

PARTICIPATORY RURAL APPRAISAL (PRA) TECHNIQUES FOR PLANNING WATERSHED MANAGEMENT

G.L. Bagdi, Pr. Scientist

*Central Soil & Water Conservation Research & Training Institute, Research Centre,
VASAD 388306, District Anand, Gujarat*

CONCEPT OF PARTICIPATORY RURAL APPRAISAL (PRA):

It is a way of enabling local people to analyze their living conditions, share the outcomes and plan their activities. It is handing over the stick to the insider in methods and actions. The outsider's role is that of a catalyst, a facilitator and convenor or processes within a community which is prepared to alter their situation.

Participatory rural appraisal (PRA) helps in interacting with local communities, for understanding and learning from them. It facilitates the process of involvement of local stake holders for harmonizing with their indigenous knowledge. It is a way of learning from and working with community members to investigate, analyze and evaluate constraints and opportunities as well as make informal and timely decisions about development initiatives.

PRA is a means of generating different kinds of data, identifying and mobilizing intended groups, evoking their participation and also opening multiway channels with stake holders. This banks upon the intimate knowledge of the community about local resources and empowers them for decision making, project designing, execution, monitoring and evaluation. It provides an alternative frame work for data collection and analysis, to focus attention on people, their livelihoods, socio economic relationships, local solutions and ecological imperatives (Samra, 1998).

PRA, as practiced in the field, has given rise to different schools of thoughts with difference in style and emphasis (chambers, 1996). Rapid Rural Appraisal (RRA) is also an often used term in many cases. RRA can be defined as systematic semi-structured activity conducted on site by a multidisciplinary team with the aim of quickly and efficiently acquiring new information about rural life and resources. The emphasis, however, is more on rapid process of development or even implementation of plans. Other terms which are synonyms to PRA are also used in describing PRA, such as, PRRA (Participatory Rapid Rural Appraisal), PALM (Participatory Learning Method).

Need for PRA:

The participatory approach is an informal way of learning from local people about the problems and opportunities in a given area. PRA is both an attitude and methodology, which produces authentic information of the villages. PRA is required for:

- Sustained change and the need for accurate and timely information.
- Advocating that people themselves are 'solution agents' for their need and problems.
- Reducing 'normal professional bias' and anti-poverty bias towards people.
- Cutting down time consuming long methods of survey which give results after considerable time. The method is cost effective, accurate and timely and information emanates from within the stakeholders.

Purpose of PRA:

The purpose of Participatory Rural Appraisal is:

- To gain an understanding of the complexities of a topic rather than to collect highly elaborate data on a list of variables. There should be greater use of farmers friendly criteria, choice, understanding and local priorities.
- To learn about farmers indigenous technologies, skills and materials.
- To development self-critical analysis and direct contact with local needs and communities.
- To collect information for general analysis, specific topics, need assessment, feasibility studies, prioritization and project evaluation.
- Verify, confirm and cross check findings through different triangulation methodologies and involving various people.

Principles of PRA:**1. Optimal ignorance**

The principle of optimal ignorance is to minimize cost and time. It is applied by investigating at or to know what is worth to know. One should know enough to serve the purpose. Associated with this is seeking appropriate imprecision or avoiding precision that is not necessary (Chamber, 1993). The matter not desirable should be ignored to the possible extent to avoid confusion.

2. Seeking diversity

PRA is to look for different analysis through diverse events, various processes and deliberating relationships in local communities to explore the facts in local situations.

3. Off-setting biases

It is to avoid biased opinion. In PRA, off-setting bias is an important methodology for bringing out real facts about the village in neutral or unbiased situation. It aims at off-setting such biases by being relaxed and not rushing, listening and not lecturing, probing and not speeding indifferently and looking for participation of poor and other weaker sections of local communities (Chamber, 1993).

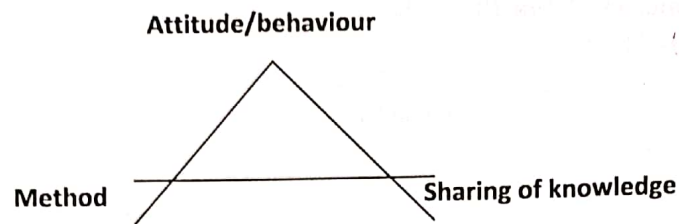
4. Triangulation

Triangulation is cross checking of information generated during PRA. It is an important component of the exercise in which trustworthiness, credibility, reliability and validity of data are tested through various methods. Data collected are put before a group of people for their conscious view about the facts. The different dimensions for triangulation depend upon interdisciplinary team composition. It concludes method of data collection, location, source of data and the time of generating information.

5. Interlinking basic foundation of PRA

PRA has its three basic interlinked components. This analysis remains incomplete in absence of any one of them. The exercise is basically on participatory mode and for this attitude and behaviour of people are required to be understood. The participants may feel hesitant in the

presence of outsiders in expressing their views. In local situation attitude and behaviour of outsiders should be congenial to the village environment for gathering relevant information. PRA method has its significant role and has links with other components, namely, attitude and behaviour. The diagram represents interdependencies of basic foundations.



Types of PRA:

- Participatory Rural Appraisal is of various types, which are described below in brief:
1. **Exploratory PRA:** This type of PRA is quite common. It explores different aspects of socio economic issues of village life and suggests important needs to be taken into account for improvement. Various useful ideas also emerge out of exploratory PRA for further probing and help in undertaking the exercise.
 2. **Topical PRA:** It is concerned with particular topic or area of investigation. The topic or investigating area can be suggested by the outsiders or villagers may also indicate the key area. The topic can be probed through different groups without taking into consideration the caste, age, gender etc. Its main objective is to generate maximum information on specific topic. It is intensive in nature and helpful in analyzing collected information at length.
 3. **Deductive PRA:** Social situations of a village are taken into account under the study. In this type of PRA main problem is not tackled directly. But various aspects of social systems are studied by relating other factors to deal with the sensitive issues of the society. It is used when facts are required and probing can not be done directly as for example, corruption, social tension, community struggle, etc.

PRA team should consist of:

- A. **Facilitator:** He is supposed to lead the group and act as facilitator to provide guidance and help to participants according to their needs. Facilitator may be outsider who can motivate, pursue and clarify the matter in local situation.
- B. **Process recorder:** He is the person to keep record of activities in black and white. His duties are to write processes, activities performed and result for documentation. He may be a person either from team or from group of farmers taking part in PRA.
- C. **Gatekeeper:** He is known as climate controller. In every village individuals are there who create problems and spoil environment of working. Such persons generally hold status in the village and have influence over villagers. He tries to create unnecessary argument, discussion and prohibit villagers in sharing relevant information. They are required to be isolated very tactfully through peaceful persuasion. They should be taken away from working place so that farmer could continue their exercise without any disturbance and fear.

PRA Techniques:

1. Social mapping
2. Resource mapping

3. Seasonal analysis
4. Transact analysis
5. Matrix ranking
6. Preference ranking
7. Problem Tree analysis
8. Historical Time line
9. Indigenous technological knowledge

1. Social mapping:

This is a method of involving local community in preparation of village resource map as perceived by farmers and to solicit their participation. Infrastructure, services and other village resources such as forests, agricultural lands, ponds, wells, wastelands, cattle population etc. were mapped. This was done by putting values with stone pebbles, leaves, wooden sticks, drawing and coloring on ground by *rangoli* powder through local people with minimum interference of outsiders and clarifications by the Watershed Development Team (WDT) members. This activity was for the purpose:

- To exercise rapport building for winning confidence of stakeholders.
- To explore the analysis of spatial information, particularly is studying problems and opportunities.
- To get an impression about the village setting, physical layout, location of various houses and institutions as perceived by the villagers.

2. Resource mapping:

The resource map provides an insight of available natural and man made resources existing in the village. Every hamlet has seasonal streams, either passing through the village or along its boundary. There may be check-dams constructed along the streams, Primary Health Centre (PHC), veterinary hospital, post office, bank, or Panchayat building (Bhawan), domestic water supply for the villagers, Hand pumps etc.

3. Seasonal analysis:

Seasonality analysis was carried out to identify patterns of peak and low points in various aspects pertaining to season variations concerning village life. Seasonality was analyzed with the aim to have information regarding fluctuations in social, household and agricultural operations in a year.

4. Transect walk:

This is the process of getting first hand information about the topography, settlement pattern, resources and land use pattern of the whole village through "Transect Walk" across the village in association with group of old and young practicing farmers and villagers.

5. Matrix ranking:

Matrix ranking of preferences was done to priorities the list of choice of crops, tree species and cattle. The activity was also to get a prioritized list of problems and need of the villages. This exercise attracted large participation from all the sections of the society. However, the villagers had only one and one priority i.e. scarcity of water for both domestic and agriculture. When explained about the utility of this exercise, they unanimously said "If water is made available, we will cultivate and produce everything but in absence of water it will be difficult to raise crops and trees".

6. Preference ranking:

Preference ranking was done to know farmers' attitude towards a particular item of interest. This helped in enlisting the choice of the rural community about crops, vegetables, tree species, livestock, soil and water conservation techniques, irrigation methods etc.

7. Problem tree analysis

This exercise was endeavored to visualize cause, effects and possible solutions of the problem as perceived by local people. A group of villagers consisting of males, females and children participated in marking tree by using rangoli (coloured) powder on the floor. They were asked to identify main problem and draw it as the trunk of tree. Subsequently, they were also asked to identify causes or reasons effect and solutions and show them as roots, branches and fruits of the trees. Sketch of the problem tree analysis made by the villagers is depicted.

8. Historical Time line

To understand the history and development of the village a time line was prepared with the participation of the farmers and facilitated by the team of research workers. Time line analysis provided the possibility of reconstructing the history of the village. Hamletwise historical events were gathered from elderly people of the village.

9. Indigenous technological knowledge:

Indigenous technical knowledge is the farmers' wisdom being followed from one generation to another. These are the thumb rules in rural area and transferred through proverbs, idioms and poems in easy language.

REFERENCES:

- Chamber, Robert, 1993: Participatory Rural Appraisal (PRA) challenges, potential and Paradigm, Institute of Development Studies, Sussex.
- Chamber, Robert, 1996: Poverty in India' Concepts Research and Reality- an exploitation, typescript, Institute of Development Studies, University of Sussex, Brighton.
- Samra, J.S., and Mishra, A.S. 1998: Participatory rural appraisal for watershed management, CSWCRTI, Dehradun.