



Livelihood Analysis of Toda and Paniya tribes of Nilgiri Biodiversity Zone by conducting Participatory Rural Appraisal (PRA)

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Abstract

Participatory Rural Appraisal (PRA) was a set of survey procedures that were mostly used to extract qualitative data. PRA compresses groups of local residents, conveners, catalysts and facilitators for analyzing the circumstances and share their knowledge. The livelihood pattern is analysed by conducting Participatory Rural Appraisal (PRA) among two PVTGs depending on their current living scenario (education, occupational status and annual income). Nilgiri Biosphere Reserve (NBR), is established in 1 September 1986 by government of India and considered as India's first biosphere reserve and later recognized by UNESCO in 2000. PRA in the villages are carried out along with inhabitants, other tribal development officers and Non - Governmental Organization (NGO) with the help of structured and semi-structured interview schedule. As a result, mobility map, daily routine map, opportunity map, seasonal calendar and livelihood diagram are drawn by tribes. The tribal men, women, old and young aged and children participated to facilitate and successfully administrated PRA. The livelihood study reveals the differences between the various categories with regard to the day-to-day events.

Keywords: PRA, livelihood analysis, tribes, toda, paniya, PRA mapping and biodiversity zone.

Introduction

Nilgiri Biosphere Reserve (NBR), is established in 1 September 1986 by government of India and considered as India's first biosphere reserve and later recognized by UNESCO in 2000². It is situated in the Western Ghats and comprises two of India's ten biogeographical regions. This region includes a rich and diverse variety of habitats and species and a range of human cultural diversity. The reserve is home to tribal groups such as the Todas, Kotas, Irulas, Kurumbas, Paniyas, Adiyans, Edanadan Chettis, Cholanaickens, Allar, Malayan, and others¹.

A tribe is a unified autonomous unit without any categorized discernment, mostly they live in group who worked together in a shared geographical area and had common culture, descent, dialect, territory and religion. Tamil Nadu has 36 designated tribal communities and 6 tribes are in endangered list with declining in population. They are Toda, Kota, Kurumba, Irular, Kattu naickan and Paniya communities who are collectively called as Primitive and Vulnerable Tribal Groups (PVTG)⁵. The main livelihood of these tribes in Nilgiris are food gatherers,

hunters and practiced stratified agricultures while others followed the indigenous forms of agriculture. The current research is carried out in the biosphere reserve of Nilgiri district in Tamil Nadu and two taluks namely Udthagamandalam and Pandalur are selected for the study purposes depending on the education, occupational status and annual income. Two villages, namely Muthanad Mund for Toda tribes and Munnanad village for Paniya communities are selected using simple random sampling technique. Using the random sampling method, a sample of 80 tribes were selected from the two Primitive and Vulnerable Tribes (PVT)⁵.

The livelihood analysis compresses the capabilities, assets including both physical and social resources. It is the sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities. It also provides a framework for addressing poverty and vulnerability in both development and humanisation contents⁶. Livelihood assessment is being used to develop an effective, realistic and practicable action plan for the upliftment of diverse sections of rural society in order to achieve a socialistic rural civilization pattern⁴. The livelihood study reveals the differences between the various categories with regard to the day-to-day events. This could be considered while formulating the action plan. The data are collected using pre-tested interview schedule by direct interview and observation method.

Research Methodology

Participatory Rural Appraisal

Participatory Rural Appraisal (PRA) was a set of survey procedures that were mostly used to extract qualitative data. PRA compresses groups of local residents, conveners, catalysts and facilitators for analyzing the circumstances and share their knowledge⁷.

For analyzing the livelihood pattern of PVT groups, two tribes namely Toda from Muthanad Mund and Paniya from Munnanad village had been selected depending on their current living scenario (education, occupational status and annual income) because Toda tribe led better life in comparison with the tribes whereas Paniya tribe was the poorest among other PVTGs. In this scenario, the two extreme tribal community was chosen for conducting PRA.

Discussion

PRA analysis (Paniyas)

1. Details of Preliminary Participatory Rural Appraisal (PRA)

- Name of the village: Munnanad (Paniyas)
- Place in which PRA conducted: Preliminary PRA meeting was conducted at Munnanad
- Date of PRA: First fortnight of August 2021
- Preliminary meeting is conducted on: 21.06.2021

2. Basic details of the village

- Name of the village: Munnanad (Paniyas)
- Name of the taluk and district: Pandalur, Nilgiris
- Total population: 5549
- Percentage of agricultural labourers: 30
- Percentage of wage labourers: 60
- Percentage of other workers: 10
- Literacy rate of the village: 10 %
- Place in which PRA conducted: Preliminary PRA meeting is conducted at Munnanad
- Nearest regulated market (Km): 34
- Distance from the District Head Quarters (Km): 80
- Rail/Road Connectivity to the village: Road
- Frequency of public transport to the nearest town: 4 times /day
- Agricultural allied business in the village: Animal husbandry
- Other Businesses in the village: Bamboo rice collection
- Nearest extension centres / KVK/ Research station (Km): 30
- Nearest bank (Km): Bank: Ayyankolly; Post office: Munnanad

3. Details of the baseline/bench mark survey

- Name of the village: Munnanad (Paniyas)
- Total geographic area: 750
- Gross Cropped area (Total area under Cultivation): 300 acres (Rain-fed)
- Gross Irrigated area (Total area under Irrigation): 1.5 acres
- Average household income (Rs/Year): Rs. 60,000
- Average family expenditure (Rs/Year): Rs. 35,000
- Major crops grown: Vegetables and fruits
- Major livelihood of tribes: Wage labourers, livestock rearing and agricultural labourers

4. Details of Participatory Rural Appraisal (PRA)

- Name of the village: Munnadan
- Place in which PRA conducted: Preliminary PRA meeting is conducted at Munnadan
- Date of PRA: 03.08.2021
- Number of participants in PRA: 20

5. Techniques of PRA conducted:

5.1 Opportunity mapping:

In our PRA, the participants mapped the major public offices and services along with the distance, which included police station, bus stand, panchayat office, tribal welfare department, primary health centres, schools and colleges respectively (figure 1).

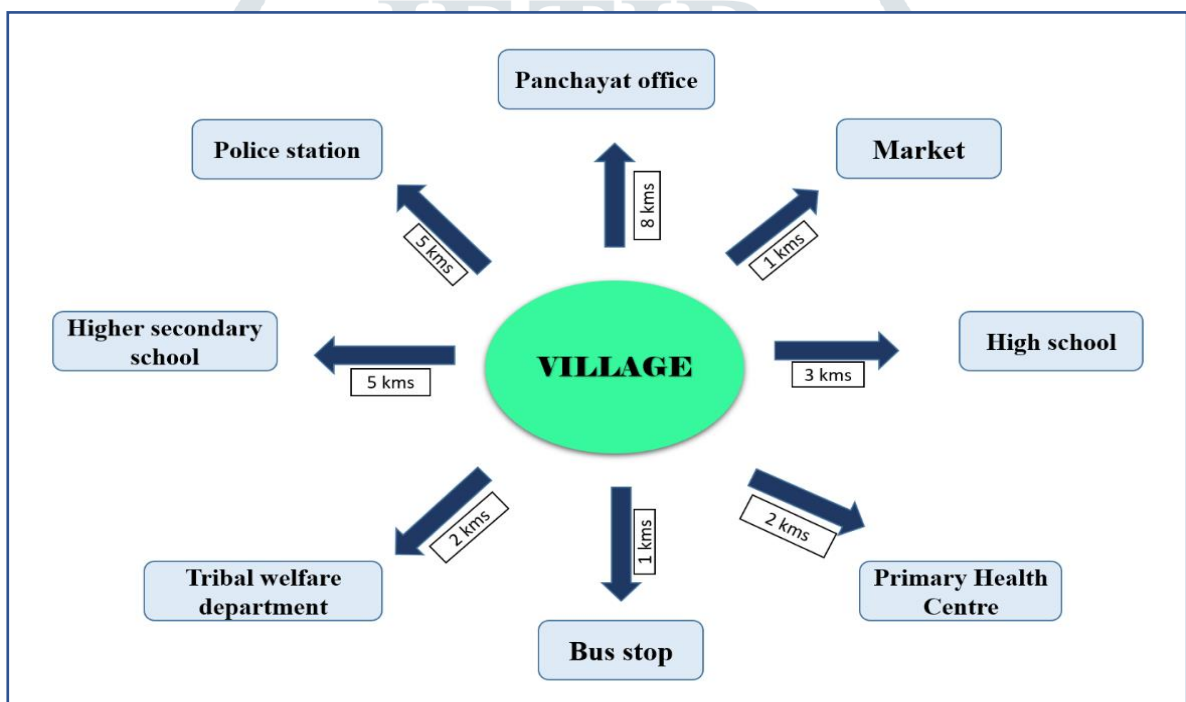


Figure 1: Map showing opportunities available for the Paniya tribes

5.2 Daily activity chart:

The daily activity chart of Paniya tribes living in Munnadan is plotted and found that most of the males and females were wage labours, house servants, livestock rearing and janitors. Munnadan village people were free after 6 pm and they spend their leisure by watching television and chatting with others (figure 2).

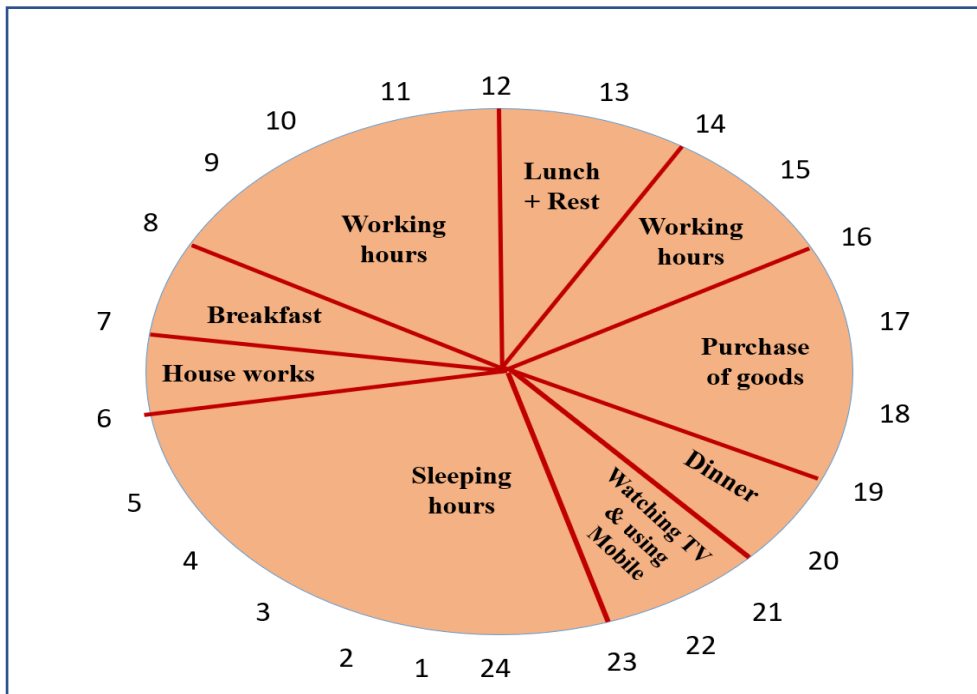


Figure 2: Map showing daily routine of Paniya tribes

5.3 Mobility mapping:

The frequency and movement of tribes in and out of the village, mode of transportation, resources available, distance from the village to the nearby public offices and other services is plotted (figure 3).

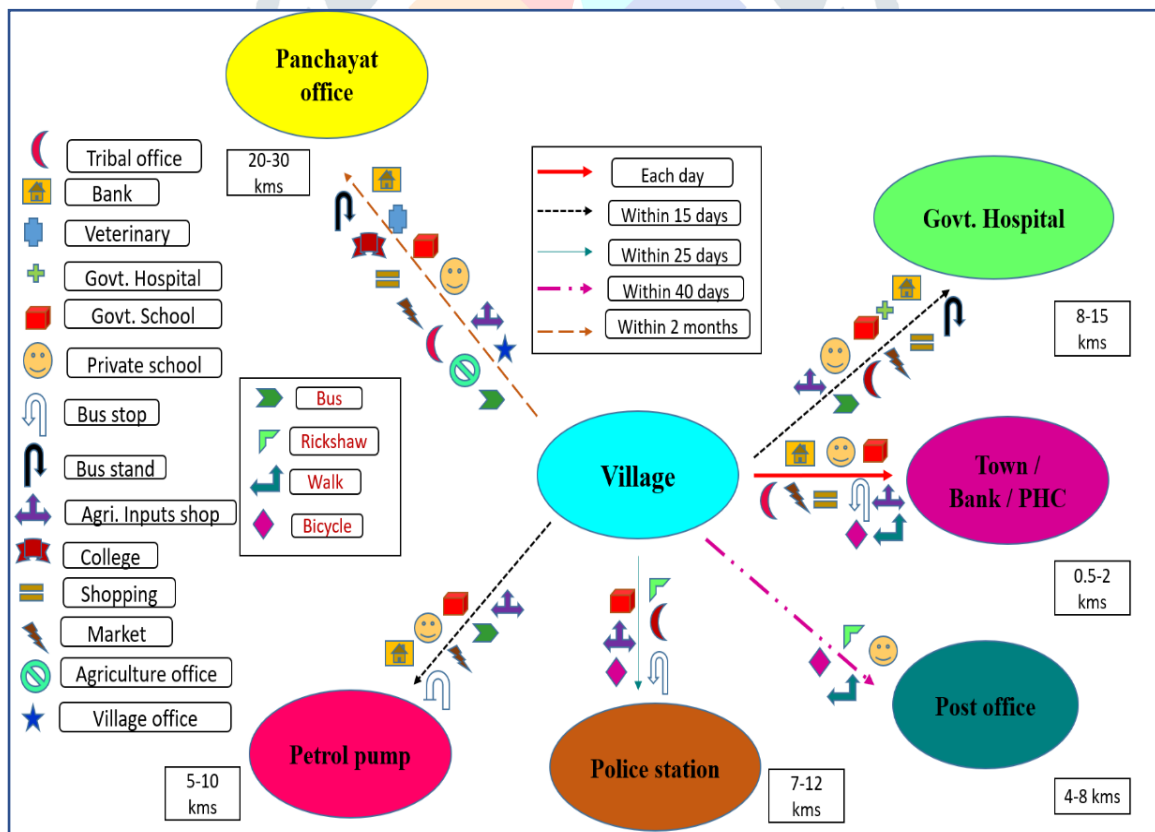


Figure 3: Map showing mobility pattern of tribes

Major outcomes of PRA in terms of needs and priorities:

- Non availability of credit facilities
- Scarcity of fodder and water for livestock
- Unaware of the tribal development schemes
- Due to biosphere conservation, the tribes who were dependent on forest produce were highly affected and started migrating from Nilgiris to nearby districts in search of employment.
- Shifting of occupation from agriculture to wage labourer due to lack of lands.

PRA analysis (Toda)**6. Details of Preliminary Participatory Rural Appraisal (PRA)**

- Name of the village: Muthanad Mund (Toda)
- Place in which PRA conducted: Preliminary PRA meeting is conducted at Muthanad Mund
- Date of PRA: First fortnight of August 2021
- Preliminary meeting is conducted on: 28.06.2021

7. Basic details of the village

- Name of the village: Muthanad Mund (Toda)
- Name of the taluk and district: Udhagamandalam, Nilgiris
- Total population: 1480
- Percentage of agricultural labourers: 65 %
- Percentage of wage labourers: 10 %
- Percentage of other workers: 25 %
- Literacy rate of the village: 60 %
- Place in which PRA conducted: Preliminary PRA meeting is conducted at Muthanad Mund
- Nearest regulated market (Km): 10
- Distance from the District Head Quarters (Km): 8
- Rail/Road Connectivity to the village: Road
- Frequency of public transport to the nearest town: No public transport
- Agricultural allied business in the village: Animal husbandry and apiculture
- Other Businesses in the village: Weaving of clothes, bags and baskets
- Nearest extension centres / KVK / Research station (Km): 10

- Nearest bank and post offices (Km): Bank: Udhagamandalam, Post office: Udhagamandalam.

8. Details of the baseline / bench mark survey

- Name of the village: Muthanad Mund (Toda)
- Total geographic area: 900 acre
- Gross Cropped area (Total area under Cultivation): 730 acres (Rain-fed)
- Gross Irrigated Area (Total area under Irrigation): 3.5 acres
- Average household income (Rs/Year): Rs. 1,15,000
- Average family expenditure (Rs/Year): Rs. 70,000
- Major crops grown: Fruits and vegetables (Cole crops)
- Major livelihood of tribes: Wage labourers, livestock rearing and agricultural labourers

9. Details of Participatory Rural Appraisal (PRA)

- Name of the village: Muthanad Mund
- Place in which PRA conducted: Preliminary PRA meeting is conducted at Muthanad Mund
- Date of PRA: 06.08.2021
- Number of participants in PRA: 20

10. Techniques of PRA conducted:

10.1 Livelihood diagram:

The participants of Muthanad Mund were enquired about their livelihood pattern from 2000 to 2020. Gradually the behaviours, decisions making capacities and coping strategies of households have changed in the last 20 years. The major changes observed were in agriculture, services, business, forest area and employment. The livelihood pattern of the tribes was changed and so they faced many crises in last decades (figure 4).

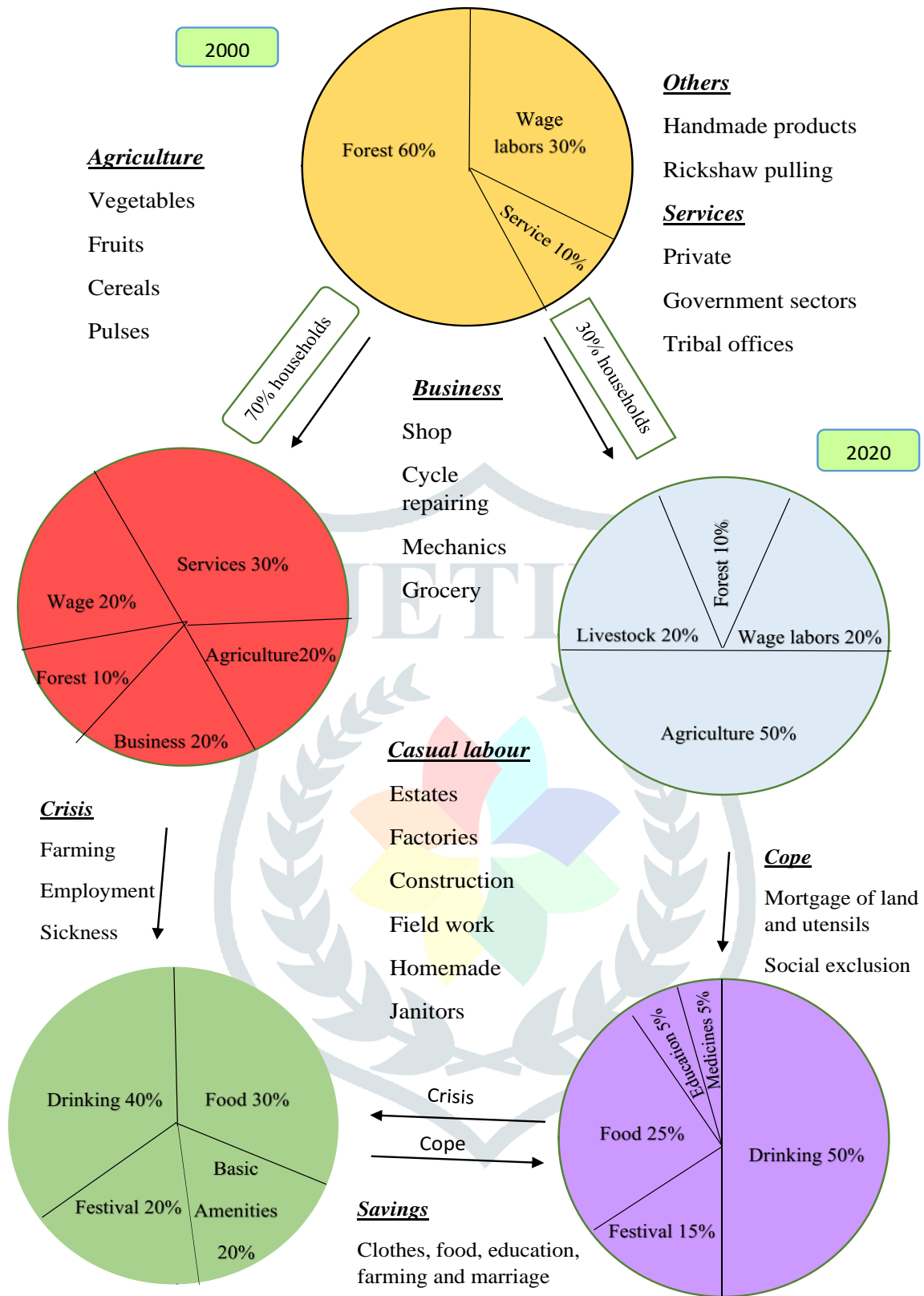


Figure 4: Map showing the livelihood analysis of Toda tribes

10.2 Daily activity chart:

The tribal people explained about their daily activity schedule and its process. The people of Muthanad Mund, co-operated well to do the activity. We plotted the daily routines of the Muthanad Mund village and found that most of the males and females were agricultural labourers, house, livestock rears and were also doing other services. Muthanad Mund village people are free after 6 pm and they spend their leisure by watching television and chatting with others (figure 5).

FEMALE	MALE
5.30 AM- WAKE UP	5.30 AM- WAKE UP
8 AM- COOKING	6.30 AM- READING NEWSPAPER
8.30-2.30 PM- LAND ACTIVITIES	8.00-8.30 AM- EATING
4.30 PM- TAKING CARE OF CHILDREN PREPATION OF TEA	8.30-2.30 PM- LAND ACTIVITIES
6.00-7.30 PM- PREPARATION OF DINNER	4.00 – 6.30 PM- MILKING & SELLING MILK
7.30 – 8.30 PM- WATCHING TELEVISION	7.30 – 8.30 PM- WATCHING TELEVISION
9.00 PM- EATING + SLEEPING	9.00 PM- EATING + SLEEPING

Figure 5: Map showing daily routine of Toda tribes

10.3 Seasonal calendar:

The participants of Muthanad Mund was grouped and started the exercise by drawing the calendar on a big sheet of paper. The people of Muthanad Mund village were busy throughout South West monsoon and North East monsoon seasons especially during October and November months, because during this time they start to cultivate their crops (Cole crops) and also during January and March months. Their harvest period last up to March- April and July- August (Figure 6).



Figure 6: Map showing seasonal calendar of Toda tribes

Major outcomes of PRA in terms of needs and priorities:

- Due to small or nil land holding, the intertribal backwardness was high.
- Unemployment
- Poor knowledge about the government development schemes
- Pest and disease problem in Cole crops
- During summer season, people struggled to earn income.
- Non availability of seed materials of improved varieties for agricultural labourers.

Major constraints faced for livelihood:

1. Strict restrictions for collecting wild honey and other resources from the forest.
2. More adherence to folkways, beliefs and norms.
3. Communal backwardness
4. During summer season, people struggled to earn income.
5. Non-availability of seed materials of improved varieties for agricultural labourers.
6. Social exclusion from non-tribes
7. Geographical separation from the society
8. Poor market facilities for cottage industries
9. Wage earning is subsistence in nature and less opportunity for asset creation.

Any other initiatives taken by the government

1. Organizing more training classes for cottage industries in the tribal villages under extension specialist.

2. Providing awareness classes in the tribal villages about the tribal development schemes and their benefits.
3. Conducting agricultural classes in the villages by agricultural officers.
4. Tribal cooperatives for marketing and credit facilities
5. Promoting socio economic and welfare development schemes.

Conclusion

Livelihood analysis is used to show how intervention fits with the livelihood strategies such as agricultural intensifications, livelihood diversification and migration. This is very true in case of tribes, especially primitive tribal groups who are most neglected and subjugated class in the rural society. PRA in the villages is carried out along with inhabitants, other tribal development officers and NGO with the help of semi-structured interview schedule. As a result, mobility map, daily routine map, opportunity map, seasonal calendar and livelihood diagram is drawn by them. The tribal men, women, old and young aged and children participated to facilitate and successfully administrated PRA.

The major outcomes identified by conducting PRA were, non availability of credit facilities, scarcity of fodder and water for livestock, unaware of the tribal development schemes, due to biosphere conservation, the tribes who were depended on forest produce was highly affected and started migrating from Nilgiris to nearby districts in search of employment, shifting of occupation from agriculture to wage labourers due to lack of lands, due to small or nil land holding, the intertribal backwardness was high, unemployment, poor knowledge about the government development schemes, pest and disease problem in Cole crops, during summer season, people struggle to earn income and non-availability of seed materials of improved varieties for agricultural labourers.

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