

# Role of Participatory Rural Appraisal (PRA) Tools and Techniques for Rural Development Planning

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## **Introduction**

Rural Development has emerged as a distinctive field in the last decade, and particularly new strategy for development planning. Rural development and planning generally refers to the process of improving the quality of life and economic well-being of people living in relatively isolated and sparsely populated areas (Moseley, 2003). The top-down approach practiced in after Second World War era and participatory approach is an alternative development theory which emerged in the late 1970's in response to the top down nature of previous approach. Participatory Rural Appraisal (PRA) technique is the most relevant effective method to receive the participation. Because, it has been strengthen by bottom up approach, well defined objectives, practicable solutions, and remedies. Hence, the outcome of such an event is most productive rather than a top bottom approach techniques. In fact, a PRA was practiced to develop a strategic plan for rural development. The purpose of this article is to describe the origins, principles, approaches, methods and applications of PRA for rural Development Planning.

### **Top - Down approach in rural development planning**

The Top-Down Approach was the predominant development planning approach during after Second World War era to 1980. The history of development denotes that Marshall Plan was initiated in the 1940s, this plan championed by then-U.S. Secretary of State George C. Marshall, delivered over \$13 billion of aid to Europe for the purpose of reconstruction (Milward 1984). Practices of top-down development approach are usually expensive and a country often has to borrow money from organizations like International Monetary Fund, World Bank, donor agencies or developed countries; the decisions making process usually made by involvement by government and external groups and local people who will be influence little involvement. Countries like South Korea and Taiwan can achieve economic development with the magic formula from Bretton Woods Institutions along with top-down government market intervention. Bretton Woods Institutions and other international agencies offered financial assistance to developing countries through conditional grants and loan, for massive industrialization and mechanization to support the Green Revolution of that period (Smith, 2003). Top-down development strategies initially practiced the national development and its "trickle-down" effects to generate sustained economic growth and this approach has had some successes to reducing mortality rate, vaccination campaigns and combating potentially disastrous diseases at a macro level but it were eventually found to produce inequitable economic growth and spatial inequality and it have been unsuccessful in most developing countries. Because of the practices of top down approach urban centers were develop as growth poles and rural areas were perceived as 'backward' and marginal.

Top-down decision making, even within representative democratic systems, was never a good system when it comes to responding to real needs and opportunities for development, or to preventing or sorting out social injustices. Top-down planners look for solutions rather than focus on specific problems. The plans called for large-scale and expensive projects requiring sophisticated engineering skills and high technology equipment. The governments receiving aid were generally experienced in industrial development. They had well-trained professionals and skilled workers, high levels of planning and managerial capability and a strong motivation to recover as quickly as possible.

Project decisions are centrally taken by outside organizations that are not in the project area and the all the stakeholders participation is only limited to provision of data or approving and adhering to what has already been planned. Planners and Government proceed as if they were writing on a clean slate and possessing all the knowledge for improving people's lives. In reality, they are making interventions in a well-established community social system, which has survived over generations of struggles and interactions with the local environment. Plans and projects are generally based on quantitative data or numerical estimations collected through rapid diagnostic feasibility studies or project formulation missions. The approach follows a predetermined project design usually based on assumptions of uniformity and cost-effectiveness regardless of area specific conditions where the project is implemented. Top down planning is usually based on poor assumptions of social and environmental behavior often proven to be incorrect as locality and social formations vary.

Due to the failure of the top-down planning approaches, some post-development thinkers wrote the "obituary" of development. Governments and international development agencies have introduced the idea of participatory grass roots development approach as a potential solution. Community involvement during planning, implementation, monitoring and evaluation of a programme or a project differentiates in the top-down and the bottom-up approaches. Participatory approaches to planning often tend to concentrate on analyzing community problems or opportunities within a village or development area. The basic principle of PRA is sustainable rural development and should be the knowledge base, priorities and perceptions of the local community (Chambers et al. 1989).

### **Participatory rural appraisal as a bottom – up approach**

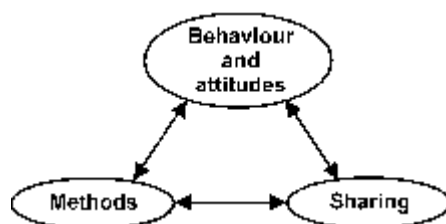
A “bottom-up” rural development approach based on local communities’ expectations, ideas and initiatives. Bottom- up approach allows the local community and local players to express their views in development activities in their areas according to their own views, expectations and plans. This approach encourages local participation in every aspect of development policy involving of local players at all levels, either through consultation or by involving them in the partnership. Participation is encouraged at every stage which are during the definition, implementation, evaluation and the revision phases.

Adopting the bottom-up approach means delegating decision-making powers from other levels of governance to the local level. Recognize the existence various needs in the Social and economic cohesion is one of the key elements for balanced and sustainable development. Transparency in decision making process is one of major part of success and sustain this systems. The bottom-up approach calls for adaptations to be made to suit the different contexts, players, goals and objectives involved.

Participatory Rural Appraisal (PRA) started in the 1980s and involves the direct participation of local community in rural planning. Shift in rhetoric: “from top-down to bottom up, from centralized to local diversity, from blue prints to learning process” (Chambers 1994). PRA’s original developed in East Africa and South Asia. Five streams which stand out as sources and parallels to PRA, are activist participatory research, agro ecosystem analysis, applied anthropology, field research on farming systems and rapid rural appraisal.

PRA is “a family of approaches and methods to enable rural people to share, enhance, and analyze their knowledge of life and conditions, to plan and to act” (Chambers,1994). It has been called “an approach and methods for learning about rural life and conditions from, with and by rural people.” PRA approach is a set of participatory and largely visual techniques for assessing group and community resource identifying and prioritizing problems and appraising strategies for solving problems. It takes into account knowledge and opinions of rural people in the planning and management of development projects and programs and transfers the role of planning and decision-making, traditionally taken by stakeholders and development agencies, to the target group or community itself. PRA is to encourage local communities to carry out their own analysis, come to their own conclusions and design their own development programs and it is important to reduce the problems of mismatch between what is being provided by the stakeholder and what is needed by the community.

**The three pillars of participatory rural appraisal**



Source: (Chambers 1992)

PRA has three pillars of behavior, methods and sharing. Behavior means to changes the behavior and attitudes of outsiders, with self-critical awareness, embracing and learning from error, and reversals of roles, with outsiders respecting, and learning from rural people. Sharing refers to a spirit of non-possessive openness, sharing knowledge, training, methods and approaches between practitioners, organizations, rural people and other outsiders. Methods refers to a continually expanding list of methods of learning from by rural communities.

Participation is key principle of the PRA serving local communities as an active partners in data collection and analysis “Flexibility” not a standardized methodology “Off-setting biases” anti-poverty biases are consciously avoided, more listening less lecturing, “Teamwork” everyone is involved, “Diversity” attempts made to identify and analyses contradictions and exceptions, “Optimal Ignorance” leave out unessential details, “Systematic” to get correct details and conclusions, it is best to cross check, “Local materials” stones, sticks (or paper), not computers/electronic device.

PRA derives some of its principles and precepts from its parent and contemporary, rapid rural appraisal (RRA). These include rapid, flexible and progressive learning, learning from rural people, optimal ignorance, and triangulation. To these PRA has added learning of rural people through their own analysis and for outsiders - critical self-awareness, listening not lecturing, embracing error, and always "Use your own best judgement at all times". PRA uses various systematic methods to enable people to express and share information, stimulate discussion and analysis, and assist participants to organize and initiate changes to a particular problem. When conducting PRA techniques can divided into four classes such as group and team dynamics methods, sampling methods, interviewing and dialogue methods, and visualization and diagramming methods.

## Methods and Tools of Participatory Rural Appraisal

Group and team dynamics methods	Sampling methods	Interviewing and dialogue	Visualization and diagramming methods
Team contracts	Transect walks	Semi-structured interviewing	Mapping and modelling
Team reviews and discussions	Wealth ranking and well-being ranking	Direct observation	Social maps and wealth rankings
Interview guides and checklists	Social Maps	Focus groups	Transects
Rapid report writing	Interview maps	Key informants	Mobility maps
Energizers		Ethno histories and biographies	Seasonal calendars
Work sharing (taking part in local activities)		Oral histories	Daily routines and activity profiles
Villager and shared presentations			Historical profiles
Process notes and personal diaries			Trend analyses and time lines
			Matrix scoring
			Preference or pairwise ranking
			Venn diagrams
			Network diagrams
			Systems diagrams
			Flow diagrams
			Pie diagrams

*Source: Pretty, 1993, as adapted from IIED 1994: 100.*

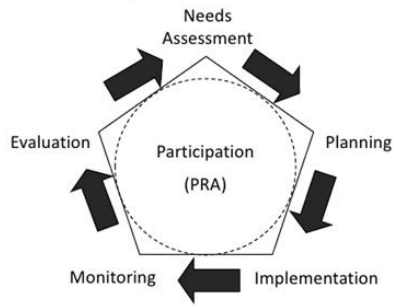
### Participatory Rural Appraisal in Rural Development Planning

PRA techniques support to the rural development planning process especially initiate new development projects in the rural sector. PRA helps to identify problems and assessing which the problem affects to the society, formulating goals to aim for solving the

problem, assessing the various intervention measures based on their advantages and disadvantages, selecting the best mode of action and projects, take action to implement them, monitoring the progress of the implemented projects and programme, finally evaluating the results.

PRA is considered one of the popular and effective approaches to gather information in rural areas and its applications involve natural resource management, agriculture development activities, poverty reduction program, social development programs, health and food security analysis. PRA is one of learning methodology rural life and their environment from them self. Rural development is an integrated approach. Economic sectors, industry, services, social and political systems contribute for development of a rural area. Rural development always concerns to develop backward rural areas and balanced development parallel with the national development of the country. Menes (2005) define integrated rural development is “an ongoing process involving outside intervention and local aspirations aiming to attain the betterment of rural community and to sustain and improve rural values through the redistribution of central resources, reducing comparative disadvantages for new ways to reinforce and utilize rural resources”. The integrated approach to rural development promotes a shift from the top down approach to bottom up participatory approach (World Bank, 1991). Planning is the process of thinking of organizing the activities required to achieve an ultimate goal. Planning is one of the most important Project management and time management techniques. Planning cycle includes analysis of the situation, list out the objectives and goals, assessment of resources, fix priorities, write up formulated plan, programming and implementation, monitoring and evaluation. Rural Development Planning is to identify ways in which rural communities can increase jobs and livelihoods, how to reduce poverty and inequality, how to use resources in the rural sector for sustainable rural development whereas retaining their rural character and lifestyle.

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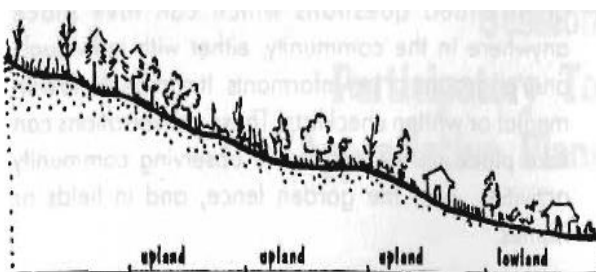
**Application of PRA steps in project Planning**

In the first steps in the project cycle selected PRA tools to collect the information using Participatory Mapping, Transect Walk, Venn diagram, Seasonal Calendars and Wealth Ranking used to identify problems for the need assessment in the rural areas to implement development plans and projects for rural communities.



Participatory Mapping includes several types mapping methods such as Social Map, Hazard Map and Natural Resources Map etc. Using sticks and other tools, relevant Community draw their map on the ground. Drawing the map on the ground, like drawing a large

map on the wall, gives you and the participants a chance to easily make the drawing process as group work. Natural Resources Map includes land use patterns, cropping pattern, irrigation patterns and water bodies, forest area, existing farming systems in their own area. Social Map demonstrates settlement patterns, demographic, educational, health and cultural information. Using these information, plan and implement resource based projects such as livelihood development projects and infrastructure development projects.



Transect Walk is a field-based observation of rural sector and can be participate and discuss with local people. It is systematic walk and basically cover Z or N letter shape of English Alphabet

walk through an area observing, asking, listening, discussing with the local people who participate to this technique. After walk visualize the findings such as soil types, vegetation, natural resources, land use pattern and topography through two – dimension



diagram. This technique useful for identify opportunities, problems and introduce better solutions for rural area and community. Hence this technique is an important to need assessment step or suitable project identification process in the project cycle.

	oilseeds	rice	wheat	maize	millet	beans
food	○○○	○○○	○○○	○○○	○○○	○○○
income	○○○	○○○	○○○	○○○	○○○	○○○
labor	○○○	○○○	○○○	○○○	○○○	○○○
every working	○○○	○○○	○○○	○○○	○○○	○○○
palatability	○○○	○○○	○○○	○○○	○○○	○○○

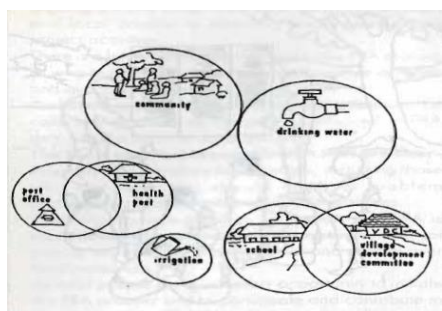
Seasonal Calendar is used to collect seasonal information such as rainfall, soil moisture, cropping pattern, insect infestation periods to the crops, food availability, income and expenditure patterns, labor demand, migration patterns of employment, health diseases and natural hazards in the year. When prepare

the Seasonal Calendar arrange 12 columns in the table to demonstrate January to December months rows to explain the changes of above elements during the year or various changes of specific economic activities, health problems and labor problems etc. These techniques can help to explore trends and problems, introduce solutions to these problems and trends through people’s participation and also helps to identify new employment opportunities, plan and manage the farming system. Matrix Ranking is a technique preference for various items and factors influencing and contributing for decision making process. For an example through this technique, can understand selection of crop in a particular piece of land variety, preference of a crop watershed treatment works, trees ranking for social forestry in common lands, trees ranking for horticultural crops either in private or common lands, seeds, fertilizers, pesticides brands, markets, agricultural credit, agro-processing facilities. Hence Seasonal Calendar is a valuable technique for project identification, evaluation steps in the rural development planning.



Wealth ranking method helps categories household economic situation on wealth or well-being in the village. Key informants first develop the parameters they think important to consider while ranking households and make a card the name of each of the households in the community on it. When selecting some members of the community, ask them to put these cards into groups according to various measures of wealth and to give their reasons for the groupings. Local people

categorize members of the community, and the reasons they give for making those categories and for putting different households into each category, are very revealing about the socio-economic makeup of the community. This is a particularly useful method to discover how the community members define poverty, to find who the really poor people are, and to stratify samples of wealth. According to the rural development planning this technique important to project identification for the poverty reduction and introducing community empowerment programs.



Venn diagram prepares based on two rules as the relationship is inversely related to the distance and the significance is proportionally related to the size of the denoted circle. In a Rural sector, there are many service providing by the Government institutes, organizations and other partners. [Venn diagram](#) are

used as a tool to discuss the relative importance or positions of different factors asking open-ended questions from group of local people using written checklists. This technique is simply a collection of circles, each of which represents a different group or organization active in the community. The size of each circle reflects the relative importance of the group represented-the smaller the circle, the less influential the group. Venn diagram helps us to understand the network of relationships of various institutions working for the rural community.

Limitations encountered in paddy cultivation

Problem	1	2	3	4	5	6	7	8	9	Marks	Rank
1. Intrusion of sea water to the <i>pallewelyaya</i>	X	1	1	1	1	1	1	1	1	8	1
2. Dilapidated irrigation canal		X	2	2	2	2	2	2	2	6	3
3. Unavailability of water for the cultivation			X	3	5	3	7	3	3	4	5
4. Difficulties to obtain seed paddy				X	5	4	7	4	4	3	6
5. Lack of machineries and equipments					X	5	7	5	5	5	4
6. Lack of high yielding varieties						X	7	6	6	2	7
7. Unavailability of fertilizer at the correct time							X	7	7	7	2
8. Poor extension services								X	8	1	8
9. Low price for the harvest									X	10	9

Pair-wise Ranking is important to prioritizing and find out suitable project idea from rural community for rural planning. Number of limits were listed down under a pre-determined topic and arranged in a matrix as

horizontally and vertically. Then each limitation was compared one against another and marked the number of most severe problem. Finally, count the times that each problem appeared and ranked according to the descending order.

PRA is a process and varies it with the context. First of all, select a site and get approval from local administrative officials and community leaders. Secondly, conduct a

pilot site visit. Steps one and two could include a community review and a planning meeting to share the purpose and objectives of the PRA and initiate dialogue between all parties with active participation. Thirdly data and information are collected through PRA techniques and share information with selected communities. In this stage, facilitators may start with a participatory mapping exercise to stimulate discussion and encourage all parties for providing an overview of the area/community, and helping to deal with non-debatable information. Undertake transect walks and seasonal and historical diagramming exercises. Engage in preference ranking to focus the intervention and groups interviews. Undertake wealth ranking once participants are confident with the process. Fourth step is synthesize and analyze data with community and identify problems and opportunities to resolve them. Fifth step is Rank opportunities and prepare land maps and resource management plans. Sixth step is adopting and implement the plan and follow-up, evaluate and disseminate any findings (adapted from Brown and Wyckoff-Baird 1992 as quoted in IIED, 1994).

PRA can be used as a bridge between agencies attempting to work in a participatory fashion and communities. It creates the kind of flexibility required by communities but provides the minimum structure needed by development agencies to be able to plan their own activities. Between the three, simplified “types” of planning framework outlined there are any number of intermediate positions where sectoral planning approaches combine with integrated development planning and even participatory planning. Different levels in the planning administration function in different ways and there are conflicts and contradictions between how various agencies, services and institutions go about planning development interventions. However, PRA can constructively be used for rural development Planning.

### **Advantages of PRA for rural development Planning**

PRA can be clearly identified below listed advantages in rural development planning sector.

#### **1 .Identification of real priorities for target group**

PRA allows local people to submit their own priorities for development and incorporated them into national and regional development plans. Planners and decision making parties

can be more secure that this responds to a real need among local people. The risks of outside planners “imposing” aquaculture as a solution and then discovering that local people are not really interested or committed to its development can be significantly reduced.

## 2 .Distribution of management responsibilities

PRA encourages local communities on independent development and giving themselves with as much of the responsibility for the management and implementation of development activities. This can greatly support the efficiency of development work and reduce many of the problems of development activities at the community level. Through top down approach projects run by outsiders are frequently plagued by problems of mismanagement and community does not actually feel any responsibility for them but activity generated by a PRA will usually be managed by the community and the benefits will be clear to them.

## 3. Motivation and mobilization of local development workers

Active participation in PRA by local development workers, can greatly increase the motivation and level of mobilization in support of the project or program of which it is part whether they are from NGOs, government or other agencies. Where changes in development approaches are being introduced, such as a shift to a more integrated development planning mechanism, a PRA-type activity which illustrates how these new mechanisms will work on the ground can help to ensure better understanding and commitment by local workers.

## 4. Strong link between communities and development institutions

PRA can help to build a better links between communities and the agencies and other institutions concerned with rural development. This can benefit workers by helping them with the monitoring of rural development and environmental issues related to development. PRA which encourages a better understanding of the environmental issues at stake in local communities and develops activities which enable them to benefit from better management could also lead to better monitoring by the communities themselves. PRAs involve intensive interaction between communities and outsiders which can have

lasting effects in breaking down the barriers of reticence and suspicion which often characterize these relationships.

#### 5 .Better Use of local resources and mobilization of community resources

Local people are very happy as in the design of projects prepare plans to make full use of existing resources. Greater commitment from the community can also mean greater mobilization of community resources for development and less reliance on outside inputs. This can take the form of labour inputs, savings or time devoted to management functions.

#### 6. Sustainable development activities

This combination of effects will generally lead to more sustainable development activities which are less reliant on support from outside agencies and is technically, environmentally and socially appropriate to local conditions.

### **Disadvantages of PRA for rural development Planning**

Though, PRA always is better option in rural development planning, it identifies some disadvantages in some areas.

#### 1. Unrealized expectations

PRA is a complex set of expectations in communities which frequently cannot be realized given the institutional or political context of the area. This can be due to the political situation, the local power and social structure or simply to bureaucratic inertia in institutions which are supposed to be supporting development. However, not all development agencies are in a position to support such activities and there is a risk that agencies which are not properly equipped to respond to PRA-type planning may use the approach inappropriately.

#### 2. Proposal of development plans which participating agencies cannot respond to

Linked to this first point is the risk that the development priorities which communities identify during the course of a PRA may be ones which participating agencies simply cannot respond to adequately in the technical sense, thus again raising

expectations only to disappoint them .This again comes back to the problem that the “playing field ”in PRA has practically no boundaries and this can make the approach inappropriate for sectorally oriented agencies.

### 3. Risk of “capture” of activities by local interests

By devolving decision-making responsibility to communities and leaving the identification and planning of activities to them, there is also a real risk that particular elements in communities - the more educated, the wealthiest, those with authority - may find it easier to “capture” the activity and monopolies its benefits. The relative lack of outside involvement in a participatory planning process can make this much easier. Poor people in the community might support “community” decisions which will not benefit them at all because they are supported by their wealthier and more influential patrons.

### 4. Failure to take account of stratification in communities

The fact that PRA is often carried out with the community as a whole can mean that stratification within the community, whether by wealth, social status, gender or ethnic group, can often be obscured and ignored. This may happen even though preliminary research in the community has clearly identified that there are strata and different sets of interests in the community. In PRA, decisions about how to accommodate the conflicting interests of different groups have to be left up to the community itself and, while one of the roles of outsiders involved in PRA is to encourage negotiation and arbitration between different interest groups, if the “community” decides that they want to resolve problems by ignoring the interests of the poor and weak, it may be difficult for “outsiders” to do much about it, especially if they are committed to devolving responsibility to the community.

## **Conclusion**

Development planning in rural sector encourages bottom-up planning approaches to motivate and encourage to active participation in rural development planning. Planning is always requiring truth and reliable information. PRA tools helps to gather reliable and truth information from the ground and those data use for planning required development and other activities in sustainable manner. PRA will be used here to refer to a more

extended process that involves not only the collection of information but also its eventual use by the community as it plans further activities. There are several tools that can help the community to prioritize and identify its problems and then analyze the potential solutions in order to find those that make the best solution. A common problem with community planning exercises are villages tend to model their desires on what looks good in another community where a development project has intervened. PRA can help to enable local analysis and planning, within and by communities, where much is possible even without seeking outside resources. PRA techniques involves defining a problem, assessing the extent to which the problem affects the society, formulating goals with a view to solving the problem, assessing the various intervention measures based on their advantages and disadvantages, selecting the best mode of action through project identification, taking steps to implement development plans in rural sector, monitoring the progress of the implemented plans and evaluation of the result of the rural development plans. Finally, it is identified that all over the world, Participatory Rural Appraisal (PRA) Tools and Techniques are mostly used for Rural Development Planning.

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