

Chapter

5

Participatory Analysis on Aromatic Rice

A. Timeline

Time line reveals the key historical events and major perceived changes. Here, a focus group discussion was organized and farmers themselves identified and delineated the breakthrough historical events on rice cultivation for the village.

Objectives

- 1) To construct a historical profile of the agro eco system chronologically.
- 2) To assess & understand the development of the village

Year	Events ts	Breakthrough
1800	Establishment of village : Maheswarpur(S)	
1930	Var. cultivated of rice – “mol”, “nagra”, “bankui” etc. “Khari Lavan” used as fertilizer.	Yield increased
1940	Excess Rainfall	Excessive crop loss
1950	Construction of NH-34	Marketability, transport, communication
1960	Small Pox	Health hazards.
1970	Set up of first tube well	1 st Irrigation facility in Boro rice.
1977	HYV cultivation – “Laal Swarna”	Production increased
1978	Indirectly affected by flood	Interested towards Livestock

1979	A KPS first visited the village	Introduction of fertilizer & pesticide
1980	Construction of "Sarap pur Road"	Increased transport & communication
	Electrification	st 1 television in 1-2 families
	Use of chemical fertilizer	Crop production increased
1990	Rice mill establishment	Employment generation
1991	Use of Power Tiller & Tractor	Mechanized Agriculture
1995	Plywood industry established	Employment generation
2002	Hail Storm	Excessive crop loss in Boro Rice
2003	Shallow Tube well	Irrigation facility increased
	Increase in pest infestation	Increase in Insecticide use
2010	Low Rainfall due to Climate change, Remarkable pest infestation eg. BHC in Jute	Quality & Quantity (yield) decrease

B. Time trend

Time trend show the qualitative and quantitative changes in Agro Eco-system over specific period of time. Here, the evolutionary trend of different agro-ecological components have been delineated.

Objectives

- To identify the changes happened in the Agro Eco-system over definite span of years
- To analyze the changes for understanding problems of farmers' perspectives & solutions

Decades	T.V.	Domestic	Animals	Pond	House (%)				Cultivated land	Literacy Rate	Tubewell	
											Deep	Shallow
		Cow	Goat		Kuc ha	Pucc a	Mixe d				Deep	Shal low
1950s	0	400	500	11	95%	1%	4%	70	1-2	0	0	0
1960s	0	420	530	11	90%	2%	8%	68	3-4	0	0	0
1970s	0	390	510	12	87%	3%	10%	70	7-8	2	1	1
1980s	0	300	400	12	84%	5%	11%	66	12-15	3	3	3
1990s	5-6	270	330	12	75%	10%	15%	63	25-30	5	3	3
2000s	40	215	260	14	60%	19%	21%	61	50-55	7	5	5
2010s	105	150	200	15	40%	35%	25%	60	70	10	6	6

C. Seasonality Diagram

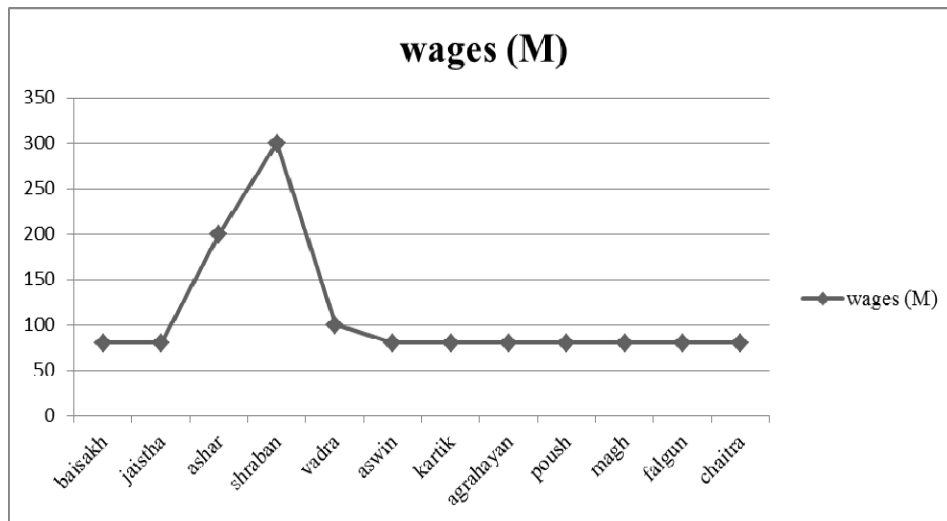
Seasonality of wage, income, yield, marketability, livelihood etc. is stumbling constraints for Indian farmers. That's why, farming fails to provide a steady income for the farmers, although , the costs have become an increasing stresses to them. This is a diagram depicting the main activity, incidents, problems , opportunities throughout the year.

Objectives

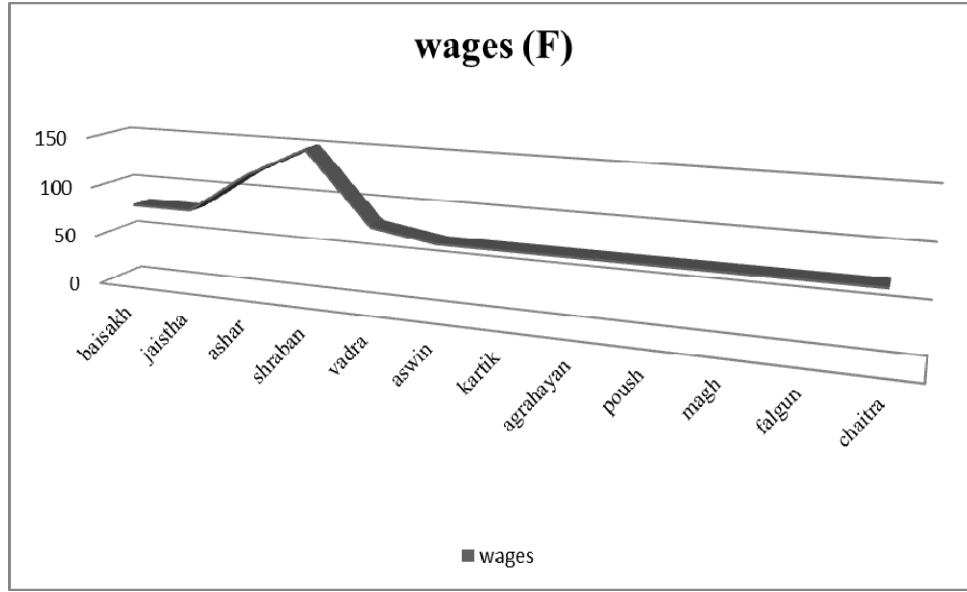
- To understand the seasonal variations of different variables & their interrelationship which have significant impact on lives of people.
- To identify the months of greatest difficulty & vulnerability.

Seasonality graph on wages (Male)

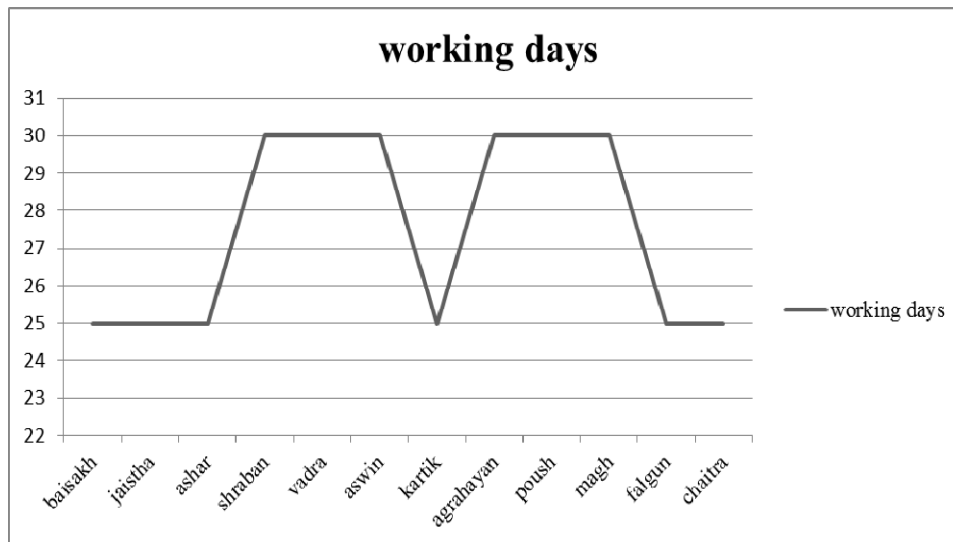
The farmers' participatory wage analysis shows that barring 3-4 months, for other months the wage and working days have been plunged to a sorrow plight. This is so harsh for any rained, CDR(complex, diverse and risk prone) farm economy of India, where more than 80 per cent of farmers belong to small and marginal economic echelons.



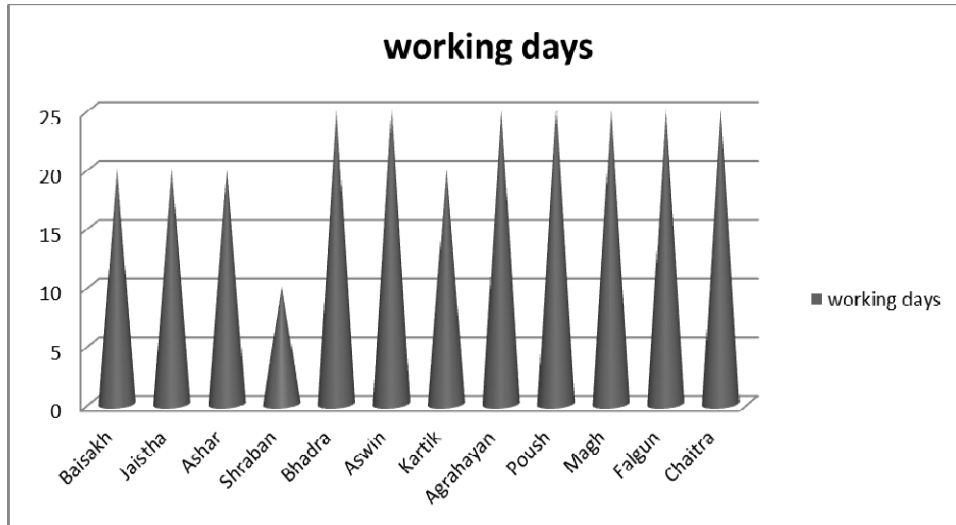
Seasonality graph on wages (Female)



Working days of Male



Working days of (Female)



D. Venn diagram: This is basically a participatory network analysis carried out on role, impact and contribution of different organizations/institutions in the social-ecology of aromatic rice enterprise.



E. Matrix Ranking Topics:

This is a tool used by group of farmers to identify different items e.g varieties of rice and local attributes following which they take a decision on which variety/technology/livelihood they should select to derive the best possible benefit out of it.

Attributes/Items	Gobindovog	Radha tilok	Radhuni pagol	Mohanvog
Production	9	9	8	7
Maintainence	8	8	8.3	8
Disease and pest resistance	8.5	9	7	7.5
Market value	10	9	8	7
Soil compatibility	9	7.5	7	7.5
Profit	9	7.5	7	7.5
Total	53	50	45.3	37.5

During our study on different varieties of aromatic rice grown in simurali (S) we find that “GOBINDVOG” was most favored & Radhuni pagol & Mohonvog v were the least favored &for them crop improvement should be done.