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PRA for Rural Resource Management

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• Introduction

The Society of Peoples' Education and Economic Change (SPEECH) conducted a workshop on Participatory Rural Appraisal for Tank Irrigation/Management, June 15-18, 1990. This workshop was combined with the regular co-ordination committee meeting, comprising of members of volags from Tamil Nadu. In all 19 organizations were represented by 34 participant members. These had a wide diversity of expectations of projects which focused on credit, livelihood, agriculture, health, social forestry and non-farm activities. The resource persons were Prof S. Subramaniam, Head of Arupukottai Agriculture Research Station, Mr James Mascarenhas and his team from MYRADA, Mr David Mosse of OXFAM as well as Mr John Devavaram, Secretary, SPEECH who had attended a previous PRA workshop. The workshop was held in Udayanampatti, a medium sized village comprising about 150 families. The village is 1.5 kms from the taluka headquarters and is connected by a kutchra road. The participants stayed all four days in this village.

When SPEECH started work here two years ago, they involved the villagers in a road building programme. Part of the road crosses a river. In the course of the work, they discovered, incidentally, that about 70 to 80 years back there was a channel from the river which fed 24 interconnected chains of irrigation tanks. With some difficulty, SPEECH located where this channel used to run. Since then SPEECH has been trying with some success to pressure the government to take up a project of

rebuilding the channel. If the project does come through, which is likely to happen shortly, it will mean that an additional 1,618 acres can be brought under cultivation. In the meantime SPEECH and the people have realised that mere desiltation is insufficient as a tank rehabilitation measure, as siltation continuously occurs. In this context, SPEECH felt that a holistic tank management could be the focus of the PRA workshop.

However, the objective of the workshop was to introduce participants to the techniques of Participatory Rural Appraisal and give them an opportunity to learn by doing in the village setting. It is expected that participants will transfer these techniques to various programme areas within their respective work settings, and by sharing their experiences, enrich the body of research in PRA. In the report which follows, the day-to-day proceedings are summarised, and relevant aspects of process are highlighted wherever possible. Some of the outputs have been transcribed and included, so as to give an idea of the quality, range and depth of data which can be obtained by use of PRA techniques.

The workshop started on June 15, 1990 at 4.30 pm with an inaugural address by Prof Subramaniam. He gave a detailed report on their experience at the research station with dry-land and being the authority on building live bunds for the government of Tamil Nadu, showed a set of slides and video cassettes. Further he assured the fellow NGOs and local villagers of their help from the research station.

Figure 40. Time line for Udayanampatti, Tamil Nadu

<u>TIME LINE</u>	
<u>NAME :</u>	
MR. KRISHNAN	MR. NARAYANA GOVINDAN
1) - VAKNAM	MR. SARDHANA
1) - THIANGAMUTHU	1) - KOTTAISAMY
1) - MANCHARAN	MS. ANGAMMAL
1) - SONAIMUTHU	MS. VALLI
1) - SULIVANAYAGAM	
<u>YEAR</u>	<u>EVENTS</u>
1992	- TANK UNDER TAKEN BY GOVT
1935 TO 1946	- ESTABLISHMENT OF VERANDA SCHOOL BY GOVT
1947	- INDEPENDENCE
1948	- 16 WERE DIED DUE TO CHOLERA, FAMINE
1954	- ROAD, THATCHED SCHOOL
1956 TO 1964	- CYCLONE, FLOOD'S
1966	- NEW SCHOOL BUILDING
1968	- AGAIN CHOLERA, 4 WERE DIED.
1970	- ELECTRICITY & FACILITY, BRIDGE, 100 FAMILIES MIGRATED BECAUSE OF SEVERE DROUGHT
1977	- ESTABLISHMENT OF NOON-MEAL CENTER
1978	- COMMUNITY WELL, 2 BORE WELL FOR DRINKING PURPOSE
1983	- TINP
1984	- ELECTION BOYCOTT. ONE MORE BORE WELL, DRINKING WATER OVER HEAD TANK - STREET TAPES BY GOVT
1984 & 1985	- NON FORMAL EDUCATION BY GOVT.
1987	- SPEECH
1989	- GROUP HOUSES FOR 20 HARIJANS
1990	- HEAVY CROP DAMAGE BECAUSE OF FLOOD

• Day one

Actual session of PRA workshop started on the morning of the 16th at 7.30 am with warming up exercises. Mr Premkumar explained about the PRA training programme, what PRA is about, how it is an alternative to the traditional approach etc. Basic principles as explained are:

- fast/quick appraising;
- key staff do it directly with people;
- fundamental for working in a rural situation;
- more of listening and not lecturing;
- gives opportunity to people to present their ideas; and,
- cross checking and triangulation is possible.

The group was then divided into two groups and asked to list their expectations from this workshop. These were subsequently presented in a plenary.

Following breakfast the group was divided into six sub-groups and each given a specific task. These were:

- Time-line;
- Participatory mapping;
- Individual family profile;
- Modelling of catchment and command area;
- Tank study and catchment area; and,
- Tank study and command area.

These groups were given approximately four hours to carry out their respective tasks. Three of the groups presented their findings, followed by an exercise in which participants were required to carry out village chores. The remaining presentations followed this, groups were required to focus specifically on process and findings, in their presentations.

The objective of this report is to concentrate on highlights of the process rather than describe events.

Expectations

When groups were listing expectations, each came out with a different set of expectations. One concentrated on watershed management

and the other exclusively on PRA. This might be because the second group had a large proportion of MYRADA participants.

Timeline

This group had six participants and six villagers (4 old and 2 young; 2 were women). The staff set the ball rolling by asking about the origin of the village name. The older villagers were then asked their respective ages and the oldest member was asked to date the earliest event he could remember. This event/date served as a reference point, and from this onwards, the discussion stemmed completely from the villagers, and they were able to date events with reasonable accuracy. Two kinds of events seemed significant to them: calamities and acquisition of village assets (Figure 40).

Participatory mapping

In this group consisting of 3 villagers and 6 participants, the main task actually was preparing a map showing the location of landmarks, important resources, etc. This was done by first listing all the village resources, as well as a caste break-down of the families. Following this, a map was drawn completely by the villagers showing village boundaries, location of buildings, etc. Later on, during the presentation, other villagers in the general forum, showed a lot of interest in pointing out gaps in this map. The impact of this visual device was clearly high.

Family profile

A conscious effort was made by this group to select a poor harijan family. An in depth interview was conducted, from questions about family tree to social practices. The depth of the discussions attracted attention, and five harijan women came in voluntarily and contributed to the discussions. The report was presented by one of the participants, as none of the villagers in this group were literate.

Modelling of catchment and command area

This task was built around a physical activity, more than discussion. Right from the start, the villagers were the leaders/guides and the staff merely followed instructions as to what to do.

The modelling was followed by a visit to the actual area, to allow for better understanding on the part of the participants. Use of coloured powders etc, for the model attracted several interested villagers, who all sat around and gave advice.

Tank study - catchment area

The group first visited the area, then had discussions and latter drew a map of the area (Figure 41). Detailed information was elicited, based mostly on specific questions from staff. However villagers volunteered a lot of details about why soil erosion, siltation, etc, had occurred, indicating active participation.

Tank study - command area

Four villagers and five participants participated. Apart from identifying salient features of command area, they also produced a graph showing rainfall over the years. Additionally, they planned the creation of a community well and a channel irrigation system. There was considerable discussion as to how the water should be shared, and the villagers came out with clearer solutions than the participants.

The intervening ice-breakers served their purpose well.

• Day two

The second day's session started with reflections on the previous day's sessions and learnings. Participants poured in their comments with every anxiety to learn more about the techniques in using PRA to different dimensions/fields of development. The report below will summarize events that took place on the second day.

- Members prepared individual reports of the process, content and their new learnings in the previous day's group activity.
- Dr Chambers' note on PRA was circulated for members understanding. The note was discussed in groups and clarifications made in the subsequent plenary.

- A number of PRA techniques were demonstrated by Mr Prasad with volunteers from the group: wealth ranking; venn diagram or chapati diagram; seasonality; matrix ranking were demonstrated and the use of local resources was stressed. In addition, techniques like transect, social mapping were explained.
- This was followed by a slide presentation to highlight salient features of these methods.
- The group was divided into five sub-groups and each given a task and six hours to do it.
- Presentations were made successively. A street play was performed by a visiting troop (Black Theatres) during one of the intervals.

Highlights of the process

When participants shared experiences, a few key points recurred, particularly:

- learning from the people is very meaningful;
- surprise was expressed at the amount, quality and depth of information gathered in a short time span;
- PRA is novel in the importance it gives to villagers;
- people also felt that the information gathered is very relevant;
- PRA is fun; and,
- reservations were expressed about some issues: extent of control by development worker and the exclusions of underprivileged groups like women.

The main queries about PRA were:

- the precise meaning of approximate imprecision - there were varying interpretations of this;
- doubts regarding how people would react to an already familiar development worker using this novel technique;
- how survey results can be used to complement data got from PRA; and,
- applicability to areas like health.

Figure 41. Catchment area for Sriramenendal

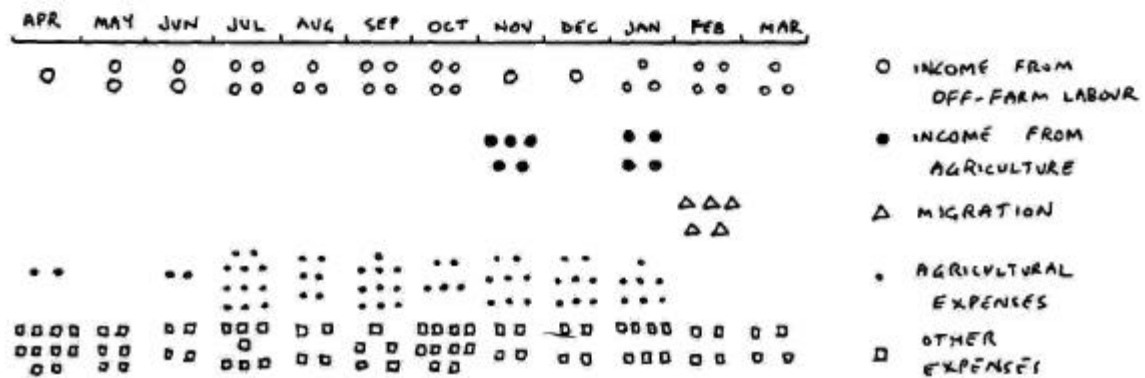
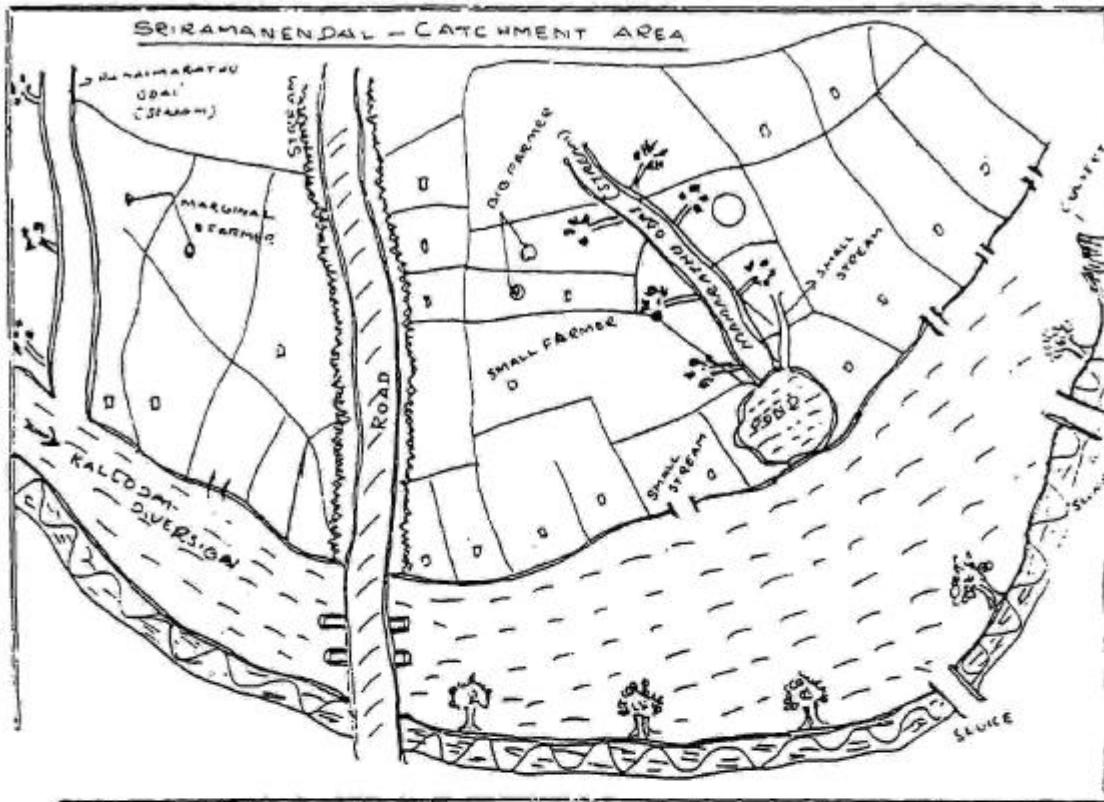


Figure 42. Seasonality for income and expenditure. Redrawn from original made on ground

The groups were allocated different tasks and methods to apply:

- Group 1: Social mapping, wealth ranking, study of sanghas and their function.
- Group 2: Social mapping of health, seasonality of diseases, traditional practices.
- Group 3: Fodder - seasonality, ranking, tree ranking.
- Group 4: Seasonality in rainfall, agriculture, labour, expenditure/credit, migration.
- Group 5: Non-farm livelihood - listing various types, ranking, economic analysis.

Group 4 made the first presentation, where a seasonal chart was made of various livelihood/economic parameters. Seven villagers were involved, all landowners. Following a discussion (open-ended interview) on the various parameters, the members suggested to the villagers how they could visually depict these patterns using various local resources (like stones, sticks, slips of paper, tamarind seeds, goat droppings, etc). The major innovations of the villagers were that they attached different values to different items (1 tamarind seed = Rs 50/-; 1 lentil = Rs 100/-, etc). They described a hypothetical family with 2 acres of land (one acre dry, one acre wet), 5 children, and then proceeded to discuss what could be the income, expenditure, credit needs, etc, of that family. The model which emerged was a floor graph, somewhat akin to a stacked bar chart (Figure 42).

Group 1 made a very elaborate village map, where individual houses and institutions were located, subsequently the group classified the people as rich, middle and poor. The criteria-wise classification were basically (i) size of land holding and (ii) occupational group. This ranking was then used to develop the map as a wealth profile map. Regarding the sangas, the three sangas in this village were analysed on the basis of strength, funds management, common activities and future plans. There was considerable exchange of ideas and queries

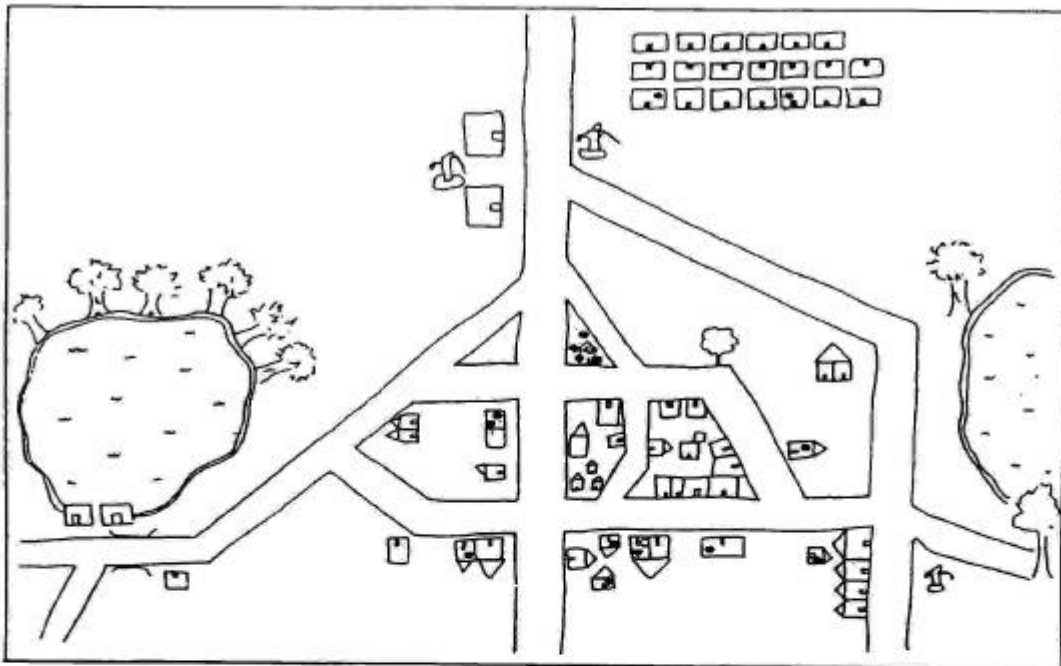
regarding sangas - with people wanting to know about long-term plans of sangas, etc.

Group 2 involved about 15 villagers in various PRA exercises. There was much open-ended interviewing to get information about health facilities (past and present), traditional versus modern systems of medicine used, list of local resources, etc. Additionally, a village map was used and prevalence of various diseases marked on this (Figure 43). One exercise which involved several men, women and much excitement was the seasonality of various diseases, as well as prioritisation of these. Tamarind seeds and goat droppings were used to indicate extent of incidence. Frequency ranking of diseases, categorisation of diseases according to spread, target, etc, was done (Figure 44).

Group 3 first made a chart of various types of fodder for different livestock in the village was prepared. The chart had actual samples of fodder and feed. Next, the seasonal availability of fodder was arrived at using a seasonality diagram. This threw up additional issues like storage and preservation of fodder. A ranking of various trees according to the number of uses they can be put to was made. Interestingly it was found that *Prosopis juliflora* (seemai karuvail) is put to several home uses here (apart from firewood) and the supplementary revenue it provided during lean periods, actually lessened migration, according to some villagers.

Group 5 focused on non-farm livelihood activities - there was basically a listing of the existing off-farm income activities, and a prioritisation of these according to number of households involved. This served as criteria for taking up the two most important activities - charcoal burning and pottery - for economic analysis. The villagers were asked to list various work processes in this activity and the costs of each. Sales volume and revenue figures for a given capacity were also elicited from the participants. There was near unanimity among villagers in this.

Figure 43. Social map with incidence of disease for each household in Udayanampatti village. After they drew the map, participants used different coloured stickers to mark the houses in which members suffer from ante-natal and post-natal problems, deafness, chronic illness, disability, malnutrition, jaundice, TB and paralysis



	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
FEVER				••	•	•					••••	••
COLD & WHOOPING COUGH	••	••									••••	••••
HEADACHE	••••	••••	••••	••••		•	•••	••••	••	••••	••••	••••
DIARRHOEA			••••	••••	••••	••	••		•	••••	••••	••••
MEASLES			••••	••••	••••	••••	••••					
JAUNDICE	•••	••••		••••								
VOMITTING	•	•••		•	••••	••••			••••	••••		
SCABIES		••	••••	••••	••••		••	••	••••	••••		
TETANUS									•	••••	••••	••

Figure 44. Seasonal health calendar of nine diseases, Udayanampatti village. Villagers used stickers to depict frequency

• Day three

Prior to an early start (6.30 am) the groups had been briefed on their respective tasks, so work began without delay. The tasks of the groups were:

- Planning for catchment area (groups 1 & 2)
- Planning for command area (group 3)
- Modelling of the tank (group 4)
- Village development plan (group 5)

Groups 1, 2 and 3 used the transect technique, combined with open-ended interviews. Group 4 developed a detailed floor model of the tank with the help of the villagers. Group 5 relied on open-ended interviewing. The groups worked at their tasks for about four hours and there was consolidation of efforts. Described below are the proceedings for each group.

Group 5: The plan focussed on the cultivation of kitchen gardens/trees. The group went into the village and spoke to several women/villagers as a group. It was primarily the women who showed interest. In the village, people did not react favourably to the kitchen garden concept. On probing the group found that the reasons were: lack of backyard space; goats may graze, also chickens; no water facilities; and they already grow vegetables in the fields. Regarding tree planting their priorities were tamarind and neem trees, and described all the activities/responsibilities they would undertake in such a program. About a common tree planting program (planting tamarind trees on the tank bunds) they said they would prefer to each have sole responsibility for a tree. Later, the group spoke to members of the harijan colony. They were already planting vegetables to some extent, and while they expressed willingness to plant more, they stated that agricultural work had greater priority for them. However, they developed a small plan for a kitchen garden what is called a bio-intensive garden (BIG), introduced by SPEECH, and said

the entire responsibility would be theirs as they would be beneficiaries.

Process - the group repeatedly tried to pursue the idea of BIG with the first set of people, but met with resistance. At this point, they started lecturing and preaching and the interview was stalled for some time. Only when the group decided to abandon the idea did discussions proceed smoothly. Women clearly divided the responsibilities in tree planting (digging and building fences is men's work and maintenance is women's responsibility).

Group 3 (modelling): The group took the help of three villagers - 2 youths (1 male and 1 female) and 1 elderly person. The youths designed the model and constructed it with advice from the older man. Twigs of various trees were used to depict the actual trees and colours were used liberally. The group related to the model to the extent that at one point when somebody put tamarind twigs at a particular point, another member protested, saying that tamarind would not grow there and only acacia would survive there. After modelling the villagers made suggestions for planning. These included: cultivation of neem and tamarind along bund and as avenue trees; cultivation of neem trees in wasteland to provide shade and for wood value; checking soil erosion by placing large stones across the stream in catchment area; and growing *Acacia nilotica* near the reservoir as an additional source of income.

Groups 3,4 and 5 used the model and pointed out various areas where measures could be taken to manage the tank. These are summarised in the accompanying charts. This was clearly dominated by inputs from the villagers, with several of the command area farmers chipping in with suggestions, arguments, discussions, etc. One of the groups also did the matrix describing the various uses to which the local tree could be put (Figure 45).

Figure 45. Matrix ranking of six trees according to eight criteria

UDIYANAM PATTIPAMATRIX RANKING TREES.

2000 : 1 - 1000000000
6 - 10000000000

	TAMARIND TREE	NEEM TREE	ACACIA NILOTICA	PALM TREE	MORINDA TINTOREA	PROSOPIA JULIFLORA
FOOD PURPOSE	***	NIL	NIL	**	NIL	NIL
FEEDER FOR GOATS	///	///	///	///	///	///
FREE WOOD	66	66	6666	66	666	6666
USE OF ROPE CONSTRUCTION	NIL	□□□□	NIL	□□□□□	□□□	NIL
USE OF ADDITIONAL IMPLEMENTS	NIL	≡≡≡≡	≡≡≡≡	NIL	≡≡≡≡	NIL
CHARCOAL MAKING	☐☐	NIL	☐☐	NIL	NIL	☐☐☐☐
MEDICINE PURPOSE	□□	□□□□	NIL	NIL	□□□	NIL
DECORATIVE PURPOSES	NIL	☆☆	☆☆	☆☆☆	NIL	NIL

In the second phase, the total group was divided into two sub-groups and given identical tasks. These were:

- planning for desilting the tank - task, problem, solution and responsibilities;
- time chart for plans;
- budgeting (fund requirement, extent of task to be done, contribution from sanghas, SPEECH and government);
- implementation of plans; and,
- management of plans.

The groups had different experiences to report. Both complained that the groups were too large to allow for involvement and participation of all members. In the first group, 4 of the achiyut farmers were involved. During the planning of who was to do what task they hesitated in saying what responsibilities they would accept, because they felt that some of the remaining

farmers (14) would disagree. Tree planting was one programme to which they promised full contribution. Moreover they suggested different species of grass, plants, etc to cultivate. They agreed to contribute two days free labour (all households) towards bund strengthening and planting of palms, provided SPEECH contributed the rest. For cement lining of stream beds, they suggested that the command area farmers could bear 25% of the cost and SPEECH 75%. However, all this, they stressed was subject to the concurrence of the remaining farmers. It seemed very clear that this exercise should have involved ALL the relevant people.

The second group did not make much headway because only two farmers were involved, and they were busier arguing than planning together. One crucial point was that neither of these farmers owned land in the command area and consequently, they could not identify with the problems/needs of farmers elsewhere. Also

the group members were keen on getting the task done, so any input served, regardless of its reliability. The group unanimously agreed that PRA planning can be unreal without participation from all relevant parties. At best, the multi-interviewer, few villagers setting can serve as a model for training but the results cannot be taken at face value by the concerned organisation. It is also relevant to point out here that the planning/budgeting exercise is taken up under constrained conditions (time constraints, non-representation), then it should be stressed to all parties that this is a role playing exercise.

• **Highlights of the feedback received from participants**

- In general there was common consensus among participants that the workshop and PRA method are highly useful and relevant to the day-to-day planning/work.
- PRA is so much relaxed that one does not feel the tension of data collection.
- Easiest way to mobilise peoples' participation.
- PRA should be practised regularly and close frequency of workshop is necessary.
- Unlike in other survey methods, collected information is shared with villagers then and there.
- PRA is a process of listening/learning from villagers.
- The workshop content/programme should have been well structured and set before hand.
- Different programme areas (health, IGP, agriculture, tank) are mixed in own workshop to try out the application of PRA - this was confusing - perhaps could have been avoided.
- It was cherishable/enjoyable for the workshop was held in village atmosphere along with villagers.

• **Some stray thoughts on this PRA workshop (actually overheard in various quarters)**

PRA is novel, PRA is interesting, PRA is fun - but:

- This workshop could have been more structured.

- Perhaps we should have tried out a single additional area, like health, to test the applicability of PRA.
- Planning of each day's proceedings could have been done at the conclusion of the previous day with the entire group more participatory?
- Can PRA be used as an evaluation tool?
- There was too much emphasis on content, at the expense of process/technique. Consequently, participants lost out in terms of learning, while the villagers too could not give their best.
- Follow-up on this workshop must be done. It was too good to be consigned to the dust of an upper shelf; like too many other workshop outcomes.

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