Participatory Poverty Assessment through Livelihood Analysis: An Indian Case

M.V. Sajeev¹, S. Naskar², G. Biswas³, N.K. Meena⁴ and R.S. Jat⁵

¹Zonal Project Directorate, Zone - III, Barapani, Meghalaya, India Telephone: +919436707013, E-mail: sajeevmv@yahoo.co.in ²National Research Centre on Pig, Guwahaty, Assam, India ³Central Institute of Brackishwater Aquaculture, Kakdwip, West Bengal, India ⁴National Research Centre on Orchids, Pakyong, Sikkim, India ⁵Directorate of Groundnut Research, Junagarh, Gujarat, India

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ABSTRACT Analysis of poverty and its dimensions are various as the ways in which poverty affects the daily sustenance of the poor. Poverty, many a times is simply viewed as an issue of income. What poverty means for the poor is a wide range of dynamic aspects. This paper presents results of analysis that emanate from Participatory Poverty Assessment (PPA) which was conducted in Sohenkhera village, Chittorgarh district of Rajasthan. Using a mixture of qualitative and quantitative methods, entire households of the village were covered for the study. Results revealed the indicators of wealth as land ownership, livestock and possession of agricultural machinery. While categorising rich and poor, a 'Very poor' category emerged representing a whopping 62 per cent of village population. Livelihood analysis exposed the highly skewed patterns of housing, land holding, livestock ownership patterns and income sources and expenditure patterns. Further, crisis analysis revealed that the poor and medium farmers are perpetually indebted to moneylenders. The exercise provided data on the otherwise hidden and side lined indicators of poverty and crisis management in villages which are otherwise unavailable through official surveys.

INTRODUCTION

Poverty is widespread in India, with the nation estimated to have a third of the world's poor. World Bank estimates that 80% of India's population lives on less than \$2 a day. According to a 2005 World Bank estimate, 41% of India falls below the international poverty line of US \$ 1.25 a day (PPP, in nominal terms ₹ 21.6 a day in urban areas and 14.3 in rural areas); having reduced from 60% in 1981 (World Bank 2010).

According to the criterion used by the Planning Commission of India, 27.5% of the population was living below the poverty line in 2004– 2005, down from 51.3% in 1977–1978, and 36% in 1993-1994 (Anonymous 2007). A study by the Oxford Poverty and Human Development Initiative using a Multi-dimensional Poverty Index (MPI) found that there were 645 million poor living under the MPI in India, 421 million of whom are concentrated in eight north India states of Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh and West Bengal. This number is higher than the 410 million poor living in the 26 poorest African nations.

Estimates by NCAER (National Council of Applied Economic Research), show that 48% of the Indian households earn more than 90,000 (US\$1,953) annually (or more than US\$3 PPP per person). According to NCAER, in 2009, of the 222 million households in India, the absolutely poor households (annual incomes below 45,000) accounted for only 15.6 % of them or about 35 million (about 200 million Indians). Another 80 million households are in income levels of 45,000-90,000 per year (Singhal 2008).

Since the 1950s, the Indian government and non-governmental organizations have initiated several programs to alleviate poverty, including subsidizing food and other necessities, increased access to loans, improving agricultural techniques and price supports, and promoting education and family planning. These measures have helped eliminate famines, cut absolute pov-

Address for correspondence: M.V.Sajeev (Agricultural Extension), Zonal Project Directorate, Zone - III, Barapani, Meghalaya, India. *Telephone:* +919436707013, *E-mail:* sajeevmv@yahoo.co.in

erty levels by more than half, and reduced illiteracy and malnutrition (World Bank 2006).

People's participation is the foundation of current thinking in any developmental issue. Farmers have become the focal point and major stakeholder in agricultural research. The 21st century has opened up new possibilities for the farmer and now he has become more aware and has started to demand a variety of technologies for him to choose from. The researchers have to identify the researchable problems and give possible solutions within no time. Field experience and teamwork is needed to succeed in the endeavour of good research where the researcher knows what the farmer needs and how the solutions can be evolved. PRA provides a 'basket of techniques' for development practitioners interested in measuring various socio-economic indicators of rural development. In India, the dimensions of rural poverty are varied and linked with unemployment, underemployment, low levels of productivity, severe demographic pressures and illiteracy. Agricultural development must take into account the differences in wealth among farmers in order to determine the priorities for research and to develop the interventions and technical packages that are to be adopted by the majority of the farmers (Barbara 1988).

Wealth ranking is a PRA tool based on the assumption that community members have a good sense of who among them is more or less well off (Theis and Grady 1991). It refers to placing the people on different categories according to their own criteria. The purpose is to find out the persons of the village, who belong to the rich, middle, poor and very poor group categories as perceived by the villagers themselves. Wealth ranking is based on the assumption that the community members have a good sense about fellow villagers in their own village and are able to categorize themselves. Wealth ranking and resultant livelihood analysis helps the extension workers, developmental staff, researchers and other concerned for rural and agricultural development to find out the inequalities and differences in wealth in every farmer and which in turn lead to overall understanding of socio-economic conditions of entire village community. This will also help in selecting the right type of beneficiaries for the various programmes. The present study was undertaken to identify the wealth status of the people of a

typical Indian village and to understand various indicators used by the villagers for classifying their own economic status.

METHODOLOGY

The study team camped at Sohenkhera village, Chittorgarh district, Rajasthan for 14 days and conducted a full-fledged PRA exercise. Basic information about the village was collected from the villagers (KIs), which constituted the primary data. Five key informants other than Gram Panchayat members were utilised in gathering the primary data. Apart from this secondary data were collected from the Agriculture Department, Panchayat Office, Revenue Department, Veterinary Officer, KVK, Chittorgarh and Bio-resource Centre of MPUAT, Udaipur at Bhadsoda SanwaliaJi Mandir. The primary and secondary data collected from different sources were then crosschecked through triangulation between different stakeholders. A mix of quantitative methods and qualitative methods were used to collect data from all the households of the village. The field exercise lasted 14 days.

For wealth ranking, list of all households was obtained from the village Panchayat Office situated at Bagund. The head of each household along with number of household members was written in separate cards meant for wealth ranking. Four Key Informants (KIs) who know each and every house in the village was asked separately to sort out the cards (having the name, number of family members and household number) into as many groups according to their own classification of different wealth classes. The criteria on which each KI was sorting the households was asked and noted separately. Each KI had full freedom to use as many numbers of categories as possible.

Scoring of Households

Scores were given to various households according to the following formulae:

Score=n+1-Ci/nX100

Where, n= Total no. of categories made by KIs, $Ci=i^{th}$ category in which a particular house-hold placed by the KIs.

Then average wealth score for each household is calculated by the formulae:

Average wealth score = Score of KI-1+KI-2+KI-3+Ki-4/4 Since different KIs used four nos. of wealth categories, Average no. of wealth categories= Sum of no. of categories used by each KI/Total no. of KI. Categories =3+5+4+4/4=4

The four categories are:

- 1. Rich
- 2. Medium
- 3. Poor
- 4. Very poor

All the households at Sohenkhera village are to be categorized into these four categories. All the wealth categories should have equal interval of scores. This can be calculated as follows:

Correction factor = (Max. - Min. score)/wealth category

CF = (100 - 25.75)/4 = 18.56 100 - 18.56 = 81.44 81.44 - 18.56 = 62.88 62.88 - 18.56 = 44.32

RESULTS AND DISCUSSION

The basic information collected from primary and secondary sources show that the village is entirely dependent on agriculture and animal husbandry for the livelihood. The primary information on the village is provided in Table 1. The farmers grow crops in all the three seasons and animal husbandry is also practiced along with. Almost all the *Kharif* and *Rabi* crops are cultivated regardless of the productivity. Productivity is not a primary concern with respect to rearing of animals also. The details are given in Table 2. The categorization/classification, criteria as well as wealth status of each household at Sohenkhera village according to the four KIs are given in Tables 3 to 6.

All the households at Sohenkhera village were categorized into four categories. The score

Particulars	Name of the village	Sohenkhera		
Details of Study Area	Gram <u>p</u> anchayat	Bagund		
0 0	Panchayat samiti	Bhadesar		
	Uptehsil	Bhadsoda		
	District	Chittorgarh		
	State	Rajasthan		
Climate	Mean annual rainfall	1100 mm (2006)		
	Temperature (Annual Range)	13-45° C (Max. 45° C, Min 1° C)		
	Relative humidity	20%		
Geographical Coordinates	Total area	412.87 ha		
0	Cultivated area	332 ha		
	Irrigated area	138.14 ha		
	Residential area	6.07 ha		
	Fallow land	35.16 ha		
	Pasture land	35.05 ha		
	Panchayat land	3.25 ha		
Demographic Pattern	Total households	99 Nos		
0 1	Total number of families	124		
	Number of joint families	109		
	Number of nuclear families	15		
	Total population	530		
	Number of male members	263		
	Number of female members	267		
	Literacy	31.35% (M- 51%, F- 12%)		
Community Categorization	Number of Hindu families	113		
, , , , , , , , , , , , , , , , , , ,	Number of Muslim families	11		
	Number of tribal families	5		
	Name of tribe(s)	Bheel		
	Major castes	Gayaris and Jats (OBC)		
	Major social occupation	Agriculture and animal		
		husbandry		
Occupational Distribution	Families engaged in agriculture	121		
e coup arronar Bristrio arron	Families engaged in agriculture +			
	business	1		
	Families with government service	-		
	(+animal husbandry)	2		

Table 1: Primary information of the village

Particulars		
Land Distribution (in ha) (I-Irrigated, UI- Un Irrigated)) Kharif	189 (0.18 I + 188.82 UI)
	Rabi	147.48 (138.14 I + 9.34 ÚI
	Summer	1.56 (I)
	Average land holding per household	2.9
	Largest land holding by any person	8.0
Kharif C rops (in ha for 2006-07)	Maize	137.26 (UI)
(I-Irrigated, UI- Un Irrigated)	Black Gram	3.28 (UI)
	Sesame	0.34 (UI)
	Groundnut Sova bean	39.86 (UI)
	Soya bean Lucerne	2.3 (UI) 0.17 (I)
	Sorghum (fodder)	5.78 (UI)
	Total area cultivated	0.17 (I) and 188.82 (UI)
Rabi Crops (in ha for for 2006-07)	Wheat	35.32 (I)
(I-Irrigated, UI- Un Irrigated)	Barley	2.47 (I)
	Chick pea	5.24 (I)
	Fenugreek	1.22 (I)
	Mustard	93.61 (I) and 3.94 (UI)
	Taramira	0.16 (UI)
	Potato	0.5(I)
	Lucerne Onion	3.73 (I)
	Total area cultivated	0.11 (I) 138.14 (I) and& 9.34 (UI
	Sorghum fodder	0.05(I)
Summer Crops (in/ha for 2006-07)	Ground nut	1.51(I)
summer crops (mind for 2000 or)	Total area cultivated	1.56(I)
Highest Recorded Yield/Ha	Wheat	50 qtl
0	Mustard	23 qtl
	Maize	28 qtl
	Chick pea	14 qtl
	Total cropped area	332 ha
Water Sources	Wells- 26, tube wells- 1, water	
	harvesting structure- 10.8 ha	
Fish Species Found	Murrells, minnows, spiny eels,	
	glass fish and barbs (during	
Animal Husbandry	monsoon) Cattle: 234	Breeding bull- 5,
animai Husbanary	Cattle: 254	Bullock- 158,
		Desi cow-63,
		Crossbred cow- 8
	Buffalo: 303	Breeding bull- 2,
		Bullock-50,
		She buffalo- 251
	Sheep: 103	Ram and young male- 15,
	G	Ewe and young female-88
	Goat: 332	Buck and young male- 46,
		Doe and young female- 286
Major Broads of Llivestock	Horse:	12 All mare ,
Major Breeds of Llivestock	Cattle	Nagori. Nimari, Jersey and HE crossbred nondescript
	Buffalo	HF crossbred nondescript Nondescript, upgraded
	Dullalo	stock with <i>Surti</i> (earlier)
		and <i>Murrah</i> (ongoing),
		Pure Murrah
	Sheep	Nondescript, Sonadi
	Goat	Marwari, Jhakrana, Sirohi
		(Deogarh) pure and
		(Deogarh) pure and crossbred, nondescript
	Horse	crossbred, nondescript Kathiawari
Average Milk, Meat and Wool Yield	Horse Cattle	crossbred, nondescript Kathiawari Crossbred- 5-7 litre/day,
Average Milk, Meat and Wool Yield	Cattle	crossbred, nondescript Kathiawari Crossbred- 5-7 litre/day, Nondescript- 2-2.5 little/day
Average Milk, Meat and Wool Yield		crossbred, nondescript Kathiawari Crossbred- 5-7 litre/day, Nondescript- 2-2.5 little/day Murrah- 6.5 litre/day,
Average Milk, Meat and Wool Yield	Cattle	crossbred, nondescript <i>Kathiawari</i> Crossbred- 5-7 litre/day, Nondescript- 2-2.5 little/day <i>Murrah</i> - 6.5 litre/day, Nondescript (with <i>Surti</i>) -
Average Milk, Meat and Wool Yield	Cattle Buffalo	crossbred, nondescript Kathiawari Crossbred- 5-7 litre/day, Nondescript- 2-2.5 little/day Murrah- 6.5 litre/day, Nondescript (with Surti) - 4-5 litre/day
Average Milk, Meat and Wool Yield	Cattle Buffalo Goat	crossbred, nondescript Kathiawari Crossbred- 5-7 litre/day, Nondescript- 2-2.5 little/day Murrah- 6.5 litre/day, Nondescript (with Surti) - 4-5 litre/day 20-22 Kg at one year
Average Milk, Meat and Wool Yield	Cattle Buffalo	crossbred, nondescript Kathiawari Crossbred- 5-7 litre/day, Nondescript- 2-2.5 little/day Murrah- 6.5 litre/day, Nondescript (with Surti) - 4-5 litre/day 20-22 Kg at one year 200-250 gm wool/shearing
Average Milk, Meat and Wool Yield Fodder Grasses Available	Cattle Buffalo Goat	crossbred, nondescript Kathiawari Crossbred- 5-7 litre/day, Nondescript- 2-2.5 little/day Murrah- 6.5 litre/day, Nondescript (with Surti) - 4-5 litre/day 20-22 Kg at one year

Table 2: Agricultural scenario of the village

S. No.	Category	Criteria	Household No.
1.	Rich	Land>60 <i>bigha</i> Buffalo>10 TV/Mobile	33, 63, 64, 94, 95, 96, 119, 120
2.	Medium	Land: 30-60 <i>bigha</i> Buffalo: 4-5 TV/Mobile	3, 35, 37, 38, 41, 45, 48, 61, 62, 67, 68, 71, 79, 83, 103, 104, 118, 126, 127
3.	Poor	Land <30 <i>bigha</i> Buffalo <1-2 Sheep/Goat	1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 34, 39, 40, 43, 47, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 65, 66, 69, 70, 72, 74, 75, 76, 77, 78, 80, 81, 82, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 97, 99, 100, 101, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 121, 122, 123, 124, 125, 128, 128, 129, 131, 132, 133, 134

Table 3: Categories according to KI (1)

Table 4: Categories according to KI (2)

S. No.	Category	Criteria	Household No.
1.	Very Rich	Land: 50-70 bigha	3, 33, 37, 41, 48, 62, 63, 64, 67, 68, 71, 79, 94,
		Buffalo>10	95, 96, 104, 119, 120
		Tractor	
2.	Rich	Land: 30-50 bigha	
		Buffalo: 8-10	38, 45, 47,61, 62, 83, 103
3.	Medium	Land: 20-30 bigha	
		Buffalo: 5-8	7, 31, 32, 34, 35, 39, 40, 49, 58, 59, 69, 70, 61,
		House	72, 74, 82, 88, 90, 93, 112, 116, 118, 126
4.	Poor	Land:10-20 bigha	1, 2, 4, 5, 6, 9, 10, 13, 14, 22, 24, 25, 28, 29, 30,
		Buffalo: 2-5	51, 54, 60, 65, 66, 75, 78, 89, 91, 92, 100,
		Sheep/Goat	107, 108, 109, 110, 111, 113, 115, 117, 121,
		*	122, 123, 124, 127, 128, 129, 132, 133, 134
5.	Very Poor	Land <10 bigha	8, 11, 12, 15, 16, 17, 18, 19, 20, 21, 23, 26, 27,
	5	Buffalo <2	43, 50, 52, 53, 55, 56, 57, 76, 77, 80, 81, 84,
		Sheep/Goat	85, 86, 87, 97, 99, 101, 114, 125, 131

Table 5: Categories according to KI (3)

S. No.	Category	Criteria	Household No.
1.	Rich	Land >30 <i>bigha</i> Buffalo >5	3, 9, 33, 37, 38, 41, 45, 47, 48, 62, 63, 64, 67, 68, 71, 79, 83, 94, 95, 96, 103, 104, 116,118,
		Tractor Tube well	119, 120, 122, 126
2	Medium	Bike Land: 20-30 <i>bigha</i>	7, 11, 14, 31, 32, 34, 39, 40, 70, 74, 82, 88, 90,
2.	Meatum	Buffalo: 4-5 Well	112
3.	Poor	Land: 6-20 <i>bigha</i> Buffalo: 2-3	1, 2, 4, 5, 6, 10, 15, 16, 17, 25, 26, 30, 49, 51, 54, 66, 69, 72, 75, 91, 92, 93, 100, 108, 109,
4.	Very Poor	Land <5 <i>bigha</i> Buffalo <2	110, 111, 113, 115, 117, 121, 128, 132, 133, 134 8, 12, 13, 18, 19, 21, 22, 23, 24, 27, 28, 29, 35, 43, 50, 52, 53, 55, 56, 57, 58, 59, 60, 65, 77, 78, 80, 81, 84, 85, 86, 87, 97, 99, 101, 107, 114, 123, 124, 125, 127, 129, 131

S. No.	Category	Criteria	Household No.
1.	Rich	Land >30 <i>bigha</i> Buffalo >5 <i>Pucca</i> house Tractor Bike Gold	3 33, 48, 63, 64, 69, 94, 95, 96, 103, 118, 119, 120, 123, 126
2.	Medium	Land: 15-30 <i>bigha</i> Buffalo: 4-5 <i>Pucca</i> house Bike	7, 35, 37, 38, 41, 61, 62, 67, 68, 71, 83, 91, 104, 116
3.	Poor	Land: 5-15 <i>bigha</i> Buffalo: 2-3 <i>Kachcha</i> house	1, 4, 6, 9, 10, 11, 15, 31, 32, 34, 39, 40, 45, 47, 48, 79, 90, 93, 100, 109, 110, 111, 112, 121, 122, 124
4.	Very Poor	Land <5 bigha Buffalo <2 Kuchcha house	2, 5, 8, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 43, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 65, 66, 72, 74, 75, 756, 77, 78, 80, 81, 84, 85, 86, 87, 92, 97, 99, 101, 107, 108, 113, 114, 117, 125, 127, 128, 129, 131, 132, 133, 134

Table 6: Categories according to KI (4)

 Table 7: Score ranges for different wealth categories

S. No.	Category	Score range
1.	Rich	81.44 to 100
2.	Medium	62.88 to 81.44
3.	Poor	44.32 to 62.88
4.	Very poor	25.76 to 44.32

 Table 8: Common criteria identified for wealth ranking

S. No.	Common criteria	Rich	Medium	Poor	Very poor
1.	Land owned		20-30 bigha	5-20 bigha	<5 bigha
2.	Buffalo	>5	4-5	2-3	<2
3.	Sheep/Goat	-	-	5-10	<5
4.	Tractor	One	-	-	-

ranges for different categories arrived through addition of correction factors is provided in Table 7. Based on the above exercise, the common criteria for wealth ranking in Sohenkhera village was identified (Table 8). Based on the score range and categories, the final wealth ranking table for the village was prepared (household addresses kept blank when could not be identified by KI). The wealth score obtained is tabulated in Table 9.

Based on the above tabulation, population belonging to various wealth categories of Sohenkhera village were delineated. The categorisation of village households to various wealth categories is provided in Table 10.

Livelihood Analysis

Livelihood analysis refers to find out the degrees to which the pattern of life differs from one social class to another social class in term of size of family, size of landholding, type of house, implements, annual income, source of income, expenditure pattern, crisis management pattern, indebtedness etc. The livelihood analysis at Sohenkhera village was carried out after completion of wealth ranking. One representative villager from each of the wealth category (Rich, Medium, Poor and Very poor) was selected randomly. The data on relevant information were collected from each of the categorized farmer which is presented in Table 11 below and explained.

Among the four wealth categories, there is a clear cut indication in the type of house owned by the villagers. Rich category people have pucca houses and medium and poor category people of the village live in kuchcha houses, whereas, very poor category people live in mud houses. There is no marked difference in family size of rich, medium and poor category but slightly big family was observed in very poor category people. Rich category invariably has more than 30 bigha land and more than 5 buffaloes, while many of the very poor category villagers have land size less than 5 bigha with less than two buffaloes. Regarding source of income, rich category villager has another source of income other than agriculture, while medium and poor category villagers are totally dependent

	Table	9:	Wealth	score	of	households
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House No.	Head of household	KI-1	KI-2	KI-3	KI-4	Avg. score	Wealth category
1.	Onkar Gayari	33	40	50	50	43.25	Very poor
2.	Mangu Lohar	33	40	50	25	37.00	Very poor
3.	Udailal	66	100	100	100	91.50	Rich
4.	Uda Chamar	33	40	50	50	43.25	Very poor
5.	Dhapu Gayari	33	40	50	25	37.00	Very poor
6.	Bhagwan Gayari	33	40	50	50	43.25	Very poor
7.	Nimaram Jat	33	60	75	75	60.75	Poor
8. 9.	Sarif Mohd	33	20	25	25	25.76	Very poor
9. 10.	Amar Chand Shankar	33 33	$\begin{array}{c} 40\\ 40\end{array}$	100 50	50 50	55.75	Poor Very poor
10.	Nagjiram	33	20	50 75	50	43.25 44.50	Very poor Poor
12.	Gokul Bheel	33	20	25	25	25.76	Very poor
13.	Hakim Khan	33	40	25	25	30.75	Very poor
14.	Gangaram	33	40	75	25	43.25	Very poor
15.	Nangjiram	33	20	50	50	38.25	Very poor
16.	Mewa Regar	33	20	50	25	32.00	Very poor
17.	Bhola Regar	33	20	50	25	32.00	Very poor
18.	Chunni Bai	33	20	25	25	25.76	Very poor
19.	Lakhma Regar	33	20	25	25	25.76	Very poor
20.	Bhairulal	33	20	25	25	25.76	Very poor
21.	Bhagwan Nai	33	20	25	25	25.76	Very poor
22.	Naran Jat	33	40	25	25	30.75	Very poor
23.	Jetun Bai	33	20	25	25	25.76	Very poor
24.	Ramlal	33	40	25	25	30.75	Very poor
25.	Shankar Nayak	33	40	50	25	37.00	Very poor
26.	Rameswar Nayak	33	20	50	25	32.00	Very poor
27.	Nanda Regar	33	20	25	25	25.76	Very poor
28.	Dalla Regar	33	40	25	25	30.75	Very poor
29.	Vardhu Lohar	33	40	25	25	30.75	Very poor
30.	Amarchand Lohar	33	40	50	25	37.00	Very poor
31.	Kajor Gayari	33	60	75	50	54.50	Poor
32.	Dalla Gayari	33	60	75	50	54.50	Poor
33.	Rama Jat	100	100	100	100	100	Rich
34.	Chatra Gayari	33	60	75	50	54.50	Poor
35.	Harli Bai	66	60	25	75	56.50	Poor
36.	Not identified by KI		100	100			D · 1
37.	Gangaram Gayari	66	100	100	75	85.25	Rich
38.	Kishore Gayari	66	80	100	75	80.25	Medium
39.	Rameswar Gayari	33	60	75	50	54.50	Poor
40.	Bhera Jat	33	60	75	50	54.50	Poor
41.	Hajarilal Jat	66	100	100	75	85.25	Rich
42.	Not identified by KI	22	20	25	25	25 76	Vanuencen
43. 44.	Laxmilal Not identified by KL	33	20	25	25	25.76	Very poor
44. 45.	Not identified by KI Hiralal Jat	66	80	100	50	74.00	Medium
45. 46.		00	80	100	50	74.00	Wedfulli
40. 47.	Not identified by KI Narayan Jat	33	80	100	50	65.75	Medium
48.	Shankar Jat	66	100	100	100	91.50	Rich
48. 49.	GhasiGayari	33	60	50	25	42.00	Very poor
49. 50.	Sardar Khan	33	20	25	25	25.76	Very poor
50. 51.	Rameswarlal	33	40	50	25	37.00	Very poor
52.	Govind	33	20	25	25	25.76	Very poor
53.	Bhagchand	33	20	25	25	25.76	Very poor
54.	Kishan Gayari	33	40	50	25	37.00	Very poor
55.	Amir Khan	33	20	25	25	25.76	Very poor
56.	Sardar Khan	33	20	25	25	25.76	Very poor
57.	Aziz Khan	33	20	25	25	25.76	Very poor
	Shankar Gayari	33	60	50	25	41.25	Very poor
58.							

Table 9: Contd....

House No.	Head of household	KI-1	KI-2	KI-3	KI-4	Avg. score	Wealth categor
60.	Narayan Nai	33	40	50	25	37.00	Very poor
61.	Heera	66	60	-	75	67.00	Medium
62.	Bhairu	66	100	100	75	85.25	Rich
63.	Harlal Jat	100	100	100	100	100	Rich
64.	Bhagwan Jat	100	100	100	100	100	Rich
65.	Badridas	33	40	25	25	30.75	Very poor
66.	Shankardas	33	40	50	25	37.00	Very poor
67.	Gopu Jat	66	100	100	75	85.25	Rich
68.	Gokal Gayari	66	100	100	75	85.25	Rich
69.	Navanram	33	60	50	100	60.75	Poor
70.	Mangilal	33	60	75	-	56.00	Poor
71.	Gangaram Jat	66	100	100	75	85.25	Rich
72.	Udailai Gayari	33	60	50	25	42.00	Very poor
73.	Not identified by KI						
74.	Bhaira Chamar	33	60	75	25	48.25	Poor
75.	Madhu Lohar	33	40	50	25	37.00	Very poor
76.	Appar Khan	33	20	-	25	26.00	Very poor
77.	Nola Regar	33	20	25	25	25.76	Very poor
78.	Shankarlal Gayari	33	40	25	25	30.75	Very poor
79.	Narayan Gayari	66	100	100	50	79.00	Medium
80.	Kashiram	33	20	25	25	25.76	Very poor
31.	Bhagwan Bheel	33	20	25	25	25.76	Very poor
32.	Pratap Gayari	33	60	75	-	56.00	Poor
33.	Bhairalal Gayari	66	80	100	75	80.25	Medium
34.	Bhanwar Khan	33	20	25	25	25.76	Very poor
35.	Muneer Khan	33	20	25	25	25.76	Very poor
36.	Naranilal Bheel	33	20	25	25	25.76	Very poor
37.	Bhagawandas Bheel	33	20	25	25	25.76	Very poor
88.	Ganeshlal	33	60	75	50	54.50	Poor
39.	Mohan	33	40	-	-	36.50	Very poor
90.	Prithviraj Gayari	33	60	75	50	54.50	Poor
91.	Jeetmal	33	40	50	75	49.50	Poor
92.	Bhairu Nayak	33	40	50	25	37.00	Very poor
93.	RamuJat	33	60	50	50	48.25	Poor
94.	Bhaira Jat	100	100	100	100	100	Rich
95.	Shyani Bai	100	100	100	100	100	Rich
96.	Shankar Singh	100	100	100	100	100	Rich
∂7.	Rais Mohd	33	20	25	25	25.76	Very poor
97. 98.	Not identified by KI	55	20	23	23	25.70	very poor
99.	Ramjan Khan	33	20	25	25	25.76	Very poor
100.	Ratanlal Gayari	33	40	50	50	43.25	
100.	Dalchand Nai	33	20	25	25	25.76	Very poor
101.	Rama Jat	55	20	23	25	25.70	Very poor
102. 103.		66	80	100	100	86.50	Diah
103.	Shankarlal Rameswar Jat	66 66	$\begin{array}{c} 80\\100\end{array}$	$\begin{array}{c} 100 \\ 100 \end{array}$	100 75	86.50 85.25	Rich Rich
		00	100	100	73	83.23	KICH
105.	Not identified by KI						
106.	Not identified by KI	22	10	25	25	20.75	T 7
107.	Gangaram Lohar	33	40	25	25	30.75	Very poor
108.	Onkarlal	33	40	50	25	37.00	Very poor
109.	Laluram	33	40	50	50	43.25	Very poor
110.	Roda Gayari	33	40	50	50	43.25	Very poor
11.	Narayan	33	40	50	50	43.25	Very poor
112.	Chuna Gayari	33	60	75	50	54.50	Poor
13.	Mangilal Gayari	33	40	50	25	37.00	Very poor
14.	Basir Khan	33	20	25	25	25.76	Very poor
15.	Bhairulal Gayari	33	40	50	-	30.75	Very poor
116.	Narayan Gayari	33	60	100	75	67.00	Medium
117.	Champalal Gayari	33	40	50	25	37.00	Very poor
118.	Sabairam	66	60	100	100	81.50	Rich
119.	RatanlalJat	100	100	100	100	100	Rich

Table 9: Contd....

House No.	Head of household	KI-1	KI-2	KI-3	KI-4	Avg. score	Wealth category
120.	Lachhiram Jat	100	100	100	100	100	Rich
121.	Bhagwan	33	40	50	50	43.25	Very poor
122.	Amarchand	33	40	100	50	55.75	Poor
123.	Kaluram	33	40	25	100	49.50	Poor
124.	Sadhu	33	40	25	50	37.00	Very poor
125.	Bhera Nayak	33	20	25	25	25.76	Very poor
126.	Amarchand	66	60	100	100	81.50	Rich
127.	Shankar	66	40	25	25	39.00	Very poor
128.	Lakhma Gayari	33	40	50	25	37.00	Very poor
129.	Champalal Jat	33	40	25	25	30.75	Very poor
130.	Not identified by KI						• 1
131.	Shambudas	33	20	25	25	25.76	Very poor
132.	Rama Gayari	33	40	50	25	37.00	Very poor
133.	Naran Gayari	33	40	50	25	37.00	Very poor
134.	Lalu Gayari	33	40	50	25	37.00	Very poor

Table 10: Wealth categories of Sohenkhera village

S. No.	Category	Number of families	Percentage
1.	Rich	20	16.13
2.	Medium	7	5.64
3.	Poor	20	16.13
4.	Very poor	77	62.10

on agriculture along with very poor families in the village (especially in *Lohar* community having 43 per cent income from blacksmith works). There are almost uniform expenditure patterns among the different groups with slight difference. Poor category people spend more on food and clothing due to their bigger family size and

less in entertainment and there is no way of saving in very poor category. All rich category people go for saving like Insurance instruments etc. and very poor category people borrow money from local money lenders for crisis management.

CONCLUSION

From the results of the livelihood analysis conducted for the three different categories of wealth ranking results, it may be pointed out that with respect to the size of land holdings the rich farmer had 50 percent more the size of the medium and as such large as 9 times that the

Table 11: Livelihood analysis of Sohenkhera village

Variables	Rich (Ratan Lal Jat)	Medium (Pema Lal Gayari)	Poor (Ganeshlal Gayari)	Very poor (Ganga Lohar)
Type of house	Pucca	Kuchcha	Kuchcha	Mud made
Family size	5	5	2	7
Men	2	2	1	3
Women	2	1	1	3
Children	1	2	-	1
Land holding	37 bigha	25 bigha	12 bigha	4 bigha
Nature of farming Livestock:	Mixed	Mixed	Mixed	Mixed
Buffalo	12	4	3	1
Cow	-	1	-	1
Sheep/goat	-	-	5	2
Income source	Agriculture-50%, business- 50%	Agriculture- 91%, livestock- 9%	Agriculture- 97%, ghee selling- 3%	Agriculture - 43%, Blacksmith 43%
Expenditure	Agriculture-30%, food- 20%, celebration- 20%, health- 5%, savings- 25%	Agriculture- 45%, food- 36%, clothes - 9% education- 3% livestock - 3% health- 2%, savings- 2%	Agriculture- 33%, food- 17%, celebration- 14%, livestock- 16%, transport- 3%, health- 3%, savings- 15%	credit- 14% Agriculture- 15%, food- 70%, clothes- 15%

poor farmer. The rich farmer had an incomparably large number of cattle with respect to his counterparts. While the rich farmer received monthly income equally from agriculture and business, the medium and poor farmer almost solely depended on agriculture for income. The very poor farmers depended on agriculture and other enterprises such as black smithy but with very poor returns. Furthermore, from the expenditure pattern observed, the rich farmer were inclined to save nearly 25% of his monthly income, while the poor farmer was always in need of loan to meet his monthly needs since no saving pattern was observed. As a consequence the crises analysis indicated that the poor farmer as well as the medium farmer usually takes a loan of 50 per cent towards meeting any calamities faced in their agricultural and livestock sectors as well as meeting day to day expenses which continue to make them poorer.

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