Preparation and use of some selected low cost teaching aids:
Poster, Flash Cards, Charts and Graphs

PREPARATION OF POSTER

Poster: Poster is a placard displayed in public place with the purpose of creating awareness about new idea, practice or issue among the people. It is usually large piece of paper with 30 × 20 sizes which depicts a simple message for a large number of potential people.

Properties of a good poster:
   i.   It must be able to attract attention.
   ii.   It must convey the message quickly.
   iii. It must lead to action immediately.

Advantage:
   i.   Helps in making announcements.
   ii.   Facilitates display of ideas to the audience.
   iii. Quick communication of message to a large number of people.
   iv.   Facilitates motivating people.

Points to be considered in making a quality poster:
A quality poster should have the following characteristics:
   i.   Brevity   : Not more than 5 words should be used.
   ii.   Simplicity   : It should be compact with minimum number of individual units.
   iii. Idea   : Should be intellectual and original that as to attract and impress to the viewer.
   iv.   Layout   :   The letters should be simple, attractive, bold and visible from a distance.
   v.   Colour   : Bright and attractive colour should be used.

Steps of a poster preparation:
1. Planning:
   ▪ Decide on the theme of the poster and identify the key pint.
   ▪ Decide on the size of the poster, caption, illustration and colour to be used.
   ▪ Decide on the number of copies to be produced.
   ▪ Keep in mind the date by which the posters are to be made ready.

2. Preparation:
   ▪ Prepare a number of dummies, small but proportional to the actual size.
   ▪ Ensure a balance between words and picture. The picture should be bold and follow optical spacing of the letters.
   ▪ Select the best layout and make some sets of colour combinations. The picture and letters must make contrast with the background.
   ▪ Select the best colour combination.
   ▪ The design should be shown to other people before printing inorder to cheek whether it is easily understood.
   ▪ Consult with the press manager and decide on economic production of the prster.

The following factors should be taken into consideration while preparing a poster.

i.   **Lettering:** Almost all posters have some reading materials and consequently need lettering. Care should be taken so that lettering can be read easily.

ii. **Contrast:** As visual aid, posters need contrasts between the back ground board and illustration. The principle is that dark colour should be used on light back ground and light colour on dark back ground. Colours of nearly equal strength should never be used. Contrast is also necessary in colour combination. In a recent study of eligibility of the colour combination the following combinations were suggested.

   a) Black ink or paint on yellow paper or card Board
   b) Dark green   ink or paint   on white   paper or card Board
   c) Dark red   "   "   on white   "   "   "
   d) Dark blue   "   "   on white   "   "   "
   e) White   "   "   on dark blue   "   "   "
   f) Black   "   "   on white   "   "   "
   g) Yellow   "   "   on black   "   "   "
   h) White   "   "   on dark red   "   "   "
   i) White   "   "   on dark green "   "   "
   j) White   "   "   on black   "   "   "

iii. **Colour:** Poster may do a good job when made in black and white. It is necessary not only to have contrast in colour but also to have colour harmony. Of course, it must be admitted that colour taste differs with individuals- "some like it hot, some like it cold."

iv. **Design:** In case of an agricultural poster it is usually made up of both pictures and lettering, the picture should occupy more space than the lettering. If one makes approximately the same area to each, the visual aid will have an equally divided "cut into two look" which is disinteresting.

v.   **Size of Poster:** The standard size of the poster is 30 x 20 inches.

vi. **Table and materials required :** The following tools and materials are necessary for preparing a poster:
   a) Poster Paper
   b) Knife or scissor
   c) Coloured paints/pencils/--------
   d) Drawing board
   e) Measuring scales
   f) Eraser

3. Presentation:
   ▪   Paste the hand drowns posters in well lighted place, where the visitors are likely to assemble or pass through.

- For printed poster ensure timely dispatch. Timely display printed posters at prominent places. Put up a number of posters closely to produce mass effect.

4. Follow-up:
- Watch reaction of the audience.
- Ensure availability of inputs and services, commensurate with the message in the poster.

Limitations:
- Poster give only initial idea and can not furnish detail information.
- Productions of good poster are a technical job and require skill, time and money.
- Cannot be repeated. For each occasion a new poster to be made.

Uses:
- Hand drown posters may be used in training program, group meeting, farmers day etc.
- Painted posters may be used in large numbers in campaign, exhibition etc.

Preparation of Flash Cards

Meaning

Flash cards are the series of drawings or pictures or cartoons on cards that shown in sequence emphasize important points in a talk. Each individual card is "flashed" before the audience accompanied by the verbal commentary. The person, who wants to use them, holds them in hand and flashes the card one after another.

Purposes of Flash Cards

- To emphasize the main points of a talk
- To inspire and take people towards action
- To give exposure to the participant to have a special area of interest
- To produce dramatic effect on the audience in order to promote learning

Uses of Flash Cards

Flash cards are visual aids, which can be used to promote thought and generate discussion on a particular subject, particularly amongst small groups of farmers. These help to reinforce training process, quickly showing a card can help audience to make a relation between an idea and a lively image. These can be used in a number of ways:

- to promote discussion on a particular topic by showing an image e.g. healthy brinjal plant while discussing pest protection measure
- to help structure a discussion session by illustrating a process such as the uses of a village pond or different components of IPM
- a series of cards can be used to illustrate a story which includes information about a particular subject or raises important issues for discussion

Followings are some points that a facilitator/trainer needs to consider while using flash cards in a training and/or discussion session:

Ensuring seating arrangement: One should ensure a suitable seating arrangement so that whole group can see the cards clearly. Rectangular or circular seating arrangements are usually preferred.

Introducing the topic: One should introduce the topic at the beginning of presentation. S/he can explain the topic before starting display of the cards or while displaying the first card.

Displaying the cards: Extension agent should hold the cards in one hand in front of the body at a level, which everybody can see comfortably without straining. The cards can be held slightly to one side of the body to enable the facilitator to glance at the pictures. The cards should be stalked in order, as one card is finished it may be kept behind the others. S/he should proceed displaying the first card to the last in a sequence. To change the card to illustrate a new point, he can remove it and either lay it faces down on nearly table or slip it behind the set.

Explaining the points: Facilitator should try to explain the points that s/he intended to illustrate by displaying a card. Key points regarding the illustration can also be written on the back of each card to prompt discussion. Use of simple language may be convenient. To encourage the discussion group members can be asked questions about what they can see or whether there is anything new in the pictures.

Size of flash cards

The size of the cards can vary depending on the size of audience. For a small group (10-15 persons) 25 cm×30 cm cards can be used, whereas for a group of 30 to 50 persons, cards size can be 40 cm× 50 cm.

Number of Flash Cards

The number of flash cards should be such as will hold the interest of the audience to complete a topic. Numbers of cards are to be decided based on the topic and the number of discussion points. It is better to limit the number of flash cards from 6 to 10 for one talk.

Characteristics of Good Flash Cards

- drive a single idea with several interrelated and systematically arranged phases
- should tell the message at a glance
- should be colorful and should attract attention
- should be carefully planned, brief in wording and simple in design
- should motivate the observer to action or to change his attitudes

Rules for Preparing Flash Cards

1. **Knowing audience:** One should try to know the audience to whom they are going to convey some idea through flash cards.
2. **Choosing subject matter:** One should choose the subject matter very carefully. Clear objectives are basic to any good presentation.
3. **Pick up the main points:** Write down all the important points which seem good for conveyance to the audience. Now sort out the essential points from these points.
4. **Draw a picture for each point:** For this we should make small drawings and should have one idea for each card.
5. **Show action in picture:** Make figures or pictures to show some action because static figures are not forceful and interesting.
6. **Make the illustrations big:** We should try to make illustrations as big as possible according to the number of people to whom we want to show them.
7. **Use color:** Color attracts and creates interest in human mind, so we should use color in pictures to make them attractive.
8. **Write the talking points:** Key points regarding the illustration can also be written on the back of each card to prompt discussion.
9. **Cards should be numbered:** Flash cards should be serially arranged to the subject matter and each card should be numbered. It is better to limit the number of flash cards from 6 to 10 for one talk.

Advantages

Flash cards are effective for a small group of audience as these:

- facilitate presentation of the talk as important points are already noted on the paper
- help in clarifying concepts
- help in showing the cumulative process
- produce dramatic effect on the audience
- help in summarizing the talk
- save time in presentation of a talk

Limitations

- Flash cards are not suitable for a large group and they require some preparation and practice.
- Sometime it is difficult to illustrate a complex subject matter by a series of cards.
- An individual should have prior knowledge and skills about the subject matter on which flash cards are to be prepared.

Differences between posters and flash cards

Criteria	Posters	Flash cards
1. Purpose	Creating awareness about a potent idea	Highlighting the important points in a talk
2. Illustration	In a single sheet of paper	In a series of paper cards
3. Nature	Self-explanatory	Need speaker or facilitator for explanation
4. Use	Both as teaching method and aid	Only as teaching aid
5. Message provided	For a large number of people	For a small group of people
6. Size	75 cm× 50 cm	25 cm × 30 cm for 10-15 people 40cm × 50 cm for 30-50 people

PREPRATION OF CHARTS AND GRAPHS

Charts and graphs are closely related. It's have a common usefulness in teaching by their ability to tell a story quickly with little explanation. Charts and graphs are relatively inexpensive, effective and usable in most situations. It's are among the more easily prepared visual-aids and can be used very effectively with nearly all individual, group and mass teaching methods. Its can be displayed or prepared for either opaque or transparent projection.

Charts:
Charts are composed of information compiled in tabular from that is primarily to shown sequence and relationships.

Use:
   • Charts can be used to present information in graphic, enjoy-to-understand way.

Example:
   • Steps in preparing a product for market
   • Lines of authority in an organization.

Charts are effective teaching aids because it's:-
        - make facts and figures clear and interesting
        - emphasize relationships
        - show size and placement of parts
        - show operational procedures

Charts should be:
        - with bold lettering
        - brief in wording
        - simple in design and lettering
        - colourful
        - large enough to be seen.

Graphs:
Graphs are diagrams or lines representing numerical quantities used for quick comparisons and contrast of statistical information.

Bar graphs:
        Bar graphs are composed of a series of horizontal or vertical measured bars spaced along a marked scale and it's represent data by bars of equal width. The numerical data may be lettered within the bar or outside of it. In bargraph, the bars are usually separated by space. If the graph contains a large number of items, the bars may be joined to save space. Bargraphs picture contain relative amounts such as production of wheat per acre with different fertilizer application. When comparisons are made, bars or parts of the bars are contrasted by cross hatching. This cross

hatching may be done with black permanent ink. Various designs of stripes, dot, circles and checks have largely replaced the inking process.
Make a bargraph by using the following data-

	Category	Percent of landless
Category- I	Household not owing any land	8.7
Category- II	Household with homestead land only	19.6
Category- III	Household and homestead land up to .50 acre	28.2
Category- IV	Household and homestead from .51-1.0 acre	12

Pie graphs:

Pie graphs are made in the form of a circle with the entire area divided into segments, each representing some part of the whole; It's always represent the whole amounts and their segments are shown as percentages of the whole.

The radices are drawn vertically and components are arranged in a clockwise direction in descending order of magnitude. The proportion of data is indicated by the number of degrees in each segment of the 360˚ circle.

Segments are usually shaded, cross-hatched or colored to improve contrast. Percentages are always shown on the various segments.

Pie graphs can be used to show use of crop-land, use of time, distribution of particular crops, and so on.

Example: Consider single, double and triple cropped area of a farm 30, 20, and 10 acre respectively. Prepare a pie graph.