Analysis of different techniques in Participatory Rural Appraisal (PRA)

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Abstract: PRA is intended to enable local communities to conduct their own analysis and to plan and take action. PRA involves project staff learning together with villagers about the village. The aim of PRA is to help strengthen the capacity of villagers to plan, make decisions, and to take action towards improving their own situation. Participatory Rural Appraisal (PRA) is considered one of the popular and effective approaches to gather information in rural areas. This approach was developed in early 1990s with considerable shift in paradigm from top-down to bottom-up approach, and from blueprint to the learning process. In fact, it is a shift from extractive survey questionnaires to experience sharing by local people. PRA is based on village experiences where communities effectively manage their natural resources.

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Introduction:

PRA is a methodology of learning rural life and their environment from the rural people. It requires researchers / field workers to act as facilitators to help local people conduct their own analysis, plan and take action accordingly. It is based on the principle that local people are creative and capable and can do their own investigations, analysis, and planning. The basic concept of PRA is to learn from rural people. Chambers (1992) has defined PRA as an approach and methods for learning about rural life and conditions from, with and by rural people. He further stated that PRA extends into analysis, planning and action. PRA closely involve villagers and local officials in the process.

Similarly, Rapid Rural Appraisal (RRA) reflects the new thinking about development, needs, and people oriented responsibilities. It is a process that is highly systematic and structured, relying on interdisciplinary teamwork and special strategies for data collection and analysis such as triangulation, probing, and iteration. Some critics consider RRA to be a quick and dirty technique(Guijt, 1998).

There are a wide range of participatory tools and techniques available. People can use these tools and techniques according to their situation or needs. Generally, the application of different tools may vary from one situation to another. However, the process for conducting RRA/PRA remains the same.

PRA techniques(Gibson, 1992):

The most common methods are the following:

1- Diagramming, Mapping and Modeling:

- transects
- maps (resource, social, farm)
- venn diagrams
- seasonally analysis
- historical analysis (time lines, trend lines, activity profiles)
- 2- Ranking and scoring
- pair wise ranking
- matrix ranking
- matrix scoring
- well-being analysis and wealth ranking
- proportional piling
- pie charts (iniera charts)
- 3- Problem analysis
- identification and specification
- causal chaining
- prioritization
- **-Direct observation** -- Observations are related to questions: What? When? Where? Who? Why? How?
- Observe a particular topic or theme for a particular piece and time
- Record observations as soon as possible
- Guidelines for making observation
- Decide on the major theme or topic to be observed
- Decide before hand where observation will take place. When and how long you will observe(Pottier, 1992).
- _ **Do it yourself** -- Villagers are encouraged to teach the researcher how to do various activities. The researcher will learn how much skill and strength are required to do dayto- day rural activities, gaining an

insider's perspective on a situation. Roles are reversed: villagers are the "experts" and attitudes are challenged.

_ Participatory mapping and modeling -- Using local materials, villagers draw or model current or historical conditions. The researcher then interviews the villager by "interviewing the map." This technique can be used to show watersheds, forests, farms, home gardens, residential areas, soils, water sources, wealth rankings, household assets, land-use patterns, changes in farming practices, constraints, trends, health and welfare conditions, and the distribution of various resources(Ekins, 1992).

Maps and Models - Diagrams:

Spatial data is analyzed through diagrams, maps and models. The techniques are pictorial or symbolic representation of information.

The purposes of diagrams are:

- a tract and focus attention of discussion group
- represent objects on processes
- stimulate an open discussion
- provoke an effective group work
- facilitates education and information exchange
- assist in decision making
- help remember important points
- help in monitoring and evaluation

Community Sketch Maps

The purposes of community sketch map or a model: is a visual representation of what the community perceives as their community space. This include showing the shape (appearance) of the community, boundary and all the major features as understood and known by the community(Scrimshaw and Gleason, 1992).

The map shows where resources, activities, problems and opportunities are located, as well as the dimension and scope of issues to be investigated. It is critical to understanding the boundaries and characteristics of the community involved.

Topographical data (elevation, slope, drainage etc.)

Topographical data are basic when drawing a map of community, so is information on soils, vegetation, water availability, road, schools, health facilities etc. There are different sketch maps known for different purposes. Some of them include(Dunn, 1992):

- **A. Social maps:** Specific type of topical map representing households according to certain indicators.
- Indicates where people live and how many people live in an area
- Social and residential differences in status and wealth
- Buildings where people live or work, uses of space in a house

- **B. Physical and resource maps:** drawn by the people to show natural resource of an area, location and use of natural resources.
- fields and land uses
- physical land features
- water location, quality and use
- soil types, uses, location
- **C. Topical maps:** specific topic maps are drawn to draw attention to a particular type of information of the area, example:-
- location of forest resources
- soil types
- different crops grown
- houses and the number of people live in
- social & economic infrastructures etc.
- **D. Farm sketch:** Making a farm or compound sketch highlight details that would otherwise be lost in a smaller scale maps.

Procedures for collecting spatial data Who draws the maps?

The community members of their representatives together with the PRA team and the local extension field staff undertake this exercise. The various parties having different but complementary ideas to the process.

HOW?

The community members are the best experts of their area. While it is tempting for a team member to take charge and save time by drawing the

map, it is advisable to let ordinary villagers draw the map on the ground. Literacy is not necessary in order to draw a map of one's place. The PRA team should explain the process clearly. The sketch map is drawn using their fingers, sticks and other locally available materials such as pebbles, leaves, and flowers. The community should be guided through questions to draw the map of their community territory of application(IUCN, 2001).

Community sketch map helps in defining microzones, knowing about disparities in wealth, differences in land use. This exercise provides to locate areas where particular problems are thought to be prevalent. The map is also used to lay the transect route. While the map is still on the

ground the community members mark the most representative cross section of the community.

How should one proceed to sketch maps or models?

Before:- Decide what type of map you want

- Bring people together who will have some knowledge about the area and can contribute
- Choose suitable time and place
- Bring materials with you on which you can copy a map drawn on the ground(Scoones, 1993).

During:

Try to minimize your own participation be an observer?

- Encourage by asking op0en questions
- Encourage the use of different materials, i.e. flowers, twigs, sticks etc
- Be patient! (Swift and Umar, 1991)

After:

- Maker a copy of the map or model, including mapper's names
- Try drawing the same type of map with different groups of people. i.e. one group of women, a group of old men and the young
- Keep it simple
- Orient it appropriately
- Cross-check the map, compare with what you see
- Draw it in the area of study with the local people.

_ Transect walks and guided field walks -- The researcher and key informants conduct a walking tour through areas of interest to observe, to listen, to identify different zones or conditions, and to ask questions to identify problems and possible solutions. With this method, the outsider can quickly learn about topography, soils, land use, forests, watersheds, and community assets(Drummond, and Nontokozo, 1992).

Transect walk

A transect is a walk or a series of walks through an area with local informants to learn of the range of different condition, problems and opportunities in each of the area. It shows a cross section of the area as observed by the walk(Pretty, 1993).

Purpose?

Transect provides mapping information beyond that collected during the initial reconnaissance and verifies the information on the sketch map. It adds detail on specific characteristics (slope drainage, vegetation, water, soils other sources) that further verifies the PRA team's understanding of the area.

What?

The transect should include more detailed and specific information than the sketch map, such as data on cropping pattern, trees, vegetation, farm size, problems and opportunities.

Who?

The PRA team, community representatives, and local extension staff take charge of this exercise. People encountered along the route should casually be interviewed to provide information on other observed conditions.

How?

PRA team uses a simple technique of reviewing the community sketch map to estimated the line of greatest diversity. When the community members. Complete drawing of the sketch map, while the map

is still on the ground, they debate, with the guidance of the PRA team about which route to take. The transect walk following the agreed route could be done on the same day the map is drawn: while walking:

- -Assign responsibilities for observations and note taking to team members, for instance the agriculture should note soils, cropping patterns etc. the water officer should be responsible for water points, scope, and drainage, the social scientists should observe socio-economic indicators etc.
- -The transect route can be subdivided and assigned to two or three smaller team so that a single team need not to walk the entire length
- -Proceed along the designated route taking time for brief and informal interviews of residents in each of the ecological zones, time to discuss the
- critical issues already identified in the transect.
- At the end of the exercise, complete detailed notes and construct a chart similar to the example shown below(Gueye, 1991).

Application

Information gathered will help to verify the information on the sketch map. It will help the community and the PRA team to identify and related opportunities. It will also show the most pressing problem, which may require a thought feasibility study and additional technical data. The information displayed in the transect will be used during the development of the community action plan and to organize stratified sampling for further studies(Cornwall, 2008).

Mobility diagram

The community can get goods and services from different places. Some resources will be available with in the PA, others on the boundaries of the community. People daily, weekly and occasionally fetch for those resources in and out of their area. Therefore they travel long distances under difficult situations.

Purpose

The diagram is used to understand the places traveled, resources collected and to identify the persons travailing. The resource centers could have problems and the road and means of transportation may not be appropriate, PRA team needs to know the critical goods and services that people travel to fetch for.

What?

The community center and the places of goods and services are listed. The pull factors and the reasons for not having the resource at the center are recorded. The team tries to understand the condition of the resources, and opportunities to establish with in the community. The community members may face difficulties on the road and may also be inconvenient

to get goods and services at the destination(Uphoff, 1992).

Who?

The PRA team identifies individuals or groups who travel to other places on a purpose. Discussion with men and women travelers can give a clue about resource scarcity(Mukherjee, 1992).

How?

- Select informants who travel for resources
- Write down as many places as possible visited and resources the most wanted.
- The difficulties faced on the way and at the destination discussed
- The informants mark on the ground the starting point and destination for different resources or services.

Application

The PRA team and informant record resources in short supply and the reasons for not having in the community. The community action plans include ways and means to get critical resources in the future. The difficulties faced on the road and at the resource center (destination) taken due consideration for improvement(Clayton, 1997).

_ Seasonal calendars -- Variables such as rainfall, labor, income, expenditures, debt, animal fodder or pests, and harvesting periods can be drawn (or created with stones, seeds, and sticks) to show month-to-month variations and seasonal constraints and to highlight opportunities for action. An 18-month calendar can better illustrate variations than a 12-month calendar(Hahn, 1991).

Seasonal calendar

The seasonal calendar attempts to establish regular cycles or patterns of activities and occurrences within a community over 12 months.

Purpose

A seasonal calendar helps present large quantities of diverse information in a common time frame. It compares community activities. Month by month, across sectoral boundaries. It identifies cycles of activity that occur within the life of community on a regular basis, and helps determine whether there are common periods of excessive environmental problems of opportunities over the course of normal year. These yearly cycles are important in determining for example; labour availability, timing for project activity, potential absorptive capacity for new activities, times of diseases and food shortage and variation of cash flow.

What

The actual themes to be recorded will vary from community to community some of the more

commonly used topics include annual rainfall, water availability, cash and food crops, livestock, labour demand, food shortages, and human, crop and animal diseases. The calendar should show times when problems may be acute, variation in labour demand by gender and age etc.

Who

Data for seasonal calendars should be collected from community groups. If a community has two or three distinct ecological zones, groups should be selected from each so that differences in cycles are reelected in the calendar. Efforts should be made to diversify informants from community groups i.e. men and women, informal leaders, young and old residents.

Before:

- Identify what type of seasonal pattern you wish to learn.
- Find one or more people able and willing to share their knowledge and their views
- Find a suitable space, enough space and shade
- Explain the purpose of exercise carefully

During

- Ask when their year starts
- Ask how they divide the year
- Use local calendars
- Religious festivals
- Agricultural operation
- Have the informant mark the unit on the ground, floor or a paper
- Probe
- Compare quantities
- Ask the participant to mark which month is or are the most extreme
- Continue comparing each month with extreme until the whole year is completed

Materials

- Any kind of material can be used to indicate the duration or amounts i.e. seeds, stones, beans, soil, sand, leaves, pods, ash etc.

After

- Make a permanent record
- Analyze the information from different calendars
- Compare the months to identify periods of stress and comfort

Application

Information collected during the drawing of the seasonal calendar is very rich, not only in terms of what is put down by the community, but also in what comes out from the discussions during the process. For example seasonal calendar data provides information on opinions and attitudes of the community towards certain activities. These include attitudes towards gender allocation of labour, gender ownership and control of resources, etc. such information helps the PRA Team and the community

to prepare the community action plan(Chambers, 2004).

Gender daily calendar:

Purpose

Most daily activities in traditional rural, societies are managed along gender lines. There are activities that are specifically performed by women, men or children. In some communities gender role divisions are still pronounced. In such cases it is necessary for the PRA team to be aware in order not to be seen as interfering with the community cultural norms specific gender roles so that new programmers are not introduced to overburden an already overworked group. Introducing gender awareness in PRA helps a community to begin examining itself(NCAER, 1993).

Who

Community members both men and women, young and old should be in attendance. PRA team members, men and women and local extension staff in the analysis of gender roles and responsibilities.

How

It is better if the community is allowed to lead gender related discussions. The PRA team facilitates discussions through a neutral process of mapping out a gender daily calendar. Men and women discuss on each daily activities on agreed season (raining or dry season). The groups on their timetable, from the time they wake up in the morning to the time they got to sleep in the evening.

Application

Gender daily calendar provides a clear picture of who does what in the community. It will help in the formulation of the community Action Plan. The community will become aware that unless some changes in gender relations are effected rural development will not proceed as quickly as they would like it to be(Holland, 1998).

- _ Daily-activity profiles -- Researchers can explore and compare the daily-activity patterns of men, women, youth, and elders by charting the amount of time taken to complete tasks.
- _Semi structured interviewing -- A semi structured interviewing and listening technique uses some predetermined questions and topics but allows new topics to be pursued as the interview develops. The interviews are informal and conversational but carefully controlled(Chambers, 1994).

Semi structured interviews (SSI)

SSI is a guided interview here the major topics and a few key questions are formulated before the interview. But many new additional are asked during the interview based on answers to the key question.

Types of SSI:

1. The individual interview

- Get representative information about the society form individual informants
- Ask individuals at a time

2. The key informant interview

- Get specialized information from one or group of persons about the community
- Informants with specialized knowledge

3. Group interviews:

- Useful for obtaining general information about the community
- Better for cross checking information
- Group interviews require very careful preparation
- The ideal group is 8 15 people

_ Types, sequencing, and chain interviews -- Individual, pair, and group interviews are combined in a sequence to take advantage of key informants and specialist groups.

Using secondary sources

- Secondary sources of information include previously written documents maps, diagrams, tables etc.
- Review secondary sources before beginning field survey is census data, aerial photos, marketing reports, etc.
- In reviewing secondary sources, you should keep summary notes, in the form of short paragraphs, diagrams, charts, etc
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- Be as critical as possible in reviewing secondary sources
- To develop understanding of local livelihoods
- Short period of time

Interview guides and checklist

- Formulate open ended question and themes for free discussion
- Explore what farmers think about the theme
- Allow two way communication
- Learn as you go along rather than to answer specific questions of limited range
- Use the six helpers What? Why? How? Who? When? Where?
- Use simple questions with single idea
- Probe to explore more in depth, to stimulation
- Avoid ambiguous, leading, dead and direct questions scheduling and arrival
- Select open person to lead or control the interview
- Be sensitive to farming work or other work schedule
- Try not to disrupt working activities
- Agree on a team contract: what time to begin work cash morning? Who will take notes? (Write this in your notebook)

Beginning the Interview

- Will the team stand or sit on chairs with the informant sitting on the ground?
- Sit down in a suitable place & shade
- Begin with the traditional greeting in the local manner
- Explain who you are. Describe the purpose of your visit do not imply any promise
- If the informant is busy ask when it would be appropriate to return
- The team should say we are here to learn and mean it
- Spend some time in casual conversal
- Begin your questioning by referring to something or someone visible.
- Deal with more sensitive issues when confidence is built(Pottier, 1992).

Directing the flow of Interview

- Do not interrupt each other
- Write down new questions to ask latter on
- Ask one question at a time
- Take your time, allow your response to answer completely before moving on.
- Probe explore

Recording the interview

- Record during an interview
- Ask permission from your informants before you start writing things down or tape recording the discussion
- What to record

The interview setting

- Where was the interview held?
- Who was interviewed?
- Was it a group or individual?

Record what you see

- The condition of the farmers field
- Type of a house, possessions, access to water; indicators of wealth, health

Record what is said

- The details of an interview
- Do not attempt to analyze responses in your head and record an interpretation
- Record the conduct of the interview
- Assign an interview observer

Was it

A Fact: Something definitely known to have occurred or be true

An opinion: judgment or belief base on grounds short of proof

A rumor: general talk, report of doubtful accuracy.

- Was the interview relaxed and open?
- Was it dominated by any individuals?
- Did the interviewer bias the response
- Judge the responses quickly
- Cross check by comparing responses against other sources of information

- "Look wonder, questions"

Closing the interview

- Summarise the discussion briefly
- Look around the homestead or farm
- Ask respondents, if they have other issues to be looked in to
- Thank respondents graciously
- Take a few minutes with your colleagues to reflect on the interview and compare thoughts and impressions
- Make any additional notes you feel are necessary
- Fill in the blanks in your notebook while the interview is fresh in your mind
 - Once done move on to the next household; or groups
- _ **Permanent-group interviews** -- Established groups, farmers' groups, or people using the same water source can be interviewed together. This technique can help identify collective problems or solutions.
- _ Time lines -- Major historical community events and changes are dated and listed. Understanding the cycles of change can help communities focus on future actions and information requirements.

Time related data analysis

Time Lines

A list of key events in the history of the community that helps identify post trends, events, problems, and achievements in its life.

Purpose

The time line helps the team to understand what local or national events the community considers to be important in its history. The time line is prepared through discussion wit a small groups or elders. The significant events in the history of the community hitherto kept in oral form are now documented.

What

The time lines go back as many generations as villagers can recall. Time line records could include, forest history, diseases, diets etc. These discussions provide a good opportunity to ask elders about previous trends and traditional responses, as well as about possible opportunities to resolve current problems.

Time lines are recorded by the community elders and any other long term resident. The team can only assist by asking proving questions. The

composition of the community institutions, such as church groups, selfgroups, political units or the local administrations. Both women and men should be included(lnglis, 1990).

How

Group discussions are preferred to interviews of key individuals because they encourage dialogue among the community members and Addis, helping them remember events form the distant past. The elders should be asked to identify that shaped and influenced individual and the community activity large sheets of paper and felt pens should be used to write in large letter in the local language. If there is difficulty in establishing dates for particular events, try to relate them to a renown event.

Application

This data re-in forces the community's perception of the evolving problems and the possible opportunities to be considered in the preparation of the CAP.

Trend Lines

Trend lines are helpful to understand the resident's perception of significant charges in the communities over time.

Purpose

Trend analysis will help the community to and PRA team to:

- Learn from the community how it views change over time in various sectors
- Integrate key changes into a village profile, which well simplify problem identification and
- Begin to organize the range of opportunities for the community to consider.

What

Information could be collected on trends over the past ten to forty years in the areas that support the community. A core set of trends should include changes in water availability, soil loss and fertility, deforestation and tree planting, grazing, employment rates food production and population.

Trend lines can be discussed with community representatives including elders, long term residents, leaders of church groups, women groups, and self help groups. If possible, all ecological zones in the study site should be represented.

How

The following steps are important for proper generation of trend lines.

- 1. PRA team should carefully explain the measuring of trend lines to the community groups.
- 2. Explain the concept of trend lines using simple graphs. Demonstrate the meaning of the two lines. Show them how time moves form left to
- right along the horizontal axis, and how the rate of increase/decrease in resource use is indicated on the upright vertical axis.
- 3. When the community members have understood the concept, ask one of them to draw the two lines on the ground. Once this is done, years
- should be indicated at equal intervals along the horizontal line.
- 4. Use the discussion of trends to probe for explanation of the changes. This will help identify underlying problems and traditional activities to

correct the situation. Find out what solutions have been tried in the past and how well they have worked.

Application

Trend lines provide useful baseline information for researchers operating on micro level follow ups of such aspects as population, food availability, school enrollment etc. It forms the basis upon which problem identification and options assessment is made during the preparation of the community action plan

- _ Local histories -- Local histories are similar to time lines but give a more detailed account of how things have changed or are changing. For example, histories can be developed for crops, population changes, community health trends and epidemics, education changes, road developments, and trees and forests.
- _ Local researchers and village analysts -- With some training, local people can conduct the research process (for example, collect, analyze, use, and present data; conduct transects; interview other villagers; draw maps; make observations).
- _ **Venn diagrams** -- To show the relationship between things, overlapping circles are used to represent people, villages, or institutions; lines are added to reflect inputs and outputs.

Venn Diagram (Institutional analysis)

Venn diagramming is a method to find out who, what person or organizations are important in and for a community.

Purpose

To identify groups and institutions operating in the community and to show how they interact with each other To show the degree of their cooperation and involvement in development programs. To discover their important or influence on decision making in the community.

What?

Venn diagrams have been used with in PRA in institutional context to discuss:

- The role and significance of various institutions
- Levels of communication between organizations
- The role of project bodies and their intervention Improving missing links between existing organizations,
- Potential for working through existing organizations, which ones and with which links.
- Potential roles for new organization
- Formal and non-formal groups and their levels of cooperation
- Communities perceptions of the institutions, always **Who?**

The PRA team, key informants as elders, religious leaders, extension staff and other knowledgeable person take the responsibility of listing and

evaluation of individuals and institutions influencing decision making of the community.

How?

List institutions in the community and discuss importance of each institution and what they do. Make different sized circles and not which circle represents each institution i.e. big circle very important and decision maker, small circle with little importance. During overlapping the circles, the size of the circle indicates the importance of the institution, the distance between the circles indicate the degree of contact between institutions. For instance a large overlap high interaction. No overlap distant relationship.

Application

Identify individuals, groups or institutions. Important in the lives of people and establish close relationship with them. Provide the necessary support and effectively utilize their skills and experiences.

- _ **Participatory diagramming** -- People are encouraged to display their knowledge on pie and bar charts and flow diagrams.
- Wealth and well-being rankings -- People are asked to sort cards (or slips of paper) representing individuals or households from rich to poor or from sick to healthy. This technique can be used for crosschecking information and for initiating discussions on a specific topic (for example, poverty). The technique can also be used to produce a benchmark against which future development interventions can be measured or evaluated(Blackburn, 1999).

Ranking and scoring

Presentation:

A way in which various kinds of things can be compared according to different qualities people value. It places in an order of what is more or what is less important.

Purpose

Ranking methods allow us to see individual and group priorities among a number of alternative problems or solutions. It helps to generate reasons why people choose one item from the other.

What

People could use three different ways to generate a criteria for comparison and make up their choices.

- (1) preference ranking
- (2) pairewise ranking
- (3) direct matrix ranking
- (4) and direct matrix scoring

Preference ranking method helps to quickly get a good idea of what people think are the priority problem or preferences. The criteria attached to make up a choice is used to consider in the action plan. Individuals or groups vote on the items from most important to least important item. The choices could be between crop varieties, water points, food diets, livestock species, problems, solutions and many different issues, which require preferences. Paire wise ranking is used to compare between two items and make up a choice. It is more useful for exploring the reasons why people prefer one possibility over another. The moment a preference is made lots of criteria are explored to compare items using a group of criteria before a choice. Direct matrix ranking is used to list items to be compared along horizontal line and criteria on the vertical line to rank choices from most important to least important (i.e. 1st, 2nd, 3rd, 4th etc) In this case frequency of the items valued as the 1st choice helps to make up a final decision. Direct matrix scoring helps to attach a score to a comparable items against each criteria listed before a choice. A comparison could be made out of a score of 10(for instance) a comparison could be made between many items against one criteria set, and attach a score out of a maximum of 10 to items to be chosen. The frequencies of the highest scores (closer to 10) attached against many criteria helps to make up a decision for preference.

Who

Ranking and scoring could be done with individuals, households, community members deliberately selected and with mixed group of men, women, traditional leaders, local officials, extension workers etc. The group combination depends upon the issues to be ranked. Who should decision on the issues to be compared? Leads to the choice of informants.

How

The groups for discussion lists items to be compared. Let them generate either directly or thorough pair wise comparison criteria for ranking. Putting in an order of importance or ranking could be done through ranking order, scoring or key voting, from the most to least important. Thorough courting frequencies list in ranked order the items to be compared and make up a decision. The final choice could be made through group of criteria or a single but most important critieria. Some times, the period for ranking (emergency) or vested need to the item may influence decision-making procedures. While listing criteria, do not mix up. PRA teams criteria with those of the informants. Use positive criteria for comparison

Application

Community action plans are developed on the basis of peoples preferences. The problems, solutions technical inputs etc are arranged on the interests of the users(Appleyard, 1998).

_ Direct-matrix pair-wise ranking and scoring -- Direct-matrix pair-wise ranking and scoring is a tool used to discover local attitudes on various topics.

People rank and compare individual items, using their own categories and criteria, by raising hands or placing representative objects on a board. For example, six different shrubs can be ranked from best to worst for their fuel, fodder, and erosion-control attributes. Other resources can be ranked in terms of taste or marketability. Wealth ranking can be used to identify wealth criteria and establish the relative position of households(Carmen, 1996).

- _ Matrices -- Matrices can be used to gather information and to facilitate or focus analyses and discussions. For example, a problem opportunity matrix could have columns with the following labels: soil type, land use, cropping patterns, and available resources; and rows with the following labels: problems, constraints, local solutions, and initiatives already tried.
- _ Traditional management systems and localresource collections -- Local people collect samples (for example, of soils, plants). This can be an efficient way to learn about the local biodiversity, management systems, and taxonomies.
- _ Portraits, profiles, case studies, and stories -- Household histories or stories of how a certain conflict was resolved are recorded. This can provide short but insightful descriptions of characteristic problems and how they are dealt with.
- **_ Key probes** -- A question addressing a key issue is asked of different informants, and the answers are compared. The question might be something like "If my goat enters your field and eats your crops, what do you and I do?"
- _ Folklore, songs, poetry, and dance -- Local folklore, songs, dance, and poetry are analyzed to provide insight into values, history, practices, and beliefs.
- _ **Futures possible** -- People are asked how they would like things to be in 1 year and to predict what will happen if nothing is done or if something is done. People's desires, wishes, and expectations are revealed.
- _ Diagrams exhibition -- Diagrams, maps, charts, and photos of the research activity are displayed in a public place to share information, facilitate discussions, and provide an additional crosschecking device. The exhibition can inspire other villagers to take part in research activities.
- _ Shared presentations and analysis -- Participants are encouraged to present their findings to other villagers and to outsiders, providing another opportunity for crosschecking, feedback, comment, and criticism.
- _ Night halts -- The researchers live in the village during the research process. This facilitates all interactions between the outsiders and the villagers, invites change in the outsiders' attitudes, and allows

for early-morning and evening discussions, when villagers tend to have more leisure time.

- _ **Short questionnaires** -- Short and issue-specific questionnaires can be useful if conducted late in the research process.
- _ Field report writing -- Key findings are recorded before "leaving" the village. (This assumes that the community has consented to having the research data leave the village.) Brief summaries are made of each diagram, model, and map, as well as of the process involved in creating them.
- _Survey of villagers' attitudes toward PRA -- To improve the PRA process and techniques and maintain realistic expectations, the researcher asks the villagers what they expected and what they learned from the PRA research process.
- _ Intriguing practices and beliefs -- Indigenous practices and beliefs are noted, even if they are based on myth or superstition. Even practices that are unusual or don't fit in with conventional scientific thinking are worth exploring because they are meaningful to local people.

CONCLUSION:

As a result of the PRAs, the communities are expected to attain many benefits including:

- Expressing their own ideas and concerns;
- Organizing their knowledge about the past and present;
- Identifying as a community their problems, the causes of these problems and possible solutions;
- Developing a common plan to address these problems;
- Developing the ability to use their own resources more effectively and attract more resources from the outside.

The academicians/researchers involved in the PRAs are expected to get the following benefits:

- Developing better understanding of rural environments and social as well as economic dynamism taking place there;
- Appreciating the fact that communities are capable of analyzing their problems and outlining possible solutions to their problems;
- Participating in designing possible solutions to community problems;
- Utilizing the results of the PRA work as a research output for publications and presentations;
- Building their research and problem investigation capabilities;
- Supporting their classroom discussions to students with practical examples from the PRA findings.

The main objectives of the current PRA are:

1. empowerment of rural communities by assisting them to systematically utilize their local knowledge to identify problems and strengths, develop skills of analysis, and design appropriate mechanisms for intervention by themselves and/or by development agents;

- 2. advancement of understanding by academicians/researchers of local knowledge and acknowledgement of the capacity of communities to gather data, conduct analysis, and identify as well as prioritize problems and solutions;
- 3. utilization of the research questions/problems identified during the PRAs for further investigation;
- 4. documenting and presenting the outcomes of the PRAs to development agents (governmental and non-governmental) and other stakeholders so that they could undertake interventions in line with the findings.

PRA consists of a series of participatory exercises which help community members better assess their history, resources, and overall situation as concerns agriculture, health, marketing, credit, coping mechanisms, education, and other important areas. During the conduct of the PRAs, rural communities in the selected villages will gather information on the resources they already possess; organize their knowledge; share experience among themselves; learn from each other; identify and prioritize local development needs; and develop action plans which respond to these needs.

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REFFRENCESS:

- 1. Appleyard, B., Understanding the Present: Science and the Soul of Modern Man (London: Picador, published by Pan Books, 1998).
- Blackburn, J. and J. Holland (eds). Who changes? Institutionalizing participation in development.London, UK. IT Publications, 1999.
- 3. Carmen, R. Autonomous development. Humanizing the landscape. An excursion into radical thinking and practice. Zed Books, London, UK. 1996.
- 4. Chambers, Robert, "Methods for analysis by farmers: The professional challenge," Journal for Farming Systems ResearcWExtension, Vol. 4, No. 1 (1994). pp. 87- 101.

- Chambers Robert, Notes for Participants in PRA/PLA Familiarization Workshop in 2004.
- 6. Clayton, A., P. Oakley and B. Pratt. Empowering People A Guide to Participation. UNDP, 1997.
- 7. Cornwall, A. Making a difference? Gender and participatory development. IDS discussion paper 378, 2008.
- 8. Drummond, and Nontokozo Nabane, "The use of indigenous trees in Mhondoro District" (Harare: Centre for Applied Social Sciences, June 1992).
- 9. Dunn, A. M., "New challenges for extensionists: Targeting complex problems and issues," Paper for the 10th European Seminar on Extension Education, Universidade de Tras-os-Montese Alto Douro (Vila Real, Portugal: September 1991).
- 10. Ekins, P., Wealth Beyond Measure: An Atlas of New Economics (London: Gaia Books, 1992).
- 11. Gibson, Tony, "Planning for real: The approach of the Neighbourhood Initiatives Foundation in the UK," RRA Notes, No. 11 (1991) pp. 29-30.
- 12. Guijt, I. and M.K. Shah (eds). The Myth of Community: Gender issues in participatory development. London: Intermediate Technology publications, 1998.
- 13. Gueye, Bara, and Karen Schoonmaker Freudenberger, MPthnde AccPler& de Recherche Participative (London: BED, August 1991).
- 14. Hahn, H., Apprendre avec les yeu, s'exprimer avec les mains: des paysarts .se,fiument ir la gestion du terroir (Switzerland: AGRECOL. Oekorentrum, Langenbruck, 1991).
- 15. Holland, J. and J. Blackburn. (eds). Whose voice? Participatory research and policy change, London, UK. IT Publications, 1998.
- 16. Inglis, Andrew Stewart. "Harvesting local forestry knowledge: A field test and evaluation of rapid rural appraisal techniques for social forestry project analysis," Dissertation presented for the degree of Master of Science (Edinburgh: University of Edinburgh, 1990).
- 17. IUCN. Seek... and Ye Shall Find: Participatory Appraisals with a Gender Equity Perspective. Module 2 of the ORMA modules towards Equity, 2001.

- 18. KGVK. Mancrjiemrnf Training Mnnuul (Bihar, India: Krishi Gram Vikas Kendra, Ranchi, Bihar, 1991).
- 19. Mukherjee, Neela, "Villagers' perceptions of rural poverty through the mapping methods of PRA," RRA Nores, No. IS (1992). pp. 2 l-26.
- NCAER. Comparatil'e Study of Sample Survey and Ptrrticipatotyv Rurtrl Apprnisul Methodologies (New Delhi: National Council for Applied Economic Research, I1 Indraprastha Estate. November 1993).
- 21. Pottier, Johan. "Agrarian change at the household level: A note on investigative styles in research on Mambwe Agriculture (Northern Zambia)," in Preben Kaarsholm (Ed.), hstitutiom. Culture and Change at Local Community Lervl. Intenmtiorul Development Studies Occasional Paper (Roskilds, Denmark), No. 3, (1992). pp. 61-74
- 22. Pretty. Jules N., "Participatory inquiry and agricultural research" (London: BED, 1993).
- 23. Scoones. Ian. and John Thompson, "Challenging the Populist Perspecti\~e: Rurcd People's Knor~'ledge. Agricultural Research and E,uensio,l Practice." Di.scusvion Paper 332 (Brighton: IDS. University of Sussex. December 1993).
- 24. Scrimshaw, Nevin S., and Gary R. Gleason (Ed.), RAP Rapid A,ssessment Procedures: Qualitative Methodologies .ji>r Planning and Evaluation of Health Related Programmes (Boston MA: International Nutrition Foundation for Developing Countries, 1992).
- 25. Swift, Jeremy, and Abdi Noor Umar, Participertory Pustortrl De!vlopment in Isiolo Di.ytri(.t: Sorio-reonornic Rrsenrch in the Isiolo Livestock Development Project (Isiolo. Kenya: Isiolo Livestock Devjelopment Project, EMI ASAL Programme. 199 I).
- 26. Uphoff. Norman, Lecrrning from GnI Oycl: Pos~ibilitiec jin Participatory De~elopment und Post-Newtonitrn Soc,ictl Science (Ithaca: Cornell University Press, 1992).

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