

PARTICIPATORY RURAL APPRAISAL FOR KVK INTERVENTION IN A TRIBAL VILLAGE OF TRIPURA

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Abstract

The Participatory Rural Appraisal (PRA) was carried out in a tribal village; Boltoli of Khowai district of Tripura. It is one of the tools of surveying that helps outsiders to understand the village systems, dynamics, and politics by using various techniques as well as by methods of direct observation and discussion. Participatory tools such as physical transact map, agro-ecological map, resource map, time line and seasonal calendar were carried with the villagers to find their problem and need to prepare a participatory action plan for KVK intervention in that village. Based on the problems identified through PRA various interventions, viz., tuber crop production technology, nutritional garden, high yielding variety of paddy, organic cultivation of vegetables, feed management, care and management of household animals, value addition of fruits and vegetables, formation and management of farmers club, commodity interest group and self help group etc. were undertaken with close supervision from KVK scientists.

Introduction

The term Participatory Rural Appraisal (PRA) describes a growing family of approach and methods to enable local people to share enhance and analyze their knowledge and conditions, to plan and act. Among many applications, PRA has been used in natural resource management (soil and water conservation, forestry, fisheries, wildlife, village planning etc), agriculture, programmes for the poor, health and food security. Evidence today shows high validity and reliability in information shared by tribal rural people through PRA. There have been shifts in the past decade in approach of agriculture and rural development. These shifts include the now familiar reversals from top-down to bottom-up from centralized standardization to local diversity and from blueprint to learning process. Linked with these, there have also been small beginnings of changes in modes of learning. The move here is away from extractive survey questionnaires and towards participatory appraisal and analysis in which more and more the activities previously appropriated by outsiders and instead carried out by local rural and urban people themselves (Talukdar et al,

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2008). PRA is an attitude and a methodology.

It is one of the tools of surveying that helps outsiders to understand the village systems, dynamics, and politics by using various techniques as well as by methods of direct observation and discussion. These methods or techniques often produce interesting and authentic information of the village. Useful insights are also gained. The process of understanding the agro-ecosystem and the social organization can only be successful with the involvement of the village people and official concerned. PRA helps the farmers to draw the exact feature of the village by the villagers showing its shape, direction, physical positions of different items including households, as well as land and land use pattern. It is a group learning process. The scientists working in such programmes facilitate the process of appraisal, and the farmers do the appraisal themselves in the form of self drawn picture and diagrams (Sivakumar et. al. 2102).

Methodology

The present study was conducted in the tribal populated Boltoli village of Khowai district of Tripura. The study was carried out through discussion with the community groups. KVK personnel's input was solicited in designing the study framework in the beginning and then several field level discussions were carried out in each group by using different participatory tools such as physical transact map, agro-ecological map, resource map, time line and seasonal calendar. The purposes for conducting PRA in the village were i) To gather and document first hand information relating to people and resources of a locality in relatively less time, with less cost, through active participation of people and with specific aim of development; ii) To formulate need based, demand driven, realistic, location specific and people oriented strategies and programmes for agricultural and rural development by following bottom up approach of planning; iii) To facilitate active participation of rural people in decision- making, planning, action and evaluation in relevant development efforts such that they reap maximum possible benefits; iv) To bring about favourable change in attitude and modality of working of cosmopolite change agents with rural people, sensitize and facilitate them to shift from the notion of "working for the people" to "working with the people" (Venkatasubramanian et al, 2009). PRA is concerned with collecting information through participation. It helps farmers to put forth their perception in their own language and modes of communication. Thus, use of symbols, maps and drawings are made not in standard forms of art but as villagers can do naturally. PRA methods are diagrammatic in nature. Majority of the PRA methods are employed with group of people. It emphasizes on listening to people's experiences, history, culture, priorities and performances. It encourages multi- disciplinary investigation using multiple methods for cross checking to allow different perspectives. Attitude of listening, learning and respect for rural people is must to conduct PRA so that

mutual learning can take place (Nath et al, 2010).

Result and Discussion

1. Physical Transact

Physical Transact walk involves systematic walking with the selected local people across a cross section of that locality and discussing about land and ecological usage



observed during such walk. First the boundary of the village with the help of ten key informants and people gathered for the transact walk was identified; and started walking from north to southern direction on the pitch road. During the walk and discussion with the key informants,

it was found that the village could be divided into three distinct parts on the basis of topography, household clusters and agricultural lands.

The first part of the village was low land undulated topography having inceptisol, red soils and sandy clay texture. During the walk, it was observed that the crops like paddy, maize, banana, mango, coconut, beetle nut were cultivated in the village. The livestock population includes cattle, pig and poultry. Most of the social institutions like panchayat office, primary school were located alongside the main road and source of irrigation was depended on overflow.

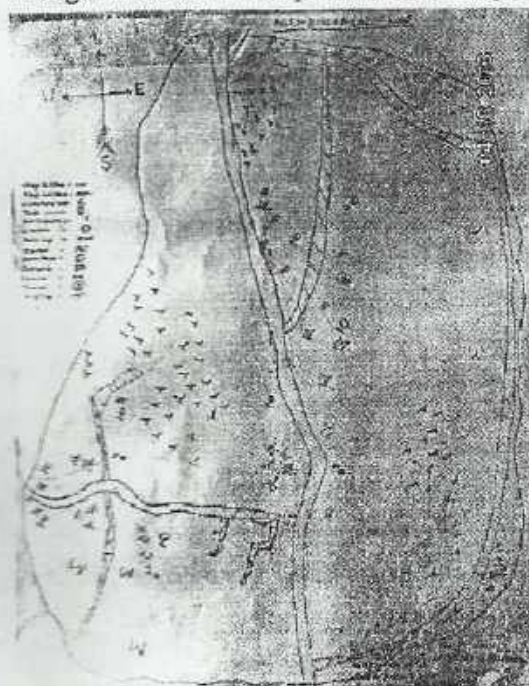
Topography of the second part of the village was both undulated and hilly, having soil type of inceptisol, lateritic and silty clay texture. Bamboo and rubber plantation were observed during the walk. The livestock population includes in second part of the village were cattle, pig and goat. One Church was situated in this part. Source of water was hand pump. Problem observed in this part were irrigation, erosion, waste land, soil degradation etc.

Topography of the third part of the village was semi plain having soil type of alfisol, red and sandy silt texture. Crops like paddy, colocasia, cassava, brinjal, chilli, and jackfruit were cultivated in this part. The livestock population includes in second part of the village cattle goat and poultry. Most of the social institutions like community hall, health centre, school, church, and temple were located alongside the main road. Source of water were bore well and pond. Source of irrigation, erosion, waste land, soil degradation etc. were major problems affecting agricultural production in the village.

2. Agro Ecological Map

The Agro-Ecological map shows the relation between agriculture and environment in a

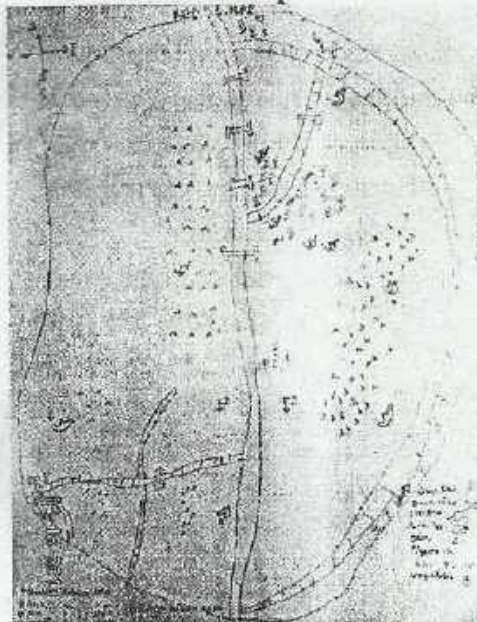
village. The main components and respective observations are described below:



The village is situated in Purba Ramchandraghat Gram Panchayat under Khowai block at Khowai district of Tripura. It is 30 km away from the main Assam-Agartala highway. The nearest railway station is Teliamura connecting route to Agartala. This village is located 8 km away from Khowai, the district headquarter. There is a pitched road passing through the village that connects Teliamura and Khowai. There are four types of land topography such as, low land, the medium upland area, the low semi plain area and hilly area. In low land area soil type is inceptisol, red soils & sandy clay texture, while in medium upland area it is alfisol, red and sandy silt texture. Inceptisol, lateritic and silty clay texture type of soil is found in semi plain area and hilly area. The

Northern part of the village has crops like rice, sweet potato and few vegetables crops. The horticultural crops like ginger, cauliflower, cabbage and chilli are mainly grown in the middle section of the village near to residential areas. Bamboo plantation is found in the west-southern and middle part of the village.

3. Resource Map



The resource map indicates both the natural resources and man-made resources needed for development of agriculture. The village has 2,220 numbers of male and 2,286 numbers of female population. Literacy rate in male and female is 92.9% and 84.8% respectively. Most of the households depend on agriculture as their primary means of livelihood. The main road of the village is situated in north-south direction which is pacha type and there are several bridges at different places of the main road. Most of the social institutions like panchayat office, primary school are located alongside the main road.

As per opinion of the villagers, water is a crucial resource than even fertilizer. There are no proper irri-

gation facilities in the village. Source of irrigation are mainly overflow, hand pump, bore well and pond. Over flow is mainly found in low land undulated area and hand pump in undulated & hilly area. Bore well and ponds are found in the semi plain area of the village. The major crops cultivated in the village are paddy, sweet potato, maize, potato, ginger during

ing kharif season and coriander, carrot, radish, garlic, cauliflower, cabbage, sweet potato, chilli during rabi season..

Besides water, the local market plays a crucial role that influences agricultural production in the village. All the farmers have country plough. Most of the farmers are using tractor for paddy cultivation. The major livestock population includes cattle, pig, goat

Approx. Year	Major Occupation	Major Crops	Major Livestock	Major Forest Resources	Major Forest Products
1975-1985	AGRICULTURE	PADDY JUTE	Goat, Pig	Rice, Taro, Sweet Potato, Dry Fish	Bamboo, Teak
1985-1995	AGRICULTURE	PADDY WHEAT SWEET POTATO TARO	Goat, Pig	Rice, Sweet Potato, Taro	Bamboo, Durian, Sal, Teak, Blauk
1995-2005	AGRICULTURE WAGE SERVICE	PADDY WHEAT, P.S. TARO SWEET POTATO	Goat, Pig	Rice, Sweet Potato, Taro	Bamboo, Durian, Sal, Teak
2005-2013	AGRICULTURE WAGE SERVICE	PADDY SWEET POTATO TARO WHEAT LEAFY VEGETABLE	Goat, Pig	Rice, Sweet Potato, Taro, Yambean	Bamboo, Durian, Sal, Teak

and poultry. Rearing of pig is a common practice in the village which is seen mostly not in sheds. Piggery and Poultry farming in large scale is not possible in the village due to high cost of feed and maintenance. Backyard poultry rearing are practiced in the village which generate additional income source.

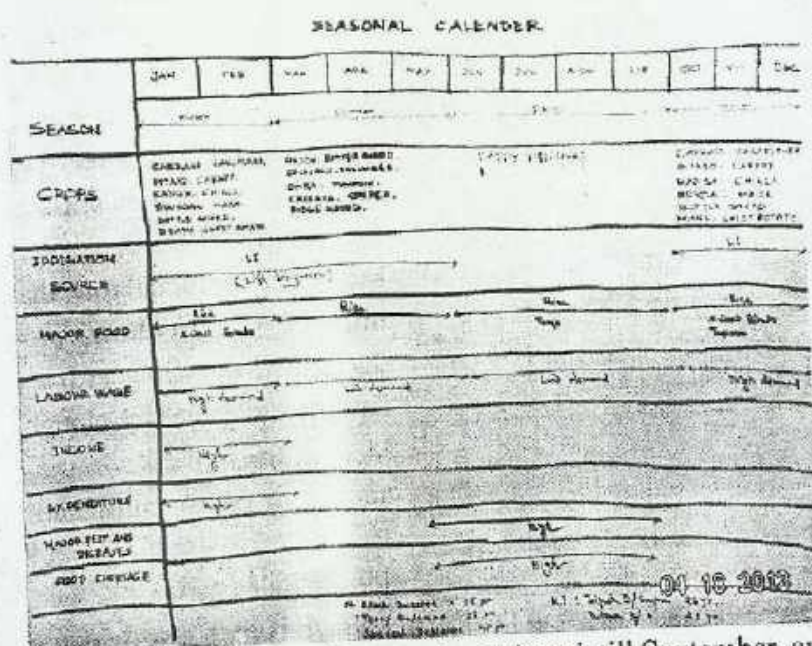
4. Timeline

Time line indicates the major events remembered by the members of a community. During 1975-1985, paddy and jute were the major crops grown in the village. Peoples were mainly depended on agriculture and wages. Rate of wages was Rs 2-5 per day. Major foods were rice, taro, sweet potato and dry fish. There were bamboo and kanak tree plantation under forest resources. During 1985-1995, paddy, wheat, sweet potato and bael were the major crops grown in the village. Peoples were mainly depended on agriculture and wages. Rate of wages was Rs 15-20 per day. Major foods were rice, sweet potato and bael etc. There were bamboo, durian, sal, teak plantation under forest resources. Though agriculture was the major occupation of over 90% of the households, the people also joined government services during 1995-2005. During 1995-2005 there was introduction of rubber plantation which made significant impact on rural livelihoods and rate of wages was Rs 70-80 per day in that period. Introduction of hybrid variety of taro & sweet potato was occurred during 2005-2013. During this period main occupations of the peoples were agriculture, wages and service. Rate of wages was Rs 180-200 per day. Women were paid Rs. 20-30 lower than their

man counterparts for the same agricultural activity.

5. Seasonal Calendar

This is a calendar which indicates month wise abnormalities with regards to agriculture



and animal husbandry. Here winter season is considered as the starting of the season. Villagers only identify three major seasons throughout the year i.e. winter, summer and rain. Agriculture is mainly rain fed and rabi crops are cultivated using supplementary irrigation. Crops like paddy, bitter gourd, colocasia, cucumber, okra, pumpkin, cassava, cow-pea, ridge gourd etc. are cultivated during summer. The

rainy season starts at June and continued till September and major crops cultivated in this season are paddy and ridge gourd. In the winter season the crops cultivated are cabbage, cauliflower, potato, carrot, radish, chilli, brinjal, maize, bottle gourd, sweet potato etc. Source of irrigation during winter is lift irrigation. But in some agriculture field when labor is required, their wage rate is same as rainy season. Income generated through agriculture and wage labour is high during October - February and low during March - September. Incidence of major pest and diseases is high during summer and rainy season, while the shortage of food also occurs during this period. The income distribution pattern shows that high cash inflow during September-February when the crops are harvested and sold in the market, while the expenditure is also high during this period.

Conclusion

This PRA process helped the KVK personnel to find out the problems faced by the farmers and preparation of participatory action plan for overall development of the tribal village. Based on the peoples need the KVK, West Tripura has already stated several interventions like training and demonstration programme on agriculture and allied sector. The source of water and lack of irrigation facility was the main problems faced by the farmers. Therefore, it was suggested to the villagers to give more emphasis on rejuvenation and construction of new water harvesting structure of which will provide life saving

irrigation for vegetables during kharif dry spell as well as during rabi summer season. It was also observed that scientific rearing of livestock is not practiced in this village. It was suggested to the villagers to provide proper shelter to the livestock along with regular deworming and vaccination for optimum production and economic profit. On farm trials and frontline demonstrations were formulated to cope with the climate change and to increase the standard of living of the tribal villagers. Interventions, viz., tuber crop production technology, nutritional garden, high yielding variety of paddy, organic cultivation of vegetables, feed management, care and management of household animals, value addition of fruits and vegetables, formation and management of farmers club, commodity interest group and self help group etc. were undertaken with close supervision from KVK scientist. It is concluded that the process of such joint analysis and dialogue helps to define changes which will help to bring improvement in the socio economic condition of the villagers and to motivate to take action to implement the defined changes.

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