

UNIT-5

COMMUNICATION AND EXTENSION TEACHING METHODS

Communication and its functions. Basic concepts: communication fidelity, communication gap, time lag in communication, empathy, homophily and heterophily, propaganda, publicity, persuasion and development communication. Types of communication: Intrapersonal, interpersonal, verbal, non-verbal, vertical, horizontal, organizational communication etc. Elements of communication: Communicator, message, channel, treatment of message, audience, and audience response (feedback). Barriers of communication. Individual contact methods: Farm and home visit, farmer's call, personal letter, adaptive or mini-kit trial, farm clinic etc. Group contact methods: Result demonstration, method demonstration, group meeting, training, field day or farmers' day, study tour etc. Mass contact methods: Farm publications (leaflet, folder, pamphlet, booklet, bulletin, farm magazine, newsletter etc.), mass meeting, campaign, exhibition, newspaper, radio, television, mobile short message service. Selection and use of extension teaching methods.

Communication:

- The most important challenge in Communication of livestock technologies is to find out ways and means to convey the messages to the livestock farmers in an effective manner which enable them to take appropriate decisions on adoption of the technologies. To meet this challenge, it is important to understand the communication process, audio visual aids and their usage for effective communication. The word communication originated from the Latin word "*Communis*" which means common.
- Communication is defined as " the process of sending and receiving messages through channels which establishes common meanings between a source and a receiver."(van den ban and Hawkins, 1996).
- Communication is a process by which two or more people exchange ideas, facts, feelings, or impressions in ways that each gains a common understanding of meaning, intent and use of message. -Leagans (1961)

Communication functions :The purpose of communication are to influence - to affect with intent by creating comprehension, understands and perceived use of the message. To fulfill such purpose, the approaches used could be informative, persuasive, entertaining or a combination of the same.

Basic concepts:

Communication Fidelity: Faithful performance of communication process by all its elements. Communicator, message, channel and receiver

Communication gap: The difference between what the sender wants to convey and the receiver understands is communication gap.

Time lag in communication: The period of time between two closely related events, phenomena, etc., as between stimulus and response or between cause and effect: a *time-lag* between the innovation and its adoption.

Empathy: Sensitivity is probably the most important factor in successful communication. Sensitivity in a nutshell is the ability to see things from the other person's point of view. Empathy, which means listening with understanding, is the modern expression for the same idea. People have feelings, opinions, fears and prejudices. Empathize with them and show concern and respect. People like to be appreciated and made to feel important.

Homophile: It is the tendency of individuals to associate and bond with similar others. "Homophile refers to the degree to which pairs of individuals who interact are similar with respect to certain attributes, such as beliefs, values, education, social status etc

Heterophile: "It is the degree to which pairs of individuals who interact are different with respect to certain attributes."

Propaganda: It is the spreading of information in support of a cause. It's not so important whether the information is true or false.

Publicity: Publicity can be defined as a form of public relations that provides news or information in the media. Publicity *is* also how a business or organization is perceived in the media.

Persuasion: Process aimed at changing a person's (or a group's) attitude or behavior toward some event, idea, object, or other person(s), by using written or spoken words to convey information, feelings, or reasoning, or a combination of them

Development communication: It refers to the use of communication to facilitate social development. Development communication techniques include information dissemination and education, behaviour change, social marketing, social mobilization, media advocacy, *communication* for social change and community participation.

Types of communication: To understand the relationship between people and communication, we need to look at that relationship from at least four different points of view, which, as already mentioned, Thayer (1968) referred four levels of analysis of human communication are (i) intrapersonal, (ii) interpersonal, (iii) organizational and (iv) inter-organizational communication.

1. Intrapersonal communication:

The interpersonal communication mainly occurs in face-to-face situations when the participants see, hear, and even touch the other person. Thus it gives immediate feedback. As a result, the participants in a communication encounter have a chance to structure and restructure communication based on the response of the other. So, intrapersonal communication is a co-function of the individual based on his immediate relevance from what is happening in his environment.

2. Interpersonal communication:

Interpersonal communication may be seen as a process of reciprocal regulation and control. Intercommunication is thus an attempt on the part of at least one of the participants to establish, maintain, exploit, or alter some relationship with the other, either by adjusting himself to the other or by trying to adjust the others to him in some way. Thus, immediate and ultimate consequences are resulted by the communication processes, which occur within each participant.

3. Organizational communication:

Organizational communication refers to all of those data-flows that subordinate the organization's communication and inter communication processes in some way. Organizational communication is a different form of communication as it happens in a highly ordered setting. It is believed to be a two-way communication wherein which ideas should travel to and fro, without distortion of bias. It determines the quality and climate of human relationships in an organization.

Communication requirements and roles of organization are fulfilled through minimum three systems.

1. The operational communication system:
2. The regulatory communication system:
3. The preservation and growth of communication system:

4. Inter-organizational communication:

Inter-organizational communication is an inter-organizational data-transportation linkage. Certainly communication occurs between people of more than one organization. Communication, with data generation, dissemination and the acquisition process of intercommunication, always occurs within some Individuals.

According to Direction of Communication:

1. On the basis of Direction of communication

i) Vertical Communication

- a) Downward communication

b). Upward communication.

ii) Horizontal or lateral communication

iii) Diagonal communication

2. On the basis of way of expression and body language.

a) Oral communication

b) Written communication

c) Non-verbal communication

3. On the basis of organizational structure

a) Formal Communication

b) Informal Communication

Vertical Communication: Upward and downward flow of messages constitutes vertical communication.

1. Downward Communications: Communications which flow from the superiors to subordinates are known as downward Communications. They include orders, rules instructions and policy directives etc. Their nature is directive. It would be impossible to manage an enterprise without downward Communications.

2. Upward Communications: Upward Communications are just reverse of the downward Communications. It flows from the sub-ordinates to their superiors. Such communications include reactions and suggestions from workers, their grievance etc. Contents of the upward Communication are reports, reactions, suggestions, statements and proposals prepared for the submission to the boss etc. Upward Communication is considered to be a main source of motivation in employees.

3. Lateral / Horizontal Communication: This type of communication refers to communication between various departments or units representing the same level, or people within the same or different departments, without having a superior – sub-ordinate relationship viz., peer groups, friends and trainees. It flows between persons at the same hierarchical level. The main object of this type of communication is to co-ordinate the efforts of different departments performing different but related activities. Such communications may be oral or written.

Diagonal Communication: In an organization, communication does not necessarily traverse along a stipulated path. While vertical and lateral forms for transmission of messages are important, there is yet another mode to be taken cognizance of, that is, the diagonal. In this type of communications, there is no direct path chalked out for information to travel. It could, at certain stages, take on the upward path, then a lateral direction and finally, move downward, or it could even skip certain stages.

This channel proves to be very affective as hierarchical bindings are done away with and communication flows irrespective of position or status. It also helps in building relationships and binding ties between the superior and the subordinate.

c) According to expression and body language

According to way of expression, and body language, the communication may be oral or written and Non- Verbal.

1. Oral or verbal communication: In oral communications both parties to the process of communication exchange their ideas through oral words either in face-to face communication or through any mechanical device such as telephone, etc. Meetings and conferences, lectures and interviews are other media of such communications.

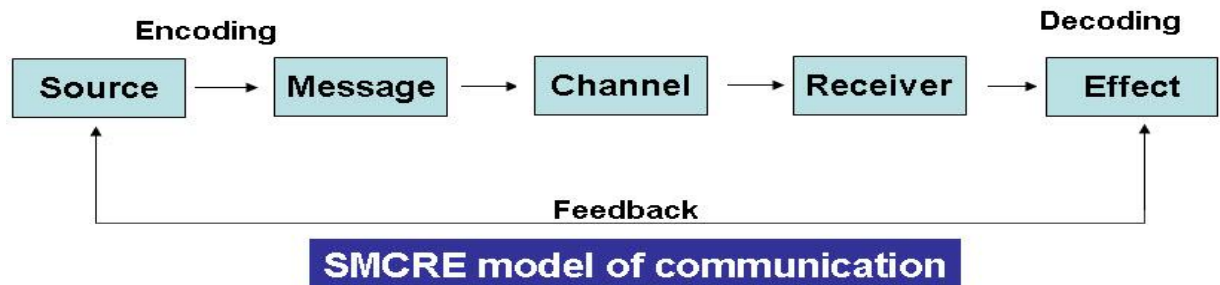
2. Written communication: They are communications on black and white. They include written words, graphs, diagrams, pictures etc. They may take the form of circulars, notes, manuals, reports, posters or memos etc.

3. Non-Verbal Communication: Non-Verbal Communication is an integral part of us and helps in communicating effectively. The way an individual positions himself, holds his hands, tilts his head, all transmit volumes about the individual.

- Through Communication individual shares his idea, information and knowledge with others. A Good communication is the one which conveys the receiver what exactly the communicator wants to convey. A good communication depends upon the Communicators' ability to organize the message with proper treatment in suitable channel keeping in view of the receiver's type, cognitive ability and experience.

Key Elements of Communication (SMCRE model of communication)

- There are several models to explain the concept of communication. **For easy understanding the SMCRE model is presented below: SMCRE stands for Source, Message, Channel, Receiver and Effect.**



Brief meanings of the key elements are as follows:

1. Source (Communicator/ transmitter) : is the person from whom the message originates.
Encoding: the idea is encoded into symbols to which meaning is attached.
2. Message: is the information or the meaning the communicator wants to convey.
3. Channel: is the media through which the communicator sends/conveys his message.
4. Receiver: is the person who receives the message or to whom the message is sent.
 - Decoding : decodes the message and attaches meaning to the symbols
5. Effect or Impact: is the end result of the communication. It is the change that has taken place with the receiver due to the communication.

Feedback: the source evaluates the impact of the message

Barriers to Communication

Problems with any one of the components of the communication model can become a barrier to communication. These barriers suggest opportunities for improving communication. According to Bovée and Thill (2000), communication barriers are usually due to a number of factors: (1) differences in perception and language, (2) Poor listening, (3) Emotional interference, (4) Cultural differences, (5) Physical distraction.

1 Differences in perception and language

Simply put, all of us have different mental images of the world or reality. Even if we experience the same thing, we may still think of it in different ways. We remember details of an experience based on what we think are worth remembering. So a speaker and a listener may not be able to understand what one is talking about because both have different things in mind. Language, too, is arbitrary. The words that we use may mean differently to different people

2 Poor listening

Having ears of our own does not necessarily mean we are good listeners. Listening is a skill that needs harnessing. Sometimes, it is a matter of attitude; we are not just interested in what people say because we may be more concerned with the way everyone looks. *Focus* on the message and the *sincerity* to understand what another person is saying are crucial elements in good listening.

3 Emotional interference

One's state of mind and psych has direct effect on how he/she communicate effectively and also one's ability to decode or understands and relate to a message being communicated. Emotional and sentimental state of mind such as happiness, madness, excitement, agitation, nervousness, or fearfulness constitutes critical barriers to engaging in effective

communication. Emotions affect the shape of communication. It is hard to be able to analyse issues objectively when you are very emotional. You may not be able to think more realistically and truthfully about the content of the message being sent or received.

4 Cultural differences

Nationality, age, education, social status, economic position, and religion are just some of the sources of cultural differences. If you share very little life experience with your co-communicator, successful communication may be difficult to achieve. The same difficulty may be experienced in the workplace: even the sight of your boss might create a certain distance that will make communication an agonizing experience. Much worse is when you do not know how to deal with the boss; this is because different cultures deal with power relations differently.

5 Physical distraction

Of course, everything around may be cause for some distraction: noise coming from vehicles, faulty phone connection, unclear photocopy, loud music, poor lighting, and health problems, among others.. They may result in loss of concentration and failure to understand what is being communicated by the other party. Physical distractions are the physical things that get in the way of communication. These physical distractions are common on farms. If the phone rings, the tendency is to answer it even if the caller is interrupting a very important or even delicate conversation.

Two people talking facing each other without a desk or truck-door between them have a much more open and personal sense of communication. Uncomfortable meeting places may include a place on the farm that is too hot or too cold. Another example is a meeting room with uncomfortable chairs that soon cause people to want to stand even if it means cutting short the discussion. Noise is a physical distraction simply because it is hard to concentrate on a conversation if hearing is difficult.

Other factors that also present barrier to effective communication include:

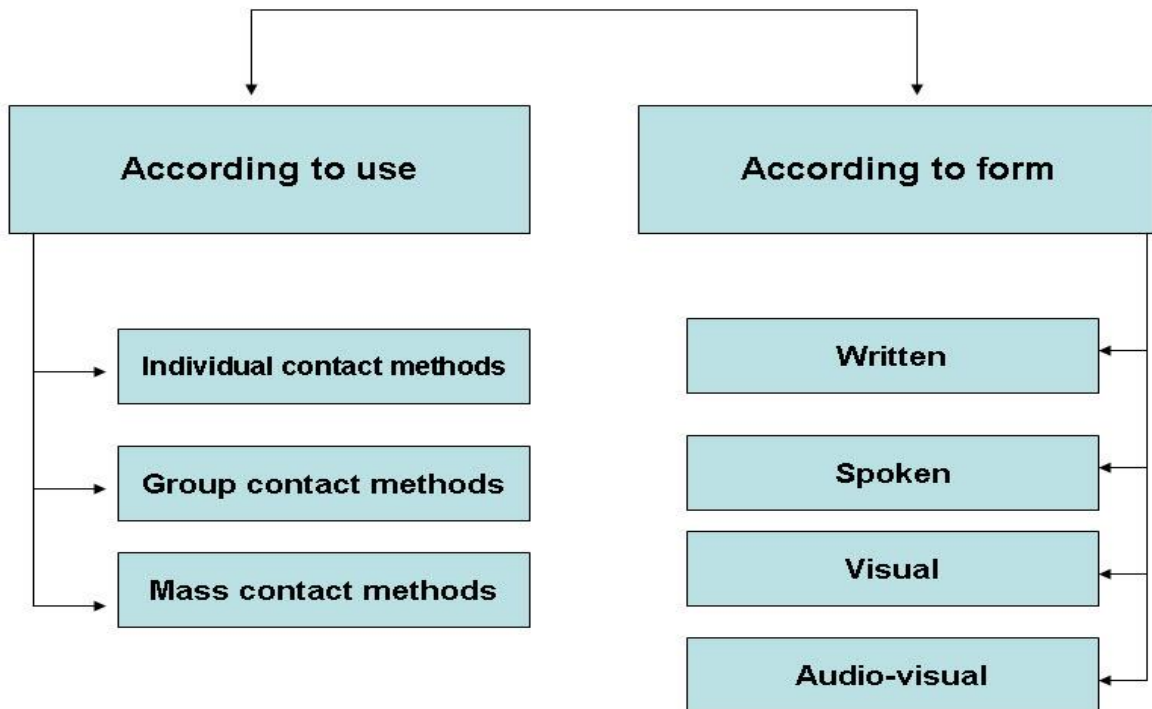
1. Muddled messages
2. Stereotyping
3. Wrong channel
4. Language
5. Lack of feedback
6. Poor listening skills
7. Interruptions

Functions of extension methods

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

Classification of extension methods

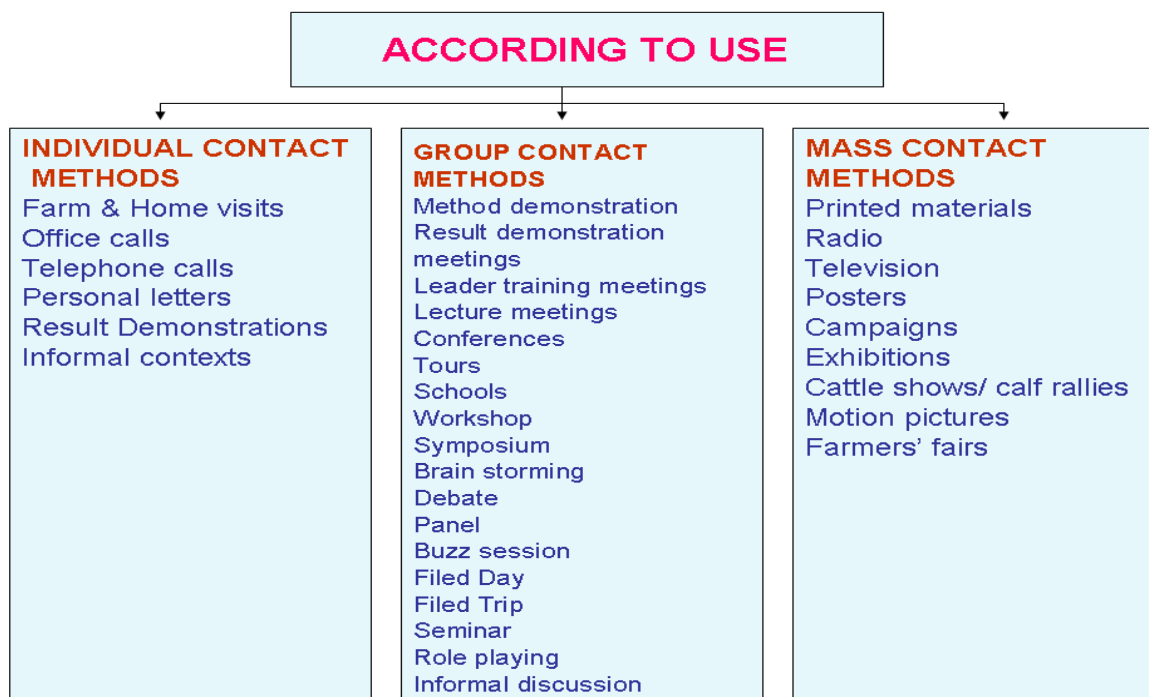
- Teaching methods may be defined as the devices used to create situations in which communication can take place between the instructor and the learner. An understanding of different Extension Teaching methods help the teacher to select an appropriate method which suits his subject matter to be delivered and the type of audience involved in the learning process. It is however, understandable that every method has certain advantages and disadvantages and there is no one single method which suits all the situations.
- Research indicates that aids used in combinations are always better than anyone type of aid used alone. The familiar classification of extension teaching methods and the common methods used indifferent contexts in livestock development are described below:



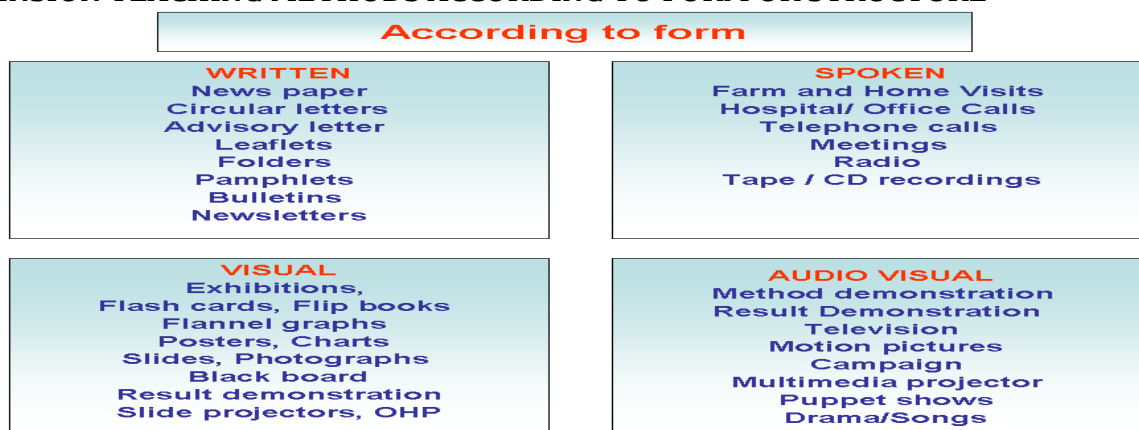
Audio-visual aids

- Audio Visual aids are devices used to create effective learning situations
- Audio visual aids are classified into audio, visual and audio-visual aids
- Audio aid is an instructional device in which the message can be heard but not seen.
- Visual aid is an instructional device in which the message can be seen but not heard.
- Audio-visual aid is an instructional device in which the message can be heard as well as seen.
- The audiovisual aids can also be classified into two types:
 - *Display type*: Posters, Bulletin Boards, Models, Exhibits etc.,
 - *Presentation type*: Flash cards, Pull charts, strip tease charts, slides and film strips etc., with running commentary.

EXTENSION TEACHING METHODS ACCORDING TO USE



EXTENSION TEACHING METHODS ACCORDING TO FORM OR STRUCTURE



Role of Audio-visual Aids in Technology Communication

- The ideas or new technologies are transferred or communicated by the extension workers by spoken word or the picture word or a combination of both. They establish direct contact with the farmers in person, in group or through indirect media.
- For better communication of ideas or technologies extension workers have to use the combinations of audio-visual aids as visual and auditory senses together aids a faster learning.

Extension Methods and Aids commonly used in Livestock Development

S.No	Context/method	Teaching aids
1	Hospital/Dispensary calls	Individual interviews Posters Leaflets/folders or other printed media Flip books ICTs
2	Farm visit/Home visit/ House calls	Individual interviews Leaflets/folders
3	Village seminars (self help groups, cooperative societies, Banks, other development departments)	Lecture Flip books/flash cards Panels/exhibitions Leaflets/folders
4	Demonstrations	Leaflets/folders/booklets
5	Campaigns	Different methods Radio, TV, PA systems, Megaphone, Notice bits Exhibitions Examination of dung sample (deworming campaign) Leaflets
6	Training on scientific livestock rearing	Chalkboard Video Overhead projector Multimedia projector, Training manual, Booklets/pamphlets, Flip books, Feed back cards
7	Group meetings	PRA/RRA for need analysis Chalk boards

SELECTION AND USE OF DIFFERENT EXTENSION TEACHING METHODS

INDIVIDUAL CONTACT METHODS

1 Farm and home visit

- It is direct contact by the extension worker with the farmer or the members of his family at his home or on his farm for a specific purpose.

- This is used,
 - To discuss problems of individuals or villagers.
 - To find out problems which he is not aware.
 - To teach skills
 - To obtain or give information
 - To gain confidence of the farmers
 - Eg. Cattle shed improvement



2 Farmers call or office call

- It is a call made by a farmer on the extension worker at his office for obtaining information or getting assistance or for developing acquaintance with him.
 - To promote close contact with farmer
 - To build up interest of individuals
 - To discuss problems in greater details
 - To arrange supplies and services.
 - To bring about contact between farmers and other agencies.
 - Eg. Starting of poultry farm, construction of cattle sheds.

3 Personal letters

- It is a personal and individual letter written by the extension worker to a farmer in connection with the extension work.
 - To answer enquiries
 - To seek the farmers co operation
 - Eg. To inform about the vaccination time and date.

GROUP CONTACT METHOD:

1 Result demonstration

- It is a method of teaching, design to show the value or worth of the improved practice employed in the field. The best type of demonstration is the comparison of two situations in which they differ only in one variable. The possible difference in the results can easily be attributed to the effect of that one variable. It requires a substantial period of time.
- eg. Effect of two types of cattle feed (existing and new feed) on milk production.
- Purpose
 - To show the utility and feasibility/worth of a practice / technology.
 - To establish the conviction on the part of the farmer.
- Principles underlying in this method
 - Seeing is believing
 - Milk yield of a cow 50 lit/day.
 - Better cattle feed etc.

2 METHOD DEMONSTRATION

- It is a relatively short term demonstrations given before a group to show how to carry out an entirely new practice or an old practice in a better way.
- It is not concerned with proving the worth of the practice but how to do something. It teaches the skill.
- Purposes
 - To acquire a skill or to improve an old skill.

- To do more efficiently.
- To give confidence.
- To save time, labour and annoyances.
- Examples
 - How to prepare khoya?
 - How to drench medicine? and
 - How to milk a cow by using full hand method?

3 Lecture

It is extensively used to present authoritative or technical information to develop background and appreciation and to integrate ideas. It is one way communication. The range of subjects that can be covered by this method is unlimited but the speaker at a given meeting presents a specific topic to a particular audience.



4 Debate

The common pattern is to have two teams. One representing the affirmative and the other the negative side of the question. Usually there are two speakers for each side. Each speaker is allowed a definite amount of time to make his speech. Debate involves two way communication.



5 Symposium

This is a short series of lecture usually by two to five speakers. Each one speak for definite amount of time and present s a different phase or subdivision of a general topic. Advantage of symposium over lecture is that two or more experts present different phases of the topic.



6 Forum

It is a discussion period that may follow either lecture, symposium or panel. It consists of question period in which the members of the audience may ask questions or make brief statement.



7 Buzz session

When there is limited time for discussion the large group may be divided into smaller units for short period. This is called “Buzz session” or “Buddle system or Philips 66”. After the discussion the secretaries of each small group will report the findings or questions to the entire audience when they are reassembled.



8 Brain storming (Click here for video...)

It is a type of small group of interaction designed to encourage the free introduction of idea on an unrestricted basis and without any limitations or feasibility. At a later period all the contributions will be sorted out and evaluated.



9 Workshop

It is essentially a long meeting from one day to several weeks. There must be planning session where all are involved in the beginning. There must be considerable time for work sessions. There must be summarizing and evaluation session at the close. As the name implies, it must result in an output (a report, a publication, a visual or any other material objects) at the end of the workshop.



10 Seminar

First the leader introduces the topic to be discussed. Members of the audience discuss the subject to which ready answers are not available. It may have two or more plenary sessions.



11 Conference

Pooling of experience and opinions among a group of people who have special qualifications in an area.

12 Institute

Consist of a series of meetings and lectures. They are a source of new information and new ideas.

MASS CONTACT METHODS

- In addition to the personnel contact methods and the face- to- face group teaching methods mass media enable extension workers to greatly increase their teaching efficiency.

1 Literatures / Publications

- Literature is write ups or written materials about an idea or a thing. In extension teaching literature plays an important role in the message dissemination process. Some of the common literature, that forms the part of extension teaching learning process are, leaflet, folders, pamphlets, bulletins, circular letters, newspapers, magazines, journals and newsletters. The literature serves the purpose of communicating precise and reliable scientific information in a simpler language easily understandable to a common man. A brief explanation of various literature used in extension are given below.
- 2 Leaflet:** A leaflet is a single sheet of printed matter. It is made to give accurate or specific information on a specific topic.
 - 3 Folder:** A single sheet of printed information in a folded form. There can be any number of folds in a folder. Like leaflet, folder is also primarily meant for dealing a specific topic.
 - 4 Pamphlet:** A pamphlet consists of 3 to 12 pages and deals with a specific topic in a detailed manner.
 - 5 Bulletin:** The number of pages for a bulletin ranges from 12 to 20. A bulletin is a written piece of information about a number of related topics presented in a detailed manner.
 - 6 Booklet:** When the number of pages exceeds 20 then it is called as a booklet. Usually a booklet deals with number of topics and the discussions are carried-out more elaborately with illustrations, pictures, figures and tables.
 - 7 Circular letters:** The letter sent to a group of people by passing it out from one man to other like a circular to pass on certain information or messages. Circular letters helps to maintain a continuous contact with farmers.
 - 8 Newspaper/ Newsletter/Magazine/ Journal:** Periodicals give a wide range of information about what is going on in the next door and around. It is mass media which can be of immense use in message dissemination. It helps to serve as a forum for extension activity in an area. It plays the role of communicating the information to people of various level and acquaint the public about programmes activities and progress made in an area.
 - 9 Circular letter:** It is a letter reproduced and sent to many people by the extension worker, to publicize an extension activity or to give timely information on farm and home problems.
 - 10 News articles (News stories):** News is any timely information that interest a number of persons. It is an accurate, unbiased account of the main facts of a current event that is of interest to the readers of the news papers.
 - 11 Radio:** It is a medium of mass communication, a tool for giving information and entertainment.
 - 12 Television:** It is one of the important mass media for dissemination of information in rural areas. It has an unique advantage over other mass media because it provides words with pictures and sound effects like movies. The messages will reach a large number of people at the same time
 - 13 Campaign:** It is an intense teaching activity undertaken at an opportune moment for a brief period; focusing attention in a concerted manner on a particular problem with a view to stimulate the widest possible interest in a community, block, geographical areas.
Ex: FMD Vaccination campaign.
 - 13 Media forums:** Are small organized groups of individuals who meet regularly to receive a mass media programme and discuss its contents.
 - The most media linked to the forum may be a radio as in India – charcha mandals, or radio phonics schools of Latin America –or television as in the Italian telescuola.
 - It is a combination of mass media inter-personal channels. Here the advantage of group psychology/pressure is used to motivate the individual.

RESULT DEMONSTRATION Vs METHOD DEMONSTRATION

S. No.	Contents	Result Demonstration	Method Demonstration
1	Purpose	To show locally the worth or value of a recommended practice.	To teach how to do a job involving skill
2	Conducted by	Farmer under the guidance of extension worker	Extension worker himself or local leader specially trained for the purpose.
3	For the benefit of	The demonstrator as well as other farmer	Persons present at the demonstration
4	Comparison	Essential	Not essential
5	Maintenance of records	Necessary	Not necessary
6	Time required	Substantial period	Relatively very little
7	Cost	Costly	Relatively cheap

Audio visual aids

- 1 **Model:** is essentially an imitation or replica of original, whether workable or not, and whether differing or not from original size. E.g. Cattle shed
- 2 **Specimens:** real objects taken out of their natural settings.
E.g. Specimens of intestinal worms/insects
- 3 **Objects:** Pieces of reality or sample.
E.g. Diseased part of a plant
- 4 **Exhibits:** A planned display of models, specimens, charts, posters etc presented to the public.
- 5 **Motion pictures:** These are really a series of still pictures on a long strip of film. Each picture is flapped and rapid succession of still pictures gives an illusion of movements.
- 6 **Recordings:** Sound can be recorded in 3 ways: Disc, tape and wire. Tape recorder is an audio equipment for recording sounds on magnetic tape by electro-magnetic process.
- 7 **Still pictures**
Non-projected
Photographs are exact visual recordings of things. Illustrations are non-photographic reconstructions of reality. E.g. drawings, paintings, etc.
Projected
- 8 **Slides:** It is a transparent picture (on glass or film) which is projected by focusing light through it from bulb.
- 9 **Film strips:** is a series of still photographs, diagrams, drawings or lettering on a strip of 35 mm films.

Other visual aids

- 1 **Chalk board:** It is most universally used of all the teaching aids. It is not itself a visual material but a vehicle for a variety of visual materials.
- 2 **Bulletin board:** It is a simple inexpensive device that can be placed either out-doors or in-doors. A soft board that will hold pins or tacks is most suitable for displaying photographs, drawings, notices, posters etc.

- 3 **Flannel graph:** It is a visual teaching aid. Pieces of flannel felt or sandpaper, having rough surfaces or nap will stick to another piece of flannel stretched on a firm flat surface called a flannel board. When you attach piece of sand paper to the back of pictures or photographs, letters etc. to be stuck on the flannel board it is called flannel graph.
- 4 **Flash cards:** Are series of illustrated cards which when flashed or presented in proper sequence tells a complete story.
- 5 **Posters:** Is an important visual aid. But like other aids the poster is never used alone. It must be always a part of a campaign or teaching programme.
- 6 **Charts:** Are visual symbols for summarizing, comparing, contrasting or performing other services in explaining subject matter. In other words, they are used more conveniently for diagrammatic presentation of facts and ideas.
 - Pull charts
 - Striptease charts
 - Flow or organization charts
 - Bar charts
 - Time (or Table) charts
 - Job charts
 - Tree charts or stream charts
 - Flap charts
 - Overlay charts
 - Pie charts (Pie graphs)
 - Line charts (Line graphs)
 - Pictorial graphs
- 7 **Dust and mud sketching:** In sand, dust, soil and mud in which highly elective, inexpensive and readily available visual materials can be drawn using a pointed stick, a sharp stone or one's own finger. It is possible to illustrate many different ideas such as layouts for villages, poultry sheds and equipment sheds.

List of audio visual aids currently in use

Aids getting replaced or becoming obsolete	Aids currently in use
Wall posters	Digital cut outs, banners, collapsible banners
Slide projector	Multi media projector
Black board	White marker board
16 mm film projector / film strips	Multi media projector
Epidiascope	Direct projector
SLR camera	Digital SLR camera
Radio	TV
VCP/ VCR	CD / DVD player
Telephone / land line	Mobile phone
Personal letters	E mails
Two dimensional pictures	Three dimensional pictures
Meetings/ discussions	Audio/ Video conferencing

CHOICE OF AUDIO VISUAL AIDS

- Audio-visual aids are just tools or aids or vehicle for transfer of ideas, technology or message.
- The success depends upon the selection of right type of audio-visual aids at the right way.
- There is no inherent magic in the visuals.
- They have to be used in support of a talk for highlighting the most salient feature in the talk to make the audience to understand and remember.
- They are only aids to verbal words of the communicator.
- Audio-visual aids are not necessary for each and every type of communication. For example, there are ideas simple enough that can be easily communicated through verbal words.
- Audio-visuals are therefore need to be used judiciously for subject matter that is beyond easy comprehension of the audience or out of their experience or abstract enough or complicated enough for their easy understanding.
- It is only then that audience will have a sustained interest for learning through audio-visual aids.
- While planning for the use of audio-visual aids the extension agent need to be selective in using the aids taking into consideration different factors like
 - the audience (age, sex, level of literacy, previous experience etc.)
 - availability and cost of equipments
 - familiarity of extension agent with the equipments
 - facilities required for use of the aids, subject matter etc.
 - above all it also depends upon the objective or purpose of the communication.

INFORMATION DELIVERY SYSTEM IN VETERINARY AND ANIMAL HUSBANDRY EXTENSION

INTRODUCTION

- In India agriculture as well as animal husbandry is a state subject and the main extension agency is the state Department of Agriculture (DoA)/Animal Husbandry(DoAH).
- All states have a separate DoAH. The Department of Agriculture and Co-operation of the central Ministry of Agriculture has a separate Division of Extension.
- Extension Division lays down major policy guidelines on extension matters and the Directorate of Extension implements specific programmes and activities.
- Currently a number of organisations are providing information /extension services. This include, the DoA and DoAH, State Agricultural / Veterinary Universities(SAUs); Krishi Vigyan Kendras (KVKs); non-governmental (voluntary) organisations (NGOs); agri-business companies (dealing with seed, fertiliser, pesticides, farm machinery); media firms (print and video), etc.

INFORMATION NEEDS OF LIVESTOCK FARMERS

- Due to changing face of livestock production, farmers have to make a number of complex decisions and they need timely information and the most relevant of them are as follows:
 - What technological options could be used profitably in his/her situation keeping in view the potential resource constraints in terms of land, capital, labour and knowledge?
 - How to manage the various technologies? (eg: how to make optimal use of new inputs in his farm?)
 - How and when to change his farming system? (eg diversifying from crop production to mixed farming or vegetable or animal production)
 - For which type of products, is there a good demand in the market?
 - What quality specifications / standards he should achieve to get good value for his produce and how to achieve?
 - How, when and whereto buy inputs and sell products?

- How to make decisions collectively on resource use and marketing?
- How to find quickly the most relevant and reliable knowledge and information?
- What are the feasible off-farm income generation options available for him and how far he could depend on them?
- To make good decisions, farmers need information from different sources and often need help to integrate them. Farmers are presently receiving information from extension mainly on technologies generated in research stations and passed on to extension.

FIRST LINE INFORMATION DELIVERY SYSTEMS

- The institutes of Indian Council of Agriculture Research (ICAR) and the State Veterinary / agricultural universities mainly constitute the information delivery system in respect of veterinary and animal husbandry extension in India.
- Through their extension centres and in association with line departments and private agencies these organisations provide information delivery to the needy farmers.
- They also utilize mass media channels in delivering the information.

LINE DEPARTMENTS

- The department of Animal Husbandry with its well built infrastructure throughout the state is the main source of information for livestock farmers in terms of livestock health and livestock production.
- The veterinary personnel of veterinary dispensaries, hospitals, sub-centres, farms, disease intelligence units are the main personalised sources of information to farmers.
- Through the implementation of the specific programmes also organised extension / information services are provided to the farmers. For example Milk Unions provide dairy related information to milk producers.

NGOs AND OTHER STAKEHOLDERS

- Voluntary Non Governmental Organisations (like BAIF, MSSRF, SEVA etc.) also play a major role in delivering veterinary and animal husbandry information specific to their area of operation.
- Their field staff who are in direct contact with the people are the immediate sources of information to farmers.

SOURCES OF INFORMATION

- There are several sources which can be tapped to get the information on animal husbandry. These sources include institutional sources like State Departments of Animal Husbandry, Veterinary Universities/ Animal science institutes of ICAR, Livestock research stations / farms, Milk federations/ unions, Training organizations like KVKs/ TTCs, Biological production units (Semen, vaccines etc.), Pharmaceutical companies, Veterinary medical representatives, Non Government Organisations, non-institutional sources like Veterinary medical shop keepers, Progressive livestock keepers, Mass media like radio, television, news paper, magazines, journals etc. The Field Veterinarian is the most credible source of information in the villages. The sources commonly available in the above categories are listed below

Institutional

- Scientists of SVUs
- Joint Director (AH)
- Dy. Director (AH)
- Asst. Director (AH)
- Vet. Asst. Surgeons
- Extension Officer of AH
- Veterinary personnel of Dairy co-operatives
- Private Veterinary Practitioners
- Livestock Inspectors
- VLW/Dairy secretary or personnel of input agencies
