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## UNIT 4 PARTICIPATORY METHODS

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### 4.1 INTRODUCTION

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In the previous unit, we discussed the meaning, importance, major benefits of participation, stakeholder's involvement in decision-making processes, major types of stakeholders and how to conduct stakeholder analysis. We also discussed that among the participatory methods, Rapid Rural Appraisal (RRA) and Participatory Rural Appraisal (PRA) are the most commonly used methods in CSR programme planning. In this unit, different PRA methods are discussed in detail for your understanding.

After studying this unit you should be able to:

- Explain material, time and site requirements for different PRA methods.
- Describe meaning, objectives and steps in conducting space, time and relation related PRA methods.

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### 4.2 CLASSIFICATION OF PRA METHODS

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PRA methods can be broadly classified into three categories namely:

- i. Space related / Spatial PRA methods

- a) Social map
  - b) Transect
  - c) Resource map
  - d) Mobility map
- ii. Time related PRA methods
- a) Time line
  - b) Trend analysis
  - c) Seasonal diagram
- iii. Relation related PRA methods
- a) Cause and effect diagram
  - b) Venn diagram

For conducting any PRA method, some locally available material, time and site selection are important. They are summarised in Box 4.1 for your comprehension.

**Box.4.1. Material, Time and Site Required for PRA Methods**

**Material :** For all the PRA methods the locally available material including stones, pebbles, seeds, leaves, twigs, matchboxes, thread, chalks, colour soils / powders and cards of different colours can be used.

**Time:** Time required for various PRA methods may vary between one to three hours depending on factors such as the subject of the exercise, size of the locality, the interest of the participants in the topic, details aimed etc.

**Site:** Site selection for drawing any PRA diagram should be based on : capacity to hold large number of people; centrally located convenient for all sections of society and ; suitability of the surface for the exercise.

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## **4.3 SPACE RELATED / SPATIAL PRA METHODS**

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### **4.3.1 Social Map**

Social map is made by local people which reflects their perceptions of the social dimensions of their reality with a high degree of authenticity. It seeks to explore the spatial dimensions by depicting habitation patterns, nature of housing and social infrastructure: roads, drainage systems, schools, drinking-water facilities, etc.

## Objectives

- i. Developing a comprehensive understanding of the physical and social aspects.
- ii. Collecting demographic and other required information household-wise.
- iii. Providing a forum of discussion in which to unravel the various aspects of social life
- iv. Serving as a guiding instrument during the process of planning, monitoring and evaluation.

## Information Elicited from the Social Map

Spatial distribution of castes, religions, community, social, economic, education, communication and other institutions, family information, leadership patterns, value systems, social interactions, cooperation, competition, conflict, assimilation and accommodation information, information, social norms, folkways, mores, social evils like dowry, alcoholism, child labour etc. can be elicited from social map for CSR programme planning and interventions.

## Steps in Social Mapping

- i. Fix the location and time with the local people / key informants ( KIs) and explain the purpose.
- ii. 'Hand over the stick to local people' - involve them actively with full faith and show it too.
- iii. Request them to draw the prominent physical features of their locality.
- iv. Leave it to them to use local as well as other materials as creatively as possible.
- v. Watch, listen to the discussions carefully and take notes.
- vi. Your role is limited to facilitation -intervene only when necessary.
- vii. Once the mapping is over, ask some people to identify their houses in the map.
- viii. Number the household wise details you are particularly interested in, like caste composition, school age children, etc. depending on the purpose of the exercise.
- ix. Triangulate the information generated with others in the locality.
- x. Copy the map onto paper immediately with all the details.

The major difference between social and resource maps is summarized in Box 4.2 for your understanding.

#### Box.4.2. Social Map Vs. Resource Map

While the social map focuses on habitation, community facilities, roads, temples, etc., the resource map focuses on the natural resources in the locality and depicts land, hills, rivers, fields, vegetation, etc. In certain though, a map could be a rich combination of the two (village map). This is quite often so in the case of areas having a dispersed settlement pattern. Of all the PRA methods, social mapping makes for the active involvement of the largest number of participants.

#### 4.3.2 Transect Walk

Transect walk is used to provide a cross-sectional representation of the different agro-ecological zones and their comparison against certain parameters including topography, land type, land usage, ownership, access, soil-type, soil fertility, vegetation, crops, problems, opportunities and solutions. Though natural resources remain the focus of any transect various social aspects for e.g., the caste and ethnic determinants of a settlement access and control and gender-related dimensions are captured in detail, depending upon the objectives of the exercise.

##### Objectives

- i. Appraisal of status, problems and potential of natural resources.
- ii. Verification of issues rose during other PRA exercises.
- iii. Planning CSR interventions and monitoring and evaluation of CSR interventions / projects.

##### Steps

- i. Locate a group of local people having some knowledge of the area.
- ii. Explain the purpose and involve them in identification of transect path.
- iii. Go along with the people at the prefixed time on the decided transect path. If the situation demands, make modifications in the path.
- iv. Carry the list of parameters and preferably the resource map for the walk.
- v. Observe the surroundings, make mental notes as well as detailed notes on the paper.
- vi. Ask questions to the local people accompanying you, listen to their discussions and encourage them to explain as you move.
- vii. If necessary, stop at certain locations for detailed discussions on the points emerging. It also gives you a breather and time to note down details.
- viii. Use transect walk to clarify issues emerging from social map, resource map and other methods.

- ix. Let the local people take the lead in drawing the transect diagram on the ground. Show the diagram to others in the locality to triangulate the details.
- x. You can also use details generated from other methods to triangulate the findings of transect. At the end draw it on a large sheet of paper.
- xi. Thank the participants for their active participation and time.

The major differences between transect, resource map and time line are summarized in Box 4.3 for your understanding.

#### **Box. 4.3: Transect Vs. Resource Map / Time Line**

The resource map provides a bird's-eye view of the locality with a focus on natural resources. A Transect, however, depicts a cross-sectional view of the different agro-ecological zones and provides a comparative assessment of the zones on different parameters. It is generally done after a resource map and therefore helps in triangulation. It also helps in taking forward the process of problem identification and planning for the development of the natural resources in the area. Transect differs from a time line, in that the focus here is geographical while the focus in the time line is on trends or changes over time on aspects related to natural resources. It is generally like a snapshot of the same transect at different points of time.

### **4.3.3 Resource Map**

Resource map is one of the most commonly used PRA methods next to social map. Resource map contains both natural and man-made resources. Transect walk is to be taken for observing the resources to be mapped in the resource map. Items for mapping include, natural resources such as land (irrigated, dry land, waste / fallow, rocky/gravelly, problematic), vegetation (pasture lands, fodder crops, fodder trees, cropping pattern etc.), water (source, adequacy, distribution over seasons, quality), climatic factors (rainfall, temperature, relative humidity, wind velocity, sunshine hours), livestock resources (species wise types), human resources (people in various occupation, labor skilled/unskilled etc.,) and man-made resources such as transport, communication channels, modern implements, supply and service organizations (hospital, banks, NGO and government organizations etc.). Thus a resource map reflects how communities view their own locality in terms of resources. The mapping process remains quite similar to that of a social map, but the focus is on resources.

#### **Objectives**

- i. Provide a focused spatial structure for discussion and analysis.
- ii. Create a common understanding of problems, looking at solutions, planning for action, monitoring and evaluation.

#### 4.3.4 Mobility Map

Mobility map is used to explore the movement pattern of an individual, a group, or the community. The focus is on where people go and for what. Other aspects, like the frequency of visits, distance, and the importance of the place visited, may also be studied and depicted. Mobility maps are generally not done in the beginning of PRA. They are done only after developing some rapport and identifying a group or individuals whose mobility pattern you are interested in studying.

Information elicited from the mobility map includes on places, purpose, direction, distance, mode, frequency, cost of transport etc.

##### Objectives

- i. Understanding the mobility pattern of local people where they go and for what purpose
- ii. Increasing gender sensitivity and awareness by using them for highlighting the difference between the mobility patterns of men and women.
- iii. Planning for CSR intervention and evaluation of the impact of certain CSR interventions.

##### Steps

- i. Select the person, group or community whose mobility pattern you are interested in understanding.
- ii. Explain the purpose of the exercise and initiate a discussion on the places they visit.
- iii. List down the name of the places on small pieces of paper in bold letters.
- iv. Encourage them to depict the places using symbols or visuals, particularly if the participants are non-literate.
- v. Draw a circle in the middle, representing the village/locality and ask them to locate the places they visit around the circle in such a way that they are properly represented with names.
- vi. Ask them to link the cards representing the places visited with the circle depicting their locality by lines.
- vii. The thickness of the lines could represent a particular feature, such as, the frequency of the visits.
- viii. Brainstorm and arrive at the aspects which could be represented including.
  - Purpose of visiting the places
  - Importance of the places visited
  - Distance of the places

- Mode of transport
  - Frequency of visits
  - Whether alone or with someone
- ix. Triangulate the diagram and other details generated during discussions
- x. Copy the diagram onto paper with all the details.

The major differences between mobility map, services and opportunity maps are summarized in Box 4.4 for your understanding.

**Box.4.4: Mobility Map Vs. Services & Opportunity Map**

The mobility map at times overlaps with the services and opportunities map. Both the maps look quite similar. In the mobility map, however, the focus is on the places which people visit and the reasons thereof, while in the services and opportunities map, the focus is on the services and opportunities. In a mobility map the village is at the centre and the other places visited are placed around it. The distance of other places from the centre may or may not be proportionate to the actual distance. In the services and opportunities map, the services and opportunities available in the village are also represented.

**Check Your Progress 1**

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

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

1. Write two examples for the following methods

a) Space related PRA methods

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b) Time related PRA methods

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c) Relation related PRA methods

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2. Write the usefulness of the following PRA tools

- a) Transect : .....
- b) Social map : .....
- c) Resource map : .....
- d) Mobility map : .....

3. Write the major differences between mobility, services and opportunity maps

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### 4.3 TIME RELATED PRA METHODS

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#### 4.4.1 Time Line

Time line is quite commonly used to explore the temporal dimension from a historical perspective. Time line captures the chronology of events as recalled by local people. It is drawn as a sequential aggregate of past events providing historical landmarks of a community individual or institution. Preferably select old people for this technique as key informants.

#### Objectives

- i. To learn from the community what they consider to be important past events.
- ii. To understand from the community the historical perspective on current issues.
- iii. To generate discussions on changes with respect to issues you are interested in e.g. education, health, food security, gender relations, economic conditions, etc.,
- iv. To develop a rapport with the villagers, since a discussion about the past of the village can be a good non-threatening and enjoyable starting point.

**Steps**

- i. Identify some elderly persons in the village willing to talk about the history of the village, invite them and explain the purpose of the exercise.
- ii. Note down the major events in brief on cards in bold letters along with years.
- iii. Ask them to keep the cards in a chronological order
- iv. Triangulate and modify order, if required.
- v. This can be done separately also for different sectors viz., education, health etc.
- vi. Copy the details onto a paper.

**4.4.2 Trend Analysis**

Trend analysis is used to explore temporal dimensions with a focus on change. It captures and trends related to certain variables over different spans of time. It is, thus, people's account of the past and of how things have changed and hence also provides a historical perspective. Trend analysis can provide a good idea of the quantitative changes over time in different aspects of village life, such as yields, population, livestock population, the number of trees, area under cultivation, rainfall, etc., it helps to understand increases and decreases in the variable under study over a period of time. It generally charts broad movements in different aspects of the local peoples lives rather than precise shifts. The discussion that follows a trend analysis may also look into the causes of changes and thus provide an understanding of the dynamics of change

**4.4.3 Seasonal Calendar /Seasonal Analysis**

Seasonal calendar is used to note seasonal activities and seasonal analysis is used to find abnormalities and the deviations from the normal. These tools give you an insight into the problems or issues faced in different seasons of the year. In seasonal calendar and seasonal analysis, month-wise depiction in a year is taken up. The seasonal analysis covers items such as natural calamities and climate (drought, flood, winds with high velocity, sunshine hours, humidity distribution), busiest and lean months, wettest and driest months, indigenous seasons, crop sequences, livestock diseases, seasonal crop activities, fodder availability, fish catch etc. are depicted in the form of tabular or pie diagrams.

**Major Advantages**

- i. Depicts a range of items and their magnitude, which helps in understanding how these items are related to and influence one another.

- ii. Helps to identify heavy workload periods, of relative ease, credit crunch, diseases, food security, wage availability etc.
- iii. Useful to analyses the livelihood patterns across the year, identify periods of stress and to plan for intervention, monitoring and evaluation.

### Check Your Progress 2

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

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

1. Write the usefulness of the following PRA tools

- a) Time line : .....
- b) Trend analysis : .....
- c) Seasonal diagram: .....

2. Write the major differences between time line and trend analysis.

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## 4.5 RELATION RELATED PRA METHODS

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### 4.5.1 Cause Effect Diagram (Problem Tree)

Cause effect diagram falls under the family of flow and linkage diagram methods. Also known as fishbone or Ishikawa diagram, it focuses on the causal factors of a phenomenon, activity, or problem, and the effects thereof. The cause effect diagram presents visually the causes, effects and their inter-linkage, which help in arriving at an in-depth understanding of a particular topic, and provide scope for analysis and subsequent action by the local people. This diagram is useful to study and the analysis of the problems of a wide areas including illiteracy, the dropout rate of children from school, drinking or alcoholism, the status of women, migration, low productivity, drought, food insecurity, ill-health, etc ( Fig. 4.1).

#### Major Advantages

- i. Visual depiction of causes and effect of a problem, situation, phenomenon, etc.,
- ii. Focus on causes rather than just on symptoms
- iii. Provide an opportunity to the local people to express the complex realities of the causes of their specific problems, consequences possible solutions in a simple visual mode.

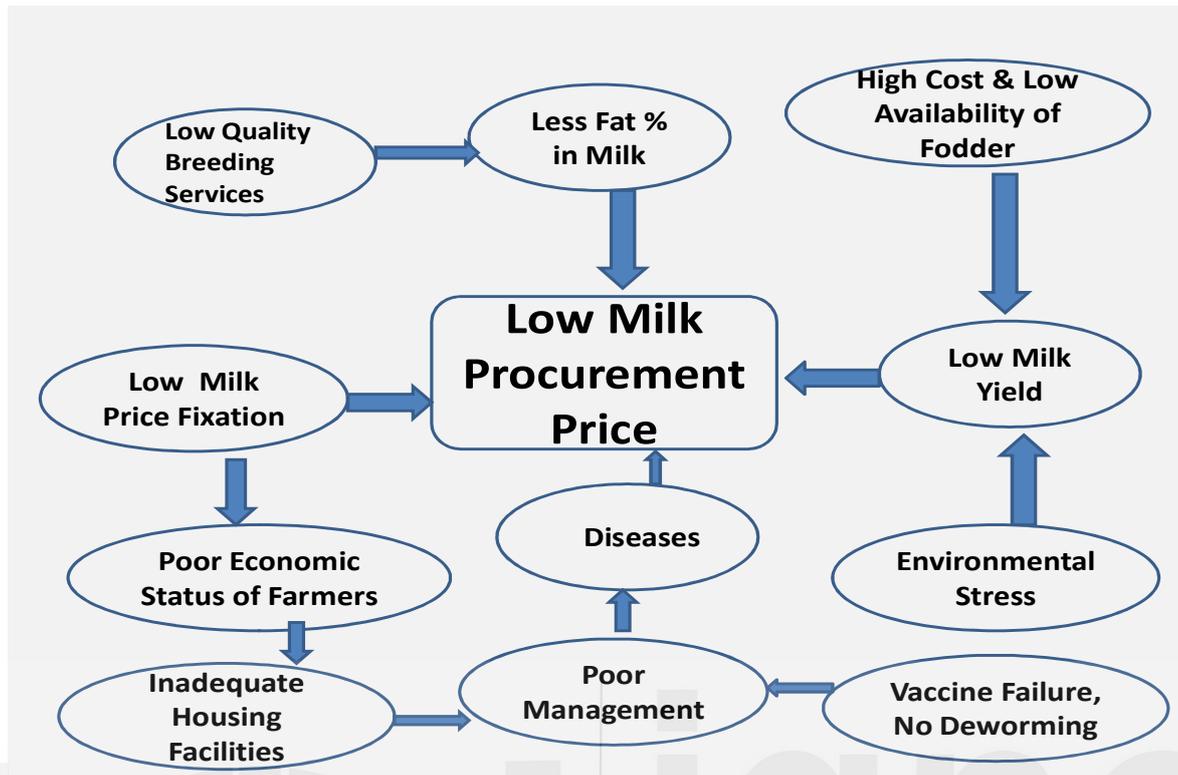


Fig. 4.1: Problem of Low Procurement Price for Milk and Associated Reasons

#### 4.5.2 Venn Diagram

Venn diagram is used to study institutional relationship and is sometimes also referred to as ‘institutional diagram’ or ‘*chapati*’ diagram as the method uses circles of various sizes to represent institutions or individuals. The bigger the circle, the more important is the institution or individual. The distance between circles represents, for example, the degree of influence or contact between institutions or individuals. Overlapping circles indicate interactions and the extent of overlap can indicate the level of interaction.

Information elicited through Venn diagram includes : relative importance of various institutions in the village; relationship and linkages among them; weaknesses with respect to decision making process ; duplication of efforts among institutions; gap identification between institutions; assess objectives and felt needs and concentration of power within villages.

Venn diagram is particularly useful when you want to study and analyze:

- i. Various institutions and individuals and their influence on the local people.
- ii. Various groups and individuals in the locality and their influence.
- iii. The main actors in the community and their conspicuous and inconspicuous influence.

**Activity 1:** Browse the internet literature and study any three PRA maps. Compare them with respective PRA method given in the above sections. Write your observations on their utility in CSR programmes.

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**Check Your Progress 3**

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

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

1. Write the usefulness of cause and affect diagram

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2. Why Venn diagram is also called as Chapati diagram?

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**4.6 LET US SUM UP**

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In this unit we started by classifying PRA methods into space, time and relation related methods. Later we discussed common material, time and site requirements for PRA methods. In the last part of the unit we discussed the meaning, objectives and steps in conducting important space, time and relation related PRA methods and their use in implementing development programmes.

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## 4.7 KEYWORDS

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**Social Map:** It explains the spatial dimensions of people's realities with focus on habitation

patterns, nature of housing, social infrastructure etc.

**Resource Map:** It focuses on natural resources in the locality and depicts land, hills, rivers,

fields, vegetation etc.

**Transect:** It provides a cross sectional representation of the different agro ecological zones

and their comparison against certain parameters including topography, land type and usage, ownership, problems, opportunities and solutions.

**Mobility Map:** It explore the movement pattern of an individual, a group or the community with focus on where people go and for what?

**Time Line:** It is used to explore the temporal dimensions from a historical perspective.

**Trend Analysis:** This method use to explore temporal with focus on change and captures trends related to certain variables over different spans of time.

**Seasonal Diagram:** It has been used for temporal analysis a cross annual cycles, with months or seasons as the basic unit of analysis.

**Cause and Effect Diagram:** It focuses on the causal factors of phenomenon, activity, problem and the effects thereof.

**Venn Diagram:** It is used to study institutional and individual relationship

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## 4.8 BIBLIOGRAPHY AND SELECTED READINGS

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## 4.9 CHECK YOUR PROGRESS – POSSIBLE ANSWERS

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### Check Your Progress 1

1. Space related methods are transect, social map, resource map and mobility maps. Time related methods include time line, trend analysis and seasonal diagram. Relation related methods are cause and effect diagram and Venn diagram.
2. (a) Transect provides a cross sectional representation of the different agro ecological zones and their comparison. (b) Social map is useful in developing a comprehensive understanding of the physical and social aspects of village life and for collecting demographic and other required information household-wise. (c) Resource map focuses on both natural and man-made resources in the locality. (d) Mobility map explore the movement pattern of an individual, a group or the community with focus on where people go and for what?
3. Mobility map focus is on the places which people visit and the reasons thereof, while in the services and opportunities map, the focus is on the services and opportunities. In a mobility map the village is at the centre and the other places visited are placed around it. The distance of other places from the centre may or may not be proportionate to the actual distance. In the services and opportunities map, the services and opportunities available in the village are also represented.

### Check Your Progress 2

- 1) (a) Time line is used to explore the temporal dimensions from a historical perspective. (b) Trend analysis is used to explore change and

captures trends related to certain variables over different spans of time.  
(c) Seasonal diagram is used for temporal analysis across annual cycles, with months or seasons as the basic unit of analysis.

- 3) Time line captures the chronology of events as recalled by local people. It is drawn as a sequential aggregate of past events providing historical landmarks of a community individual or institution. Whereas Trend analysis is used to explore temporal dimensions with a focus on change. It captures and trends related to certain variables over different spans of time.

### Check Your Progress 3

1. Cause effect diagram focuses on the causal factors of a phenomenon, activity, or problem, and the effects thereof. The cause effect diagram presents visually the causes, effects and their inter-linkage, which help in arriving at an in-depth understanding of a particular topic, and provide scope for analysis and subsequent action by the local people.
2. Venn diagram is used to study institutional relationship and is sometimes also referred to as 'institutional diagram' or '*chapati*' diagram as the method uses circles of various sizes to represent institutions or individuals.