level of the viewers' eyes.
- The closest viewer should be about 3 meters from the chalkboard.
- No other teaching aid should be in front or beside the chalk board to avoid distraction.
- Always clean the chalkboard when starting a new subject.

Advantages

- Step-by-step presentation of the topic creates a dramatic impact and sustains audience interest.
- A colourful effect may be produced by using coloured chalk.
- Presentations may be adjusted according to the receptivity of the audience.
- Helps the audience to take notes.

- Helps in comprehension and retention of knowledge.
- Economic, simple to construct, use, and maintain.

Limitations

- Bad handwriting of an extension worker may confuse the audience.
- The blackboard communication is temporary.

3.5.2 White Board

Modern classrooms are equipped with boards, also called marker boards or multipurpose boards. They can be used for more than one purpose. They are dustless and hygienic. They are preferred around computers as dust can harm computers. They require special erasable markers. A felt eraser is required to erase the surface soon after use. Markers are available in different colours.

Purpose

- It can be used for the same purpose as a blackboard, with more clarity.
- A variety of colour markers can be used for effectiveness.
- It may be used as surface for projecting films, slides, and overhead transparencies.
- A white board with a steel backing can be used as magnetic board for display.

3.5.3 Bulletin Board

A bulletin board displays message. It is a surface on which bulletins, news, information, announcements, of specific or general interest can be displayed. Bulletin boards are of different sizes with provisions to hold pins, books exhibits and other materials. A bulletin board may be covered with soft insulation or perforated masonite, and may or may not be covered with glass. Fixing, dismantling and re-fixing message is very convenient on both types of boards. The message on the bulletin board may be in the form of words, graphs, charts, photographs, illustrations, publications, etc.

Purpose

- To decorate the office with photographs, pictures or tastefully selected materials for the benefit of office visitors.
- To announce film shows, demonstrations, visits by extension workers.
- To remind people to get inoculations, spray their houses, weed their crops.
- To make comparisons. *Example:* Photographs of well nourished and poorly nourished children

Desirable Features for Bulletin Boards

- Writing should be legible from a distance.
- The materials should be related with the objectives.
- A combination of facts, pictures drawing and other materials can add variety.
- Decorative materials, such as coloured papers, tapes, pins, etc., should be used to enhance the attractiveness of the board.
- Highlight the main theme with a catchy illustration, caption, or text, or it may be the brightest or largest item on the board.

- Simplicity and brevity are keys to good arrangements. In addition, timeliness, variety, continuity, order, colour, spacing and balance are important.
- Keep the bulletin board neat and clean; remove the old materials promptly when no longer required.

Advantages

- Draws attention to important extension announcements.
- Facilitates the display of graphic and pictorial matter.
- Highlights current extension and development activities and achievements.

3.5.4 Pictures and Photographs

A picture is a representation made by drawing, painting, or photography which gives an accurate idea of an object. A good picture may tell a story without using a single word. Pictures may be in black and white, or in colour. Colour pictures and enlarged photographs have more appeal. For extension photography, a good quality 35 mm. single-lens reflex camera with some essential attachments like a flash gun, lens hood, filters, close-up lens, etc. are useful. However, due to processing and preservation problems of negatives, as well as with the advancement of technology, now digital cameras are more popular.

Purpose/Uses

Pictures and photographs are used in various ways in extension work such as training programmes, publication, campaign, exhibition, slide, filmstrip, motion picture, television, newspaper and display etc. Photographs pasted with synthetic adhesive on thick board and cut to shape by ferret machine can produce good display material with 3 -dimensional effect.

3.5.5 Rope Board

Rope, wire, heavy string can be used to create a background for pictures or exhibit materials. The rope can be stretched from floor to ceiling. Pictures mounted on cardboard or three dimensional objects can be taped in place. A heavy wire screen can also be used as a background.

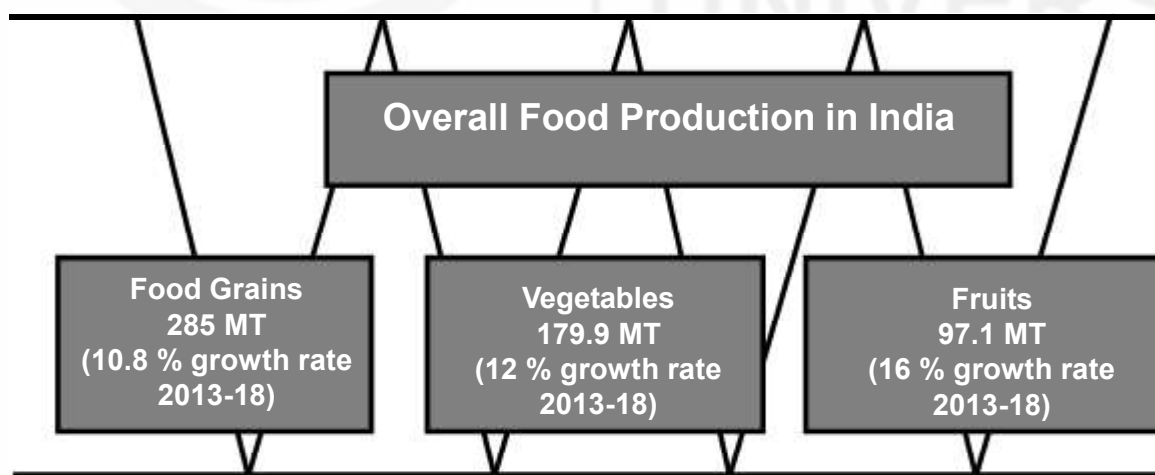


Fig. 3.6: Overall Food Production in India

3.5.6 Flannel Board and Flannel Graph

A flannel board is a visual aid in which messages are written or drawn on thick paper and presented step-by-step by the extension worker to the audience to synchronize with the talk. The board is a flannel covered flat surface. Flannel is stretched and then glued to a piece of plywood or heavy cardboard.

The name of the board comes from the kind of cloth that covers it:

- Flannel board- If covered with flannel cloth.
- Felt board – If covered with felt cloth.
- Khaddar board – If covered with *khadi* cloth, and so on.

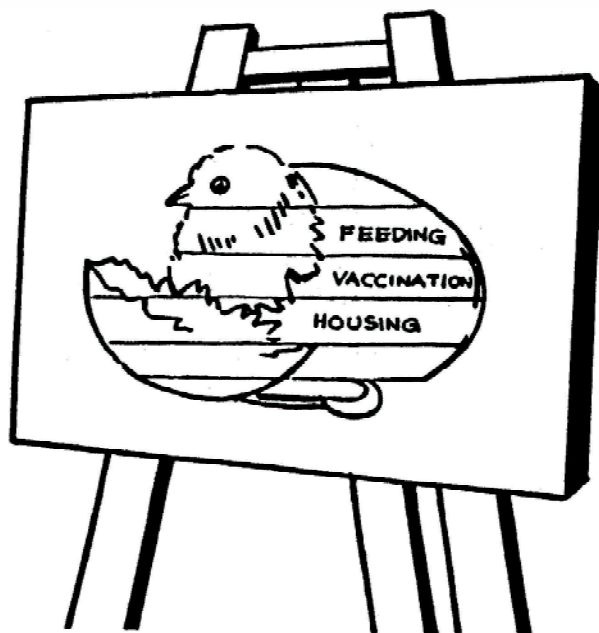


Fig. 3.7 : Flannel Graph (Source : RAGACOVAS, Puducherry)

Graphic materials like cut-out pictures, photographs writing on a piece of paper and backed by sand paper or flannel cloth are known as flannel graphs. When these flannel graphs are placed on a flannel board, they stick to the surface. Under field conditions, a rough cloth, a bed sheet, / old blanket, khaddar, or flannel can be spread on any flat surface such as a chalk board, which also works like a flannel board. By pasting strips either of flannel or sandpaper to the backs of pictures, or to other instructional material, they can be made to cling to the flannel board.

Purpose

The appeal of a flannel board demonstration is that a progressive story can be unfolded before the learner's eyes. The action of the moving parts attracts attention and stimulates interest. It can be of particular interest to illiterates for telling many kinds of educational stories. Clever extension workers can place interesting pieces on the board, and keep the audience wondering how the story will end, until the final piece is placed. Its capacity for building up suspense is the chief advantage in using a flannel board or flannel graph.

Preparation

- The board should be at least 30 × 40 inches and much larger if needed.

- Flannel must be light in colour for most uses – light grey, light tan, or green are good colours for the purpose.
- If the board is to be carried about, it should be cut into two and hinged at the centre.
- Lean the board back slightly when in use so that materials stick easily to the board and are less likely to fall.
- The title of the story should be in large letters at the top of the board.
- The story materials can be drawings, photographs, or printed illustrations with sequence numbers.
- Keep the story simple.
- Use large and bold illustrations.

Advantages

- Facilitate presentation of the talk as important points are already noted.
- Helps in clarifying concepts.
- Helps in showing the cumulative process.
- Produces a dramatic effect on the audience.
- Helps in summarizing the talk.
- Saves time in the presentation of a talk.

Limitations

- Suitable for a small group.
- Requires some preparation and practice.

3.5.7 Flash Cards

Flash cards are brief visual messages on poster board cards flashed (turned over at short intervals) before the audience to emphasize important points in a presentation. Flash cards are held like a pack of cards and are flashed to the audience, one at a time, in a sequence, along with the talk.

Preparation

- A simple flash card is prepared by writing, printing or drawing on a plain sheet of white paper and pasting it to the cardboard.
- Limit the number of flashcards to 10 – 12.
- The size of the flash card should be:
 - o 22"×28" for the group of 30 – 50 audience
 - o 11"× 14" for small group.
- Letter size should be at least 1".
- Finish with a line drawing, or a cartoon.
- Brief notes about the contents of the first card should be written on the back of the last card; notes about the second card should be on the back of 1st card; notes about the third card should be on the back of second card, and, so on, till the end of all the cards.



Fig. 3.8: Flash Cards (Source : RAGACOVAS, Puducherry)

Presentation

- The complete story and parts of the story on each card should be familiar to the presenter.
- Stack the cards in their proper order.
- Hold the card with one hand close to the chest against the body if the cards are small. If they are large, they may be placed on a high table. In any case, display the cards so that people can see them clearly.
- Flash the card in time along with the notes. For notes on the first card, you may quietly look at the notes written on the back side of the last card, and continue the sequence till the end.
- Slip the front card to the back of the set to change the card, or to illustrate the new point.
- Expose the card long enough for comprehension, or a glance.
- After the story is completed, display the cards on a bulletin board, or pass them on to the audience for glance.
- Use other teaching tools for comprehension.

Advantages

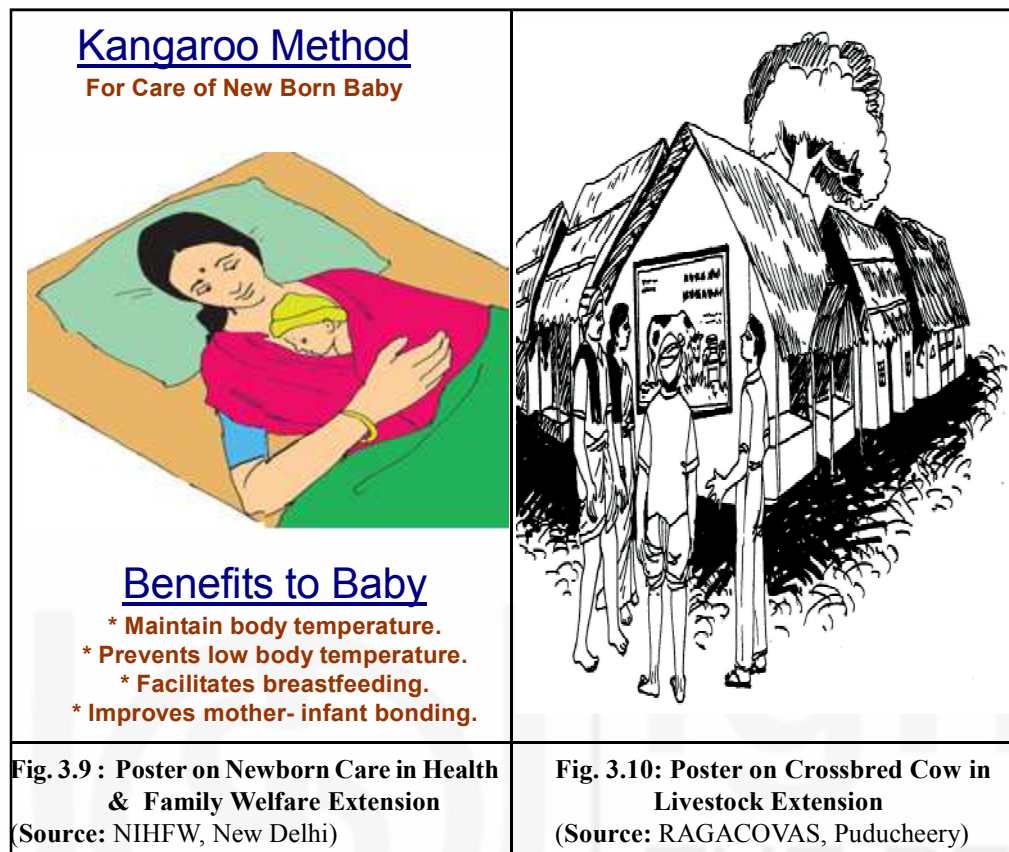
- Can be made easily and quickly.
- Very simple to use and carry.
- Helps the speaker to emphasize the main points using the notes on the back of the cards.

3.5.8 Poster

A poster is displayed in a public place with the purpose of creating awareness amongst the people. A poster is generally seen from a distance and the person glancing at it seldom has the time or inclination to stop and read. The job of the poster is to stop the persons hurrying past, thrust the message upon them. A poster may contain a written message, diagram, map, picture, or a cartoon. A few hand drawn posters may be used in extension training programme, group meeting, etc. Printed posters may be used in large numbers in campaigns, exhibitions, etc.

Purpose

The purpose of poster is to make a public announcement of a special idea with a few words and an illustration. A good poster is expected to take the learners through the first two steps in extension teaching, i.e., attention and interest. It is not expected to educate, but to stimulate action – either immediately or eventually. This requires a forceful idea, strongly presented by the content of the poster. It must be always a part of other teaching methods, viz., campaigns, meetings, demonstrations, etc.



Preparation

While preparing posters consider the following points.

- Promote a single idea or message.
- Must be timely.
- Follow ABC principle – Attractive, Brevity, and Clarity.
- It must be able to attract attention. the persons hurrying past must be stopped by some attractive feature in the poster to take a look at it. The design and use of a poster as a visual aid in extension teaching is based on this principle.
- It must be brief enough to convey the message clearly. The wording must be brief and illustrations easily understood, so that the message of the poster is quickly absorbed.
- Use simple colours – not more than three.
- Must be large enough to be seen easily – 22" × 28", 28"× 44", etc.

Advantages

- Helps in making announcements.
- Facilitates the display of ideas to the audience.

- Quick communication of a message to a large number of people.
- Easy to prepare and present.
- Highly economical.
- Highly versatile in use.

Limitations

- Posters give only an initial idea and cannot furnish detailed information. They need to be supported for further information by another aid or method, e.g., leaflets and demonstration.
- The production of good posters is technical job and requires skill and time.
- Cannot be repeated – for each occasion a new poster has to be made.

Note: Remove the poster after the programme, or when they have served their purpose.

3.5.9 Charts

A chart is a symbolized visual aid with pictures of relationships and changes used to tabulate a large mass of information, or show a progression.

Purpose

Charts can help communicate difficult, often dull subject matter in an interesting and effective way. They make facts and figures clear and interesting, show or compare changes, show the size and placement of parts. They are also helpful in summarizing information and presenting abstract ideas in visual form.

Types of Charts

There are many varieties of charts. Some common types of charts are briefly discussed below for your understanding.

Bar Chart: Bar charts are made of a series of bars along a measured scale. They are used to compare quantities at different times, or, under different circumstances.

Pie Chart: Pie charts are in the shape of circles, and are used to show proportions and percentages.

Tabular chart: Tabular charts are used to bring together mass related data in compact form. *Example:* timetable.

Tree chart: Tree charts are used for showing development or growth of a programme or project. The origin is shown in a single line, or as a tree trunk, and various developments are shown as branches.

Flow Chart: Flow charts show organizational structure of departments, institutions, resources with lines and arrows.

Pictorial Chart: A pictorial chart gives the viewer a vivid picture, and creates a rapid association with the use of graphic messages, such as cartoons, and illustrations. Each visualized symbol indicates quantities. This type of chart is more useful for illiterate audience in extension work.

Overlay Chart: Overlay charts consist of a number of sheets which can be placed, one over the other, conveniently. On each individual sheet a part of

the whole is drawn. This enables the viewer to see not only the different parts, but also how they appear when one is placed over the other. After the final overlay is placed, it shows the full view of the whole picture. This type of chart presentation is dramatic and effective.

Pull Chart: A pull chart consists of written messages on a large sheet. Messages are hidden by strips of thick paper held in position by the slits provided on either side. The messages can be shown to the viewer one after another, by pulling out the concealing strips. The same strip can be replaced in the slits after showing the message. This type of chart presentation is dramatic and creates suspense for the viewer.

Strip Tease Chart: They are similar to the pull chart, however, messages are concealed by strips of thin paper instead of thick paper. The ends of thin paper strips are pinned or pasted at both ends of the message. Whenever the message is to be exposed, one end of paper strip is stripped off. This has the advantage of surprise and anticipation.

Flip Chart: A flip chart is a series of visuals drawn into large sheets of paper or cardboard, fastened together at the top. These are turned over or flipped, one at a time by the extension worker. This kind of chart exposes the audience to segments of the subject in sequence, and holds attention remarkably well.

Window Chart: In this, flaps cover the messages and when the message is to be shown, the presenter open the flaps like windows. It creates suspense in the audience.

Preparation : While preparing any type of chart, consider the following points.

- Keep it simple.
- Promote a single idea or message with important details.
- Maintain logical order.
- Use symbols, words, or colours to explain the chart.
- Use lines and bars in only one dimension.
- Compare units and avoid comparing unrelated units.
- The chart title must emphasize certain parts of diagrams. The title for 8"x 10½" sheet should be about ½" height, and for 30" x 40" charts, the height should be about 2½".

Activity 4: Visit your nearby development department and observe their bulletin board and some of the posters prepared by them. Compare their features with those given in this unit. Write your observations.

.....

.....

.....

.....

.....

.....

Check Your Progress 4

Note: a) Use the spaces given below for your answers.

b) Check your answers with those given at the end of the unit.

1) What do you mean by non projected visual aids?

.....

.....

.....

.....

.....

2) Write any three advantages of non projected visual aids.

.....

.....

.....

.....

.....

3) Write the salient points to be considered while preparing a poster.

.....

.....

.....

.....

.....

4) Write the names any four types of charts.

.....

.....

.....

.....

.....

3.6 PROJECTED VISUAL AIDS

Any visual aid which is used for magnification of image on a screen in dark or semi-dark conditions can be called a projected visual aid. There are three important methods of projection:

- Direct projection - slide and film projectors
- Indirect projection – overhead projector
- Reflected projection – opaque projector, epidioscope.

Advantages

- Very effective aids to classroom teaching with a characteristic appeal of their own for influencing learners.
- When combined with audio aids or on the spot commentary, they prove to be very useful.

Limitations

- Require special equipment for display.
- The equipment is costly, needs meticulous care and training for operation.
- Electricity/backup power is required for operation.
- The transportation and storage of equipment needs special attention.
- The quality of projection depends on the kind of screen, placement of the audience in relation to the screen, and, the size of the image, and its brightness.

However, the above limitations don't lessen the importance of using these visuals wherever suitable, due to their specific and definite advantages in extension and development work.

3.6.1 Slides

A slide is a transparent mounted picture which is projected by focusing light through it. The projection may be made on a screen or on a white wall. Slides of 35mm films, mounted on individual cardboard or plastic frames are common, and are extensively used in extension work during training programmes, seminars, workshops, group meetings, campaigns, exhibitions, etc.

3.6.2 Overhead Projector

The overhead projector projects the picture over the head of the speaker on the screen. Drawings, diagrams, letterings, etc., are made on transparent sheets and are put on the glass platform of the overhead projector, through which a strong light is passed. The rays of light are made to converge with a lens, and are reflected by a mirror held at an angle on the screen at the back. The instructional items may be written or drawn by hand on transparent sheets, transparent cellophane, or polythene rolls with a special marker pen, in colour or in black and white. Transparencies can also be made through photographic, xerox, or electronic processes as well. Overhead projection is used in training programmes, group meeting, seminar, symposium, workshop, etc.

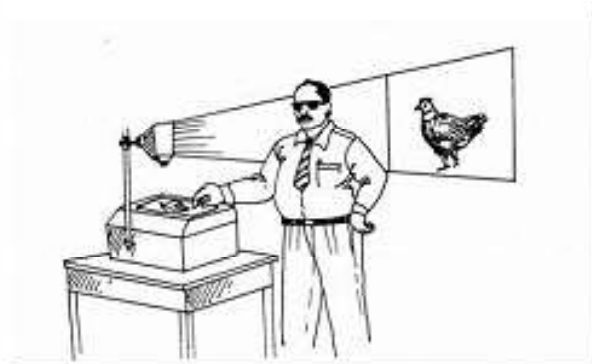


Fig. 3.11 : Overhead Projector
(Source: RAGACOVAS, Puducherry)

- ### 3.6.3 Handheld Projector

Check Your Progress 5

b) Check your answers with those given at the end of the unit.

- UNIVERSITY

- [illegible]

- 3) Write the principle involved in the operation of an overhead projector.

.....

.....

.....

.....

.....

3.7 AUDIO VISUAL AIDS

Audio visual aids are those devices through which messages can be seen as well as heard, simultaneously. Synchronization of these two important senses leads to more learning and more retention when compared to the use of visual and audio senses separately. We learnt from the previous section that the two senses, sight and hearing, together, attracts 94 % of audience attention. This is clear cut evidence that audio visual aids can play an important role in extension teaching.

Advantages

- Convey meaning clearly in a condensed form and clarify ideas better.
- Supplement spoken word.
- Supply a concrete basis for conceptual thinking.
- Attract the attention, arouse, as well as sustain, the interest of the audience.
- Make learning more permanent.
- Overcome limitations of space, time, and distance.
- Develop continuity of thought with motion pictures.
- Stimulate self activity, and motivate people for action.

3.7.1 Motion Pictures

Motion pictures are extremely useful in motivating and teaching any learner. Yet educational films are not being widely used by extension educators in many development sub sectors. The reasons usually given are:

- The expense of films and projectors.
- Non availability of suitable films.
- Transportation and maintenance of films and projectors.
- Dominance of entertainment over educative function of films.
- Lack of skills, on the part of extension workers, to operate projectors.

Seating Arrangements for a Motion Picture Show

The farthest seat from the screen should not be more than 6 times the width of the picture on the screen. Don't seat learners closer to the screen than twice the width of the picture. With a canvas/matte screen, the viewing angle should not exceed 300, and with a beaded screen the angle should not exceed 250. The bottom of the screen should be about one foot above the heads of the audience.

Preparation

- See the preview of the educational film and assure yourself that it is suitable for the planned extension activity and intended audience.
- Note down important teaching points and difficult words that audience might not understand.
- Compose a few questions which are answered in the film.
- Make sure that the projector and film are in good condition and that there is sufficient darkness in the presentation area, before the arrival of the audience.

Presentation

- Make your audience aware that the purpose of the film is educational and not entertainment, and that they will be expected to learn the messages from it.
- Tell them the title of the film and say, generally, what the film is about.
- Explain why this film is important and relate it to their own self interests.
- Write the questions that you composed on the chalkboard and inform them that these questions will be answered by the film.
- Try to show the film without any breaks or distractions.
- Immediately after film screening, encourage the audience to discuss it, freely.
- Distribute relevant literature, and provide contact addresses for further information.
- Demonstrate the skill, if any, showed in the film.
- If required show the film again.

Advantages

- Combines sound and sight, acting on two senses at the same time.
- Attracts and holds attention due to illuminated screen in semidarkness.
- Overcomes the barrier of illiteracy – it communicates extension ideas to anyone who can see and hear.
- Audiences identify themselves with the story on the screen, thus producing highly emotional responses.
- Brings audiences closer to the objects, places, and situations that they cannot ordinarily see in their daily lives.

Limitations

- Requires a lot of planning and preparation on part of extension workers.
- The audiences' focus may be on entertainment rather than education.
- With the advent of television, video, and digital technology, the importance of motion pictures has been reduced.

Educational Film on Family Planning

When a family planning educational film is shown in the villages, the intended audience should be adults, not children. The important teaching points and questions could be (i) What is family planning? (ii) What are different methods of family planning? What are the advantages of family planning? How to get the family planning operations and where to get? What are the schemes / incentives of family planning given by the Government etc.

3.7.2 Video Projector

A video projector is also known as a *Digital Projector*, now popular for many applications for extension and development. All video projectors use a very bright light to project the image. Projected image size is important because the total amount of light does not change - as size increases, brightness decreases. They are widely used with, or without a connection to an interactive white board for presentations, training, demonstrations, etc. CRT projector that uses cathode ray tubes is the oldest system still in regular use, but falling out of favour largely because of the bulky cabinet. An LCD projector using LCD light gates is the simplest system, making it one of the most common and affordable, currently.

3.7.3 Interactive White Board

An interactive white board is a large interactive display that connects to a computer and projector. A projector projects the computer's desktop onto the board's surface, where users control the computer using a pen, finger, or other device. The board is typically mounted to a wall, or on a floor stand.

Purpose

- It is a replacement for a whiteboard, flipchart, or video, or, other media system, such as a DVD player and TV combination.
- Can interact with online information from anywhere.
- Captures notes written on the whiteboard for later distribution.
- Some interactive whiteboards allow recording the instruction as digital video files for review – a very effective instructional strategy for learners who benefit from repetition, for those who need to see the material presented again, those who are absent, for struggling learners, and, for future review.
- With its integrated audience response system, presenters can get feedback.
- Helps to teach abstract, difficult concepts and complex ideas – visual tools help learners concentrate for longer and understand more fully.
- Technology has the capability of bringing lessons to life and making the lessons much more enjoyable for the learner.

Limitations

- Can be useful in the classroom situation with advanced facilities, but not under field conditions.
- Permanent markers, for example, can create problems on some interactive whiteboard surfaces. (Punctures, dents and other damage to surfaces are a risk, but do not typically occur in the normal course of classroom use).

- The technology was initially welcomed by learners, however, it seems that any boost in their motivation is short-lived.
- It is possible that learners focus more on the new technology rather than on what they should be learning.
- In lower ability groups, it could actually slow the pace of learning of the whole class, as individual learners take turns at the board.

3.7.4 Multimedia and Multiple Media

Multimedia is a combination of more than one media, but it could include several forms of media - audio, text, still images, animation, graphics, video, and film. The use of more than one aid is increasingly common. Even earlier, multiple media presentations were assembled with the available traditional audio visual aids resources.

Example: Combinations of overhead projectors, flipcharts and slide projectors.

Multimedia in a more current context generally implies a computer based media. The term, computer based multimedia, has become very popular. Interactive video is one form of computer based multimedia. With computer based multimedia, information access is simplified. Sophisticated databases can organize vast amounts of information which can be quickly sorted, searched, found, and cross indexed.

Example: Through information kiosks, a lot of developmental information is being accessed in remote and rural areas.

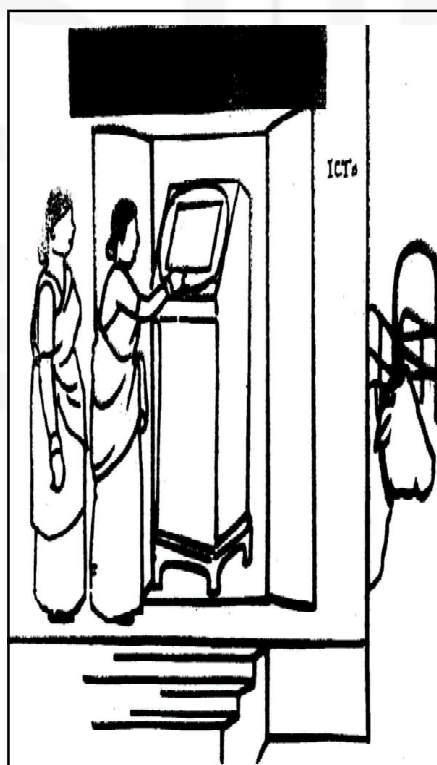


Fig. 3.12: Interactive Information Kiosk
(Source: RAGACOVAS, Puducherry)



Fig. 3.13 : A Rural Women Livestock Farmer with Interactive Information Kiosk
(Source: RAGACOVAS, Puducherry)

The advantage of using multiple media is that it can greatly increase the impact of presentation. It can also lead to a confused presentation, if not planned very carefully. The best advice is to use multiple media only if needed.

Activity 5: Visit the nearest development department and collect the titles and educational objectives of films, multimedia if any.

.....

.....

.....

.....

Check Your Progress 6

Note: a) Use the spaces given below for your answers.

b) Check your answers with those given at the end of the unit.

1) Write few examples of audio visual aids.

.....

.....

.....

.....

.....

2) Write what you mean by multimedia and provide an example.

.....

.....

.....

.....

.....

3.8 FACTORS THAT INFLUENCE THE SELECTION OF AUDIO VISUAL AIDS

Audio Visual aids will supplement the extension and development worker but cannot replace them. All aids cannot be used for all occasions, but for every occasion, there are aids which should be carefully selected and properly used. No single rule-of-thumb can be given for the selection and use of various audio visual aids to ensure effectiveness in all situations. In order to get the most effective results, the extension worker should:

- select the appropriate aids
- have a suitable combination of the selected aids
- use them in proper sequence.

Extension Worker vs Effectiveness of AV Aids

The extension worker and audio visual aids are considered as '1' and '0' and if they are properly associated as '1' followed by '0' (10), the effectiveness of extension worker increases 10 – fold. If they are improperly associated like '0' followed by '1' (01), then, there is no effect.

Audio visual aids are used singly, or, in combination, taking into consideration the following factors

Nature of Audience: Printed media are for literate people, whereas exhibits, pictures and symbols are for less literate people.

Size of Audience: A video show or white board cannot be used effectively when the number of participants exceeds 30; leaflets, bulletins, or handouts can be used for a single reader at a time, while a public address system, or messages *via* the internet can be used for large audiences.

Teaching Objective / Expected Nature of Change: Select the audio visual aids based on the objective of extension teaching, i.e., to bring about a change in

- thinking or knowledge?
- attitude or feeling?
- actions or skill?

Example : if you want merely to inform, or, to influence a large number of people slightly, use mass media such as radio or television.

Nature of Subject Matter: where the new practice is simple, or familiar (i.e., similar to those already being followed) a news article, radio message, or, circular letter will be effective, whereas complex, or, unfamiliar practices will require audio visual aids.

Availability of Aids: media such as newspapers, telephones, radio, etc., will also have a direct bearing on the extent to which these methods can be used.

Relative Cost: effective aids need not be necessarily costly. The amount expended on audio visual aids, in relation to the extent of effectiveness, is also an important consideration in their selection and use.

Extension Worker's Familiarity: familiarity of the extension worker with the use of audio visual aids, skill in selection, preparation, and use of aids will also influence the selection and use of the aids.

Questions for Evaluation of Audio Visual Aids

- Do the aids give a true picture of the idea they present?
- Do they contribute meaningful content to the topic under study?
- Is the aid appropriate for the age, intelligence, and experience of the learner?
- Is the physical condition of the aid satisfactory?
- Do they make the learners better thinkers, critical minded?
- Is the material worth the time and effort involved?

3.8.1 Audio Visual Aids for Different Extension Teaching Methods

The extension and development worker's main job is to communicate information to people. How well they do their job is indicated not by the number of people

they reach, but by the amount of change they produce in those they reach. From the discussion presented in Unit 2 on 'Extension Teaching Methods', we understood that most effective extension work can be done by the individual contact method. We all know that the personal approach is an effective way of solving problems, since the solution can be clearly planned to meet the needs of individuals. However, urgent development needs in different sectors in rural and urban areas demand that extension workers reach and influence many more people than can possibly be reached by the individual contacts. Many kinds of developmental problems can be solved well in a group situation, too. Group methods bring together a number of persons with common problems and suggest solution. Personal and group methods cannot reach everyone who wants and needs information. So, mass methods must be used to reach a large number of people quickly. Audio visual aids have a vital place in each of these three methods.

Audio Visuals in Individual Contact Methods: models, specimens, mock-ups, objects, animation pictures, etc., work well in individual contacts

Audio Visuals in Group Contact Methods: chalk board, flannel graphs, flash cards, motion pictures, film strips, overhead projector, etc., can be used well in group methods.

Audio Visuals in Mass Contact Methods: television, radio, public address system, all printed publications, photographs on bulletin board, posters, etc., can be used well in mass methods.

Combination of Aids

Dear learner, from the discussion presented in this unit it is clear that when a larger number of sensory organs are engaged in the learning process, the greater will be its effectiveness. Hence, more than one form of aids will have more influence on learners. Extension work plans must include aids that enable them to *see*, *hear* and *do the thing* to be learned. The use of various aids needs to be arranged in proper sequence to get effective results in the teaching-learning process. For instance, a personal contact is made through a telephone. The meeting is advertised by circular letters. A news story is written on the results and is broadcast over the radio. Pictures are taken and a slide story is shown at a meeting. One aid helps another, and many of them are used in combination and sequence to repeat the story.

Activity 6: Visit your nearby development department and enquire about the different combinations of audio visual aids that they use in their work. Write your observations.

.....

.....

.....

.....

.....

.....

.....

Check Your Progress 7

Note: a) Use the spaces given below for your answers.

b) Check your answers with those given at the end of the unit.

1) Write the audio visual aids useful in the following teaching methods.

- i) Individual contact method :
- ii) Group contact method :
- iii) Mass contact method :

2) Write the factors to be considered while selecting audio visual aids.

.....

.....

.....

.....

.....

3.9 LET US SUM UP

In the preceding pages, a wide variety of audio visual aids and their use in extension and development work were discussed. From this discussion, we understood that the preparation and use of audio visual aids for extension teaching is not an easy way, but it does make learning more effective, interesting and permanent. The forgoing discussion, when properly understood and applied by you, along with suitable teaching methods, should take your learners through the steps in teaching–learning process. In this unit, we started by looking at the meaning, functions, and limitations of audio visual aids and understood that they will supplement the extension and development worker, but cannot replace the development worker. Later, we classified and discussed important audio visual aids along with their preparation, merits, and limitations. At the end, we discussed the factors influencing the selection of aids, and aids suitable for different extension teaching methods. Overall, from this discussion, we realized that all aids cannot be used for all occasions, but for every occasion, there are aids which may be carefully selected and properly used.

3.10 KEYWORDS

- Audio Aids** : instructional devices through which message can only be heard.
- Visual Aids** : instructional devices through which message can only be seen.
- Audio Visual Aids** : instructional devices in which the message can be heard and seen simultaneously.
- Non projected Aids** : visual instructional devices which are simply presented without any projection equipment.
- Projected Aids** : visual instructional devices which are projected and magnified by focusing light.

Display Aids	: visual aids which are spread before the audience for viewing, who get the message by looking at them.
Presentation Aids	: visuals aids, presented or projected before the audience for viewing, which explain, or present the message of the visuals, so that the audience understands of them.
Chalkboard/ Blackboard	: probably the simplest, cheapest, most convenient, and widely used non projected visual aid in extension teaching.
White Board	: modern class rooms are equipped with white boards which are also called as marker boards, or multi-purpose boards.
Bulletin Board	: a board for displaying messages.
Flannel Board	: a visual aid in which messages are written or drawn on thick paper and presented step-by-step by the extension agent to the audience and are synchronized with the talk.
Flash Cards	: brief visual messages on poster board cards flashed (turned over at short intervals) before the audience to emphasize important points in a presentation.
Poster	: a printed message displayed in a public place with the purpose of creating awareness amongst the people.
Charts	: a symbolized visual aid with pictures of relationships and changes used to tabulate a large mass of information, or to show a progression.
Multimedia	: a combination of more than one media, but it could include several forms of media and audio, text, still images, animation, graphics, video, and film.

3.11 REFERENCES AND SELECTED READINGS

The following resources were used in writing this unit.

Dahama, O.P. and Bhatnagar, O.P. (2007). Education and Communication for Development. Oxford & IBH Publishing Co.Pvt,Ltd., New Delhi.

GFRAS. (2017). The New Extensionist Learning Kit. Thirteen Learning Modules for Extension Professionals. Lausanne, Switzerland, Global Forum for Rural Advisory Services - GFRAS.

Leagans, J.P. (1961). Extension Teaching Methods. In: Extension Education in Community Development, Directorate of Extension, Ministry of Food and Agriculture, Government of India, New Delhi.

Mathialagan, P. (2007). Textbook of Animal Husbandry and Livestock Extension, International Book Distributing Co, Lucknow.

Reddy, Y.N. (1998). Audio Visual Aids in Teaching Training and Extension. Haritha Publishing House, Hyderabad.

Suvedi M., and Kaplowitz M.D. (2016). Process Skills and Competency Tools – What Every Extension Worker Should Know – Core Competency Handbook. Urbana, IL, USAID-MEAS.

3.12 CHECK YOUR PROGRESS - POSSIBLE ANSWERS

Check Your Progress 1

- 1) Audio visual aids are instructional devices with which the messages can be heard and seen simultaneously. *Examples:* video film, documentary film, etc.
- 2) The functions of audio visual aids include: helps to convey meaning clearly; capture audience attention and arouse their interest; increase the correctness, clarity, and effectiveness of an idea and skills being transferred; helps to sustain the interest of the learners, etc.
- 3) The limitations of AV aids include: learners may sometimes form distorted impressions unless audio visual aids are supplemented with required explanation; temptation for the extension worker to narrow down his teaching to only a few big ideas, not giving the complete picture of a subject, and; possible risk of 'spectatorism' instead of the attitude of thoughtful enquiry.

Check Your Progress 2

- 1) The three ways to classify audio visual aids are according to evolution, sense involved, and projection.
- 2) (i) Audio aids: radio, tape recorder (ii) visual aids: posters, flashcards, charts (iii) audio visual aids: television, video (iv) Non projected aids: black board, chart (v) projected aids : overhead projector, slides

Check Your Progress 3

- 1) The advantages of audio aids include: recorded, so that it can be used again and again; flexible; editing and duplication is easy; inexpensive; and, readily available.

Check Your Progress 4

- 1) Non projected visual aids are those aids which are directly used as they are without projection.
- 2) The advantages of non projected visual aids are : abundant and easily obtainable; very useful in places where there is no electricity, and in low budget situations; not much artistic ability on part of extension workers is required; useful in small group situations; and, many non projected aids can be converted into projected aids.

- 3) While preparing a poster consider: promotion of single idea or message; ABC principle - attractive, brevity and clarity; ability to attract attention; use simple colours – not more than three, and; must be large enough to be seen easily.
- 4) Different types of charts are bar, pie, tabular, tree, flow, pictorial, overlay, flip, strip tease, pull, and window charts.

Check Your Progress 5

- 1) Any visual aid which is used for magnification of an image on a screen in the dark, or in semi-dark conditions can be called a projected visual aid.
- 2) Different methods of projection includes: direct projection - slides and film projectors; indirect projection – overhead projector ; and, reflected projection – opaque projector, epidioscope.
- 3) In overhead projection, the rays of light are converged by a lens and reflected by a mirror held at an angle on the screen at the back.

Check Your Progress 6

- 1) Motion pictures, video, interactive whiteboard, and multimedia are a few examples of AV aids.
- 2) Multimedia is a combination of more than one media, but it could include several forms of media-audio, text, still images, animation, graphics, video / film. *Examples:* combinations of overhead projectors, flipcharts and slide projectors. In recent years, the terms computer based multimedia, have become very popular. Interactive video is one form of computer based multimedia.

Check Your Progress 7

- 1) *Individual Contact Methods:* models, specimens, mock-ups, objects, animation pictures; *Group Contact Methods:* chalk board, flannel graphs, flash cards, overhead projector; *Mass Contact Methods:* television, radio, public address system, all printed publications.
- 2) The factors to be considered include: The nature and size of audience; teaching objective; nature of subject matter; availability and relative cost of aids, and; extension worker's familiarity with aids.

Notes



Notes



Notes



MDV-108: DEVELOPMENT COMMUNICATION AND EXTENSION

Block / Unit No.	Block / Unit Name
1.	EXTENSION EDUCATION
1.	Extension Education -An Overview
2.	Extension Education – A Global Perspective
3.	Private and Corporate Extension Services
2.	EXTENSION TEACHING METHODS AND AUDIO-VISUAL AIDS
1.	Teaching-Learning Process
2.	Extension Teaching Methods
3.	Audio-Visual Aids
3.	COMMUNICATION IN EXTENSION AND DEVELOPMENT
1.	Communication : An Overview
2.	Communication Channels
3.	Theories and Models of Communication
4.	ICT FOR DEVELOPMENT
1.	ICTS for Development – An Overview
2.	E- Governance in Rural and Urban Development
5.	DIFFUSION OF INNOVATIONS FOR DEVELOPMENT
1.	Diffusion of Innovation : An Overview
2.	Innovation Processes for Development
6.	INNOVATION, INNOVATIVENESS AND ADOPTER CATEGORIES
1.	Attributes of Innovation
2.	Innovativeness and Adopter Categories
3.	Opinion Leaders and Diffusion Networks
4.	Consequences of Innovations

MPDD/IGNOU/P.O. 1K/February, 2019

ISBN : 978-93-88498-73-9