Rural Poverty in Jharkhand, India : An Empirical Study based on Panel Data

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Introduction

Poverty has become a general phenomenon that is perceived to mean different things to different people at different times and places. Ogwumike (2001) defined poverty as a situation where a household or an individual is unable to meet the basic necessities of life ,which include consumption and non-consumption items,considered as minimum requirement to sustain livelihood. Oguwumike (2001) and Odusola (2001) referred to poverty as a condition of deprivation which could be in form of social inferiority, isolation, physical weakness,vulnerability,powerlessness and humiliation.

In India, poverty reduction is one of the major objectives of economic development programmes. Though India was the first country in the world to define poverty as the total per capita expenditure of the lowest expenditure class, which is required to ascertain a minimum intake of 2400 kcal/day in rural and 2100 kcal/day in urban areas. The same is converted into financial terms and the poverty line is defined as a minimum level of income or expenditure, which is periodically updated. The latest updated poverty line is Rs.356.30 in rural areas and Rs.538.60 in urban areas in 2004-05 (Planning Commission, 2007). There exists a substantial interstate and urban rural differential in the cost of goods and services. One in three Indians lives below the poverty line according to the Tendulkar Committee report which used a measurement of goods and services, rather than calorie intake, to calculate poverty. The World Bank estimates that 80% of India's population lives on less than $2 a day which means a higher proportion of its population lives on less than $2 per day as compared with sub-Saharan Africa. There has been no uniform measure of poverty in India. The Planning Commission of India has accepted the Tendulkar Committee report which says that 37% of people in India live below the poverty line.

World Bank (1994, p. 9) recognized that poverty is not only a problem of low incomes; rather, it is a multi-dimensional problem that includes low access to opportunities for developing

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human capital and to education..... As UNDP (1996, p. 27) commented, income poverty is only a part of the picture. Just as human development encompasses aspects of life much broader than income, so poverty should be seen as having many dimensions and accordingly developed the concept of human poverty. It observed that human poverty is more than income poverty: it is a denial of choices and opportunities for living a tolerable life (UNDP, 1997,p.2). According to Sen (1999, p. 87), 'real' poverty can be sensitively identified in terms of capability deprivation: deprivations that are intrinsically important, unlike low income, which is only instrumentally significant. Sen distinguishes between income poverty and capability poverty; and argues that the later is obviously more important. Capability poverty refers to deprivation of opportunities, and choices and of entitlements. Poverty is a widely respected indicator of well-being, which is used to make comparisons of poverty over time and between spatial and social groups for the purposes of policy analysis. Several studies of Indian villages to determine why households descent into poverty (Krishna 2004, Krishna *et al.,* 2005, Krishna 2006) find that in a majority of cases of decline into poverty, three principal factors are at work: health expenses, high-interest private debt, and social and customary expenses.

World Bank identified Jharkhand as one of the most poverty-stricken state in the country with a sharp contrast between rural and urban poverty. Although, Jharkhand is blessed with abundant natural and mineral resources as well as a cheerful and hard working human population, mostly of tribal families with a rich cultural heritage and traditional knowledge. Out of a total geographical area of 7.9 million ha, nearly 2.6 million ha are cultivated, while 2.3 million ha (29% of total area) are under forests. The area under assured irrigation is less than 10 percent. Out of a total population of 27 million, 21 million (78%) live in villages, while about 6 million (22%) reside in urban areas. Nearly 49% of the population lives below the poverty line. Rural poverty is greater than urban poverty. The most important rural occupations are crop and animal husbandry, fisheries and agro-forestry. Jharkhand comprises 28 percent of tribal communities and therefore enjoys the status of a 'tribal state' in the country. About 60% of schedule caste and schedule tribes are still below poverty line. It may be said that agro-ecological and social factors are the main causes for rural poverty in Jharkhand. Poor infrastructure, difficult terrains, high population pressure on arable land, low coverage of irrigation, limited in-situ employment opportunities, social customs and traditions, natural calamities like drought are some of the factors that inflict poverty in the state. Bihar and Jharkhand are listed as the most insecure in terms of food and nutritional security (The

world food program mapping). Evidence indicates that in Jharkhand about 2 percent of population suffer from acute and chronic hunger and 10 percent from seasonal food insecurity (National Sample Survey II).

Income based approach to poverty can not tell any thing about other forms of deprivations poor go through. Poverty is basically a denial of a range of material needs such as nutritious food, safe drinking water, shelter, healthcare, education, etc. Therefore, multidimensional poverty measures provide better understanding of the nature of poverty-at local, regional, national, and world level. The present study is a part of the ICRISAT-ICAR-IRRI collaborative project "*Tracking change in rural poverty in villages and household economies of South Asia"* being pursued in three states of Eastern India, namely, Bihar, Jharkhand and Odisha. It attempts to track and explore some of the important causes of rural poverty in the state of Jharkhand. The paper is arranged in six sections. The next section covers the poverty aspect in Jharkhand state. Section 3 describes the literature review on poverty and socio-economic indicators. Methodology has been discussed in Section 4, and Sction 5 contains results and discussions. The sixth which is final section presents conclusions based on empirical evidences.

Poverty prospects in Jharkhand, India

Agriculture is the main source of livelihood for most of the rural people. About 70% of farm households own less than 1 hectare of farm land. However, average size of land holding in Jharkhand is comparatively higher (0.56 ha) than neighbouring states, but only 66% of land owned by farmers is under cultivation in sample villages, indicating abundance of culturable waste land. The state is rich in mineral resources and poor in agricultural production. More than 75% of work force is engaged in agriculture, but generates only 20% of state's GDP. About 45% area is under non-agricultural use and 32% is cultivable wastes which are unsuitable for agricultural production and only 23% area is under cultivation. Livestock is the second important economic activity on sample households, but the productivity is very low due to domestication of local and indescript breeds of animals. However, the distribution of land and livestock ownership is more equitable in Ranchi than in Dumka district. The spatial distribution of poverty in Jharkhand is shown in table 1. It is obvious that there exists a huge inter-regional disparity in terms of incidence of poverty in the state. Except Dhanbad, which is mainly a non-agricultural economy, poverty is wide spread. About a two-third of the districts is constrained with more than 50% to 80% of the poor population.

Table: 1 Spatial Distribution of Poverty in Jharkhand

BPL (%)	Districts
80% and above	Gumla, Simdega, West Singhbhum, Latehar
70-80%	Lohardaga, Seraikela, Kharsawan
60-70%	Ranchi, Dumka, Jamtara
50-60%	Deoghar, Pakur, Sahebganj, Garhwa
40-50%	Giridih, Koderma. Godda, Hazaribagh, Giridih
Below 40%	Bokaro (36.22%), Dhanbad (8.3%), Deoghar

Source**:** *Annual Report 2004-05, Department of Food, Civil Supplies and Commerce,Government of Jharkhand pp.50.*

In Jharkhand, about 92% of the cropped area is under paddy, wheat, maize, pulses and oilseeds (Niger, linseed and mustard). The productivity of crops is low and the deficit with reference to demand and supply is as high as 52% in the case of cereals, 65% in the case of fruits, 51% in the case of milk and 34% in the case of fish. Only one crop is taken during the kharif season in most parts of the state and current fallow and other fallow lands contribute 2.0 million ha (about 25% of the area). It is thus clear that accelerated agriculture development holds the key to poverty eradication and employment generation in the state. The Government of India(GOI) placed in Parliament, in November 2007, a National Policy for Farmers which calls for a paradigm shift from a purely commodity centred approach to agricultural development to a human centred approach. The policy calls for 'improving the economic viability of farming by substantially increasing the net income of farmers and to ensuring that agricultural progress is measured by advances made in this income'. The economic wellbeing of the farming family should become the major goal of agricultural development strategies and programs. Only then, we will be able to eradicate the pervasive poverty and malnutrition prevailing in the country. The GOI has also initiated many programs for strengthening the farmers' livelihood and income security.

Poverty and Socio-Economic Indicators

Socio-economic indicators provide a background to understanding the poverty scenario in a country.These indicators provide data on education, gender, poverty, housing, amenities, employment and other economic indicators. These indicators for the country as well as states will help in identifying the linkages between socio-economic indicators and achievement of health goals. Gang *et al.* (2007) reveals that the incidence of poverty in Scheduled Caste (SC) and ST (Scheeduled Tribe) households is much higher than among non-scheduled households. There is a non-linear relationship between age and poverty incidence across all three social

groups, with the poverty rate increasing as we move from age group 20-29 to 30-39, and then decreasing for ages 40 years and above. Poverty increases with household size, highest poverty rates observed among households that have seven or more members. While literacy is negatively related to the incidence of poverty, the negative correlation between educational attainment and poverty incidence seems weaker for SC households as compared to ST and non-scheduled households.There was a higher incidence of poverty among agricultural laborers across all three social groups as compared to other occupations. The SC and ST households had a lower mean age for the head of the household and smaller (mean households size) as compared to non-scheduled households.A much higher proportion of SC and ST households were not literate compared with non-scheduled households. With respect to occupation, a majority of SC households (54 percent) were engaged as agricultural laborers, however this proportion is lower in ST households (44 percent) are agricultural laborers followed by non-scheduled households (38 percent).

Deshingkar (2010) based on experience of Andhra Pradesh (AP) and Madhya Pradesh (MP) argued that migration is higher among chronically poor groups living in Remote Rural Areas (RRAs). It plays an important role in managing risk and improving standards of living and household wellbeing. Although it is impossible to say that the poor have become non-poor as a result of migration, because of the difficulties of measuring poverty and multiple deprivations, the overall impact of migration in terms of being able to repay debts faster, being able to eat more regularly, being able to spend on education, health, agriculture and housing and being able to borrow large sums when needed has been positive and has raised the social and economic status of migrant households. However, these positive impacts come at a cost, because migration increases the risk of injury and exposure to disease and noxious substances, as well as the negative impacts of long separation from ones family. Migration rates vary across caste groups and villages, with the highest incidence among chronically poor people living in remote villages. Overall mobility levels have grown: in AP the number of households with at least one person working outside the village increased from 41% in 2003/04 to 54% in 2006/07. Corresponding figures were 42% and 52% in MP.

In remote villages, migration involved all but broad base of migration has resulted in its benefits accruing to a large number of households, challenging the notion that migration benefits only a privileged few with the right contacts, assets and education. Circular migration earnings account for a higher proportion of household income among the lower castes and tribes, namely the SC, BC and ST (in households with one person working outside the

village). Migration is critical to managing risk and smoothing consumption for a majority of chronically poor households living in RRAs. The extra income from migration has allowed the family to eat regularly and better, pay for health care when needed and spend on social events. Migration has improved the creditworthiness of the families left behind in the village who can now obtain large loans easily. For many chronically poor households, migration provides a way of 'coping' without graduating out of poverty altogether. Such migrants are usually in the lowest paid 3D jobs (dirty, dangerous and degrading), characterised by poor employment conditions, debt bondage and recruiting agents, limited personal freedom, restricted access to information and violation of human rights. Women and children from SC and ST households are often employed on the worst terms and are the most vulnerable to exploitation.

In India, at national level, WestBengal and Kerala are cited as two successful cases of land reforms followed by states like Tripura and Karnataka. Under the tenancy reform in West Bengal, an estimated 1.6 m tenants were registered and given heritable rights over tenated land. Half a million landless were given homestead land up to 5 cents each and under ceiling reforms, 2.5 m landless and land poor households wre distributed land (Bandyopadhyay, 2003; Dasgupta, 2004).

Banerjee *et al.,* (2002) have carefully estimated the effects of tenancy reform (Operation Barga) on agriculturl productivity.Their model, based on district disaggregated results for tenancy reforms, attributes 28% of the increased agricultutal productivity in WB to reform. Since land reforms were weak and limited, substaintial land owners remained at the apex of economic, social and political power in the rural areas,excluding the rural poor and the landless from participatory democracy. This continues to be the case even today and there are strong evidences that relatively improves the prospect of the poor participating in democratic processes (Srivastava, 2006). Education can very significantly influence both income poverty and capability poverty. Education is one such important opportunity, deprivation of which in itself represents poverty: poverty of education or education poverty (Tilak, 2002).

Fasoranti (2010) examined the effects of micro-credit scheme on poverty alleviation among rural dwellers. The study shows that poverty was high among the economically active age bracket as the mean age was 33.3% and 39.2% of total respondents had no specific occupation before the inception of the micro credit scheme. The scheme had positive influence on major macro economic variables such as income savings, consumption expenditures and asset acquisition of respondents.The general perception of the people is that programme was primarily designed to favour the poor. The study therefore recommends a wider coverage of

the state by the scheme.Moreover, the scheme should be divorced from politics so as to achieve the set goals of the programmes. Generally, the benefits from the programmes should be intensified by mandating beneficiaries to invest profits in economic activities.

Methodology

The study is based on micro-panel data being collected in the sample villages of the two sample districts in Jharkhand state, namely, Ranchi and Dumka to track the changes in rural poverty in the eastern states of India.

Locale of the study

The state of Jharkhand (India) was carved out of southern parts of Bihar and came into existence in 2000. It covers an area of 79,714 sq km, with 22 districts, 32,616 revenue villages and a population of 27 million according to the 2001 census. Out of a total geographical area of 7.9 million ha, nearly 2.6 million ha are cultivated, while 2.3 million ha (29% of total area) are under forests.The area under assured irrigation is less than 10 percent. Out of a total population of 27 million, 21 million (78%) live in villages, while about 6 million (22%) reside in urban areas. The state falls under agro-climatic region known as the Eastern Plateau and Hill region and receives an average annual rainfall that varies from 1300 mm to 1400 mm. About 80% of the rainfall is received during the months of June to September of which more with more than 78 % runoff losses. Jharkhand lacks existence of perennial river systems in the state and agriculture is a subject to occurrence of monsoon. Most of the farm households are small and marginal with nearly 83% of the operational holdings below 2.0 ha. State almost follows a mono cropping of rice in monsoon. In rest of the season's wheat, maize, pulses and oilseeds like Niger, linseed and mustard are cultivated. The productivity of crops is low. During last ten years agriculture could not grow in the state as per expectations, resulting in higher rural poverty.

Sampling

The data pertains to these two representative districts, one representing the socio-economically developed district (Ranchi) and the other representing the socioeconomically backward district (Dumka) and two sample villages from the different blocks in each of the selected districts. While Ranchi district has edge over other districts of Jharkhand with respect to education level, per capita income, health and hygiene, and infrastructure facilities, Dumka district has been inferior to majority of districts of Jharkhand with respect to education level, per capita income, health and hygiene, and infrastructure facilities.

There are 21 blocks in Ranchi district and 10 blocks in Dumka district respectively. Out of 21 blocks in Ranchi district, Namkum and Kanke blocks were selected based on representative socio-economic parameters of Ranchi district, particularly with respect to soil, irrigation facility, per capita income, education, health and hygiene facility and infrastructure. From Namkum block, one village namely Hesapiri (a cluster of villages including Hesapiri/Hahap/Ulidih) was selected randomly. From Kanke block, Dubaliya village was selected randomly. From Dumka district a sample of two blocks namely; Jarmundi and Sikaripara blocks were selected because the former block had mixed population of tribal and non tribals whereas later block had mostly tribal (Santhal) population. Jarmundi block has edge over to other blocks of the district with respect to irrigation facility, per capita income, education, health and hygiene facility and infrastructure whereas Shikaripara block was inferior with respect to these parameters than majority of blocks of Dumka district. From Jarmundi block, Dumariya and its adjacent two villages namely; Patsara and Uparbhaiyari villages were selected randomly and from Sikaripara block, Durgapur and its two adjacent villages namely; Shyampur and Kushpahari were selected randomly. Census of households was conducted in all the villages in June, 2010.

To ensure equal representation of different groups of households, 10 households were randomly selected from each group that is; landless, small, medium and large categories, making household sample size of 40. Data were collected from a panel of 40 randomly selected households in all the four sample village for cropping season 2010-11, covering socio-economic, agro-biological and institutional variables. Details of the locale and the number of selected households are presented in table 2.

Table: 2 locale and the number of selected households

District	Village	Block	Number of Households
Ranchi	Dubaliya	Kanke	211
	Hesapiri	Namkum	355
Dumka	Dumariya	Jarmundi	293
	Durgapur	Shikaripara	298
Total number of households			1157

The data obtained from these sample villages were scrutinized for the enumeration errors and identification of outliers. The analyzed results were tabulated and discussed in to arrive at some logical consequences of the study.

Variables studied

- Caste wise distribution of APL/ BPL
- Education level
- Land and tenurial status
- Per household assets owned
- Livestock: Herd size
- Dwellings: Kaccha/pucca
- Utilities: drinking water,electiricity etc.
- Occupation
- Migration: Age at migration, caste-wise migration, destination of migration, type of employment at destination places
- Financial inclusion: credit source, proportion/type of loans, households having savings account

Results and discussions

Caste and poverty

Caste is an important determinant of poverty. It emanates that incidence of poverty was widespread among all caste groups in the selected districts (table 3). The selected villages in Ranchi district had no general caste population. About 43% general caste households in Dumka were BPL. Among other castes cent percent of the other backward classes (OBC) in Ranchi were below the poverty line (BPL). The population of OBC below poverty line was 55% in Dumka. It implies that a majority of OBC class suffers high incidence of poverty. Ironically, despite being a tribal state, a substantial proportion of scheduled tribes (ST) in the state is BPL. It is obvious that 66% of OBC in Ranchi and 34% in Dumka were BPL[6]. In nutshell, Ranchi which is also the capital of Jharkhand supports more number of BPL households than that of Dumka. Migration of BPL households from other districts to Ranchi in search of employment may be one of the reasons for this.

[6] BPL-Below Poverty Line, APL-Above Poverty Line

Table 3: Caste wise distribution of APL/ BPL Households (in %)

Particulars	BPL		APL	
	Ranchi	Dumka	Ranchi	Dumka
General	-	43	-	57
OBC	100	55	0	45
SC	17	63	83	38
ST	66	38	34	59
Total	66	48	34	53

Education and poverty

Poverty of education is an integral part of human poverty, and it is widely argued that this should be an important constituent of any meaningful and comprehensive definition of poverty line. The features of education poverty include wide spread illiteracy, low levels of education of the population, high rates of non-participation or low rates of participation of children in schooling, high rates of dropout and failures, low rates of continuation in schooling, low rates of achievement and finally exclusion of the poor from education. Accordingly it may be easy to identify and count the number of educationally poor people, as those who are illiterate and who are less educated-educated below a defined level. Education has a strong bearing on poverty. It emanates from table-4 that the incidence of poverty comes down as the level of education increases. BPL households comprised higher proportion of illiterates and less educated members as compared to APL households. This holds true both for male and female. Male surpassed female in terms of literacy.

Table 4: Education level of family member of households (%)

Level of Education	BPL				APL			
	Ranchi		Dumka		Ranchi		Dumka	
	Male	Female	Male	Female	Male	Female	Male	Female
Illiterate	24	52	26	63	19	42	17	48
Primary Level	20	16	18	10	16	21	17	17
Middle Level	17	11	26	15	20	10	21	19
Secondary	27	17	24	10	22	17	34	15
Post Secondary	12	5	6	1	23	10	11	1

Land and tenurial status

Agriculture is the prime occupation of a majority of rural households. Table-5 shows the landholding patterns and tenurial status of Jharkhand farmers. The average size of operational land holding in Ranchi was marginally higher in comparison the same in Dumka. A BPL family

in Ranchi operates 2.21 acres of land whereas in Dumka it was 1.37 acres. The average landholding size of the households for APL families was 2.36 acres and 1.56 acres in Ranchi and Dumka, respectively. Per capita land holding size of APL and BPL families in Ranchi was equal (0.44 acres). In Dumka, it was 0.25 acres and 0.34 acres for BPL and APL farmers, respectively. It is interesting to note that the practice of leasing-in and leasing-out was more in the BPL households than the APL households in both of the districts. Virtually, no APL farm household lease-in farm lands for cultivation. The percentage of BPL households leasing-out farm lands was 23.5% in Ranchi and 3.86% in Dumka. It indicates that BPL households do not find agriculture remunerative any more.

Table 5: Per capita land and Tenurial status of Sample Households

Particulars	**BPL**		**APL**	
	Ranchi	Dumka	Ranchi	Dumka
Per Household (acre)	2.21	1.37	2.36	1.56
Per Capita (acre)	0.44	0.25	0.44	0.34
% of leased-in operational holding	2.97	16.15	0.00	0.00
% of leased-out of own land	23.53	3.86	3.39	1.82

Assets and Poverty

Poverty has a negative correlation with the amount of household assets. In general, BPL households possess fewer amounts of assts than that of APL households. This fact is ascertained by the numbers presented in table 6, which provides dissected view of different types of household assets available with the BPL and APL households in Ranchi and Dumaka districts of Jharkhand. It can be observed from this table that there was a wide gap between the availability of various kinds of assets between the BPL and APL households. A BPL household at Ranchi owns agricultural assets worth Rs. 21214 which was almost two-third of the same for the APL household. Same was the pattern at Dumka. It is important to recognize that these assets are important for carrying out different types of agricultural operations.

There happens to be a significant difference between the possession of household assets among APL and BPL households. The presence of domestic assets, to some extent, is an indicator the quality of domestic life of the farm households. It emanates from table 6 that an APL household enjoys domestic assets that values twice of the value of domestic assets with the BPL households irrespective of the districts. Besides, APL households possess transport assets that value 3-time more than that of the BPL households. It is a healthy sign that even

the BPL families owned means of information and communication like cell phones, radios, television, etc., and getting benefited.

Table 6: Per household assets own by APL/BPL Household (in Rs.)

Particulars	BPL		APL	
	Ranchi	Dumka	Ranchi	Dumka
Agricultural Assets	21214	971	39638	1181
Domestic Assets	12951	2622	24968	4693
Transport Assets	4019	1016	15504	3102
Communication & Informatics Assets	2687	450	4322	940
Total Assets	40871	5059	84431	9917

Livestock rearing

Rearing of livestock for household consumption as well as a mean of livelihood is common. The herd size of different types of livestock with APL and BPL households are presented in table-7. This can be observed that the livestock holding pattern is rather more egalitarian than the landholding patterns of the concerned districts.

Table 7: Herd size of livestock per 100 Households

Particulars	BPL		APL	
	Ranchi	Dumka	Ranchi	Dumka
Buffalos	19	21	11	21
Bullocks	126	142	137	145
Cows (Non-descript)	79	97	56	102
Young stock cattle(<3 year)	11	45	74	40
Young stock buffalo(< 3 year)	06	24	07	17
Poultry	511	174	593	200
Goats	279	139	226	143
Other livestock (Pigs etc.)	117	63	93	74

Types of dwellings

Type of dwelling houses also indicates the status of poverty in the sample districts. Table-8 shows the status of residential houses in the selected districts of Jharkhand. It fairly indicates that about three-fourth or even more houses in the BPL category were kutcha (earthen/ thatches). Even the 86% of APL households in Dumka have the kutcha houses. APL families in Ranchi, of course, have better houses.

Table 8: Type of Residential House[7] (in %)

Type of House	BPL		APL	
	Ranchi	Dumka	Ranchi	Dumka
Pucca	11.3	7.9	29.6	7.1
Pucca-Kutcha	15.1	10.5	33.3	7.1
Kutcha	73.6	81.6	37.1	85.7

Utilities availed by the households

Except electrification most of the BPL and APL households were lacking basic amenities like toillest, tap water connection and supply of drinking water in their houses (Table-9). This indicates the poor quality of life in the region.

Table 9. Facilities Availed by sample Household (%)

Facilities	BPL		APL	
	Ranchi	Dumka	Ranchi	Dumka
Toilets	6	0	11	0
Electrified	83	74	78	43
Tap Water Connection	2	0	7	0
Drinking Water	8	24	15	38

Occupation

Occupation has direct bearing on the poverty and quality of life. It emanates from table-10 that a very high proportion of female population (more than 80%) has no gainful employment. Males are engaged in a variety of occupations ranging from agriculture and related activities to non-farm jobs. Agriculture and related activities still continues to be the main occupation and provides livelihood to about 40% to 50% BPL households in Dumka and Ranchi, respectively. Among APL households, it was found to be ranging between 29% to 32%.

[7] Pucca- brick house, Kuchha-Pucca-brick and mud house, Kuchha-mud house

Table 10: Occupation of family member of sample households (%)

Occupation	BPL				APL			
	Ranchi		Dumka		Ranchi		Dumka	
	Male	Female	Male	Female	Male	Female	Male	Female
Farming	45	2	41	1	31	2	28	0
Farm Labour	4	4	1	1	1	2	1	0
Non Farm labour	14	7	17	2	7	0	10	1
Regular farm servant	0	0	1	0	1	0	1	0
Livestock production	0	1	1	0	0	0	1	1
Salaried job/ Monthly wages	0	1	2	0	9	8	5	0
Other	1	1	3	0	3	0	13	9
No gainful employment	36	84	34	95.6	47	88	41	89

Migration

Migration is one of the most common manifestations of poverty. Lack of employment opportunities, low wages and poor quality of life induce households or their members to migrate from their native places. Migration, both within the state and out-side state is very common in poverty ridden sates. Table 11 and 12 show the caste-wise and age-wise migration from the Ranchi and Dumka districts. It is obvious that migration is common from all age groups of people (Table12). However, there is no distinct pattern in caste-wise migration.

Table 11: Caste category-wise extent of migration under different households (%)

Particulars	BPL		APL	
	Ranchi	Dumka	Ranchi	Dumka
General	00	00	00	25
OBC	00	18	00	07
SC	00	00	20	00
ST	14	08	18	20

Table 12: Age wise incidence of Migration in households (%)

Age	BPL				APL			
	Ranchi		Dumka		Ranchi		Dumka	
	Male	Female	Male	Female	Male	Female	Male	Female
Total Population (Above 15 years)	94	72	73	64	65	45	76	55
Total migrants (% of total population)	6	7	5	0	6	11	9	0
Below 20	33	60	25	0	0	0	1	0
20 to 40	50	20	75	0	5	9	4	0
40 to 60	17	20	0	0	2	0	3	0
Above 60	0	0	0	0	0	2	1	0

The extent of outside state migration was more in case of BPL migrants hailing from the age group upto 20 years (Table 13). However it comes down with the increase in age of the migrants. In Dumka there was no incidence of within state migrations. Cent percent of the migrants prefer to go outside state in search of better livelihood options. APL migrants often found to be migrating to the near by twons and urban centre within the state.

Table 13: Destination of Migrants from households (%)

Age	BPL				APL			
	Ranchi		Dumka		Ranchi		Dumka	
	Within state	Outside state	Within state	Outside state	Within State	Outside state	Within State	Outside state
Below 20	40	60	0	100	100	0	50	50
20 to 40	50	50	0	100	17	83	100	0
40 to 60	100	0	0	0	100	0	100	0
Above 60	0	0	0	0	0	100	100	0
Total	55	45	0	100	33	67	86	14

About 64% and 25% of the migrants from the BPL households in Ranchi and Dumka respectively were engaged as the non-farm labourers. Rest were engaged in salaried jobs and other occupation like business, etc. the extent of salaried job was more in case of the migrants from the APL households.

Table14: Employment of Migrants at destination places (%)

Occupation	BPL		APL	
	Ranchi	Dumka	Ranchi	Dumka
Farm Labour	00	00	00	14
Non Farm labour	64	25	00	14
Salaried Job	00	75	67	29
Other occupations	36	00	33	43

Financial inclusion of the households

Table 15 illustrates the households which have access to different types of financial institution by maintain savings accounts with them. It is apparent that commercial banks are the main financial institutions which have greater reach among the rural households. Insurance companies also have some depth in the rural areas. It implies commercial banks could be effectively used as the instruments for targeting the resources to the rural households.

A perusal of Tabel-16 reveals that most of the BPL hoseholds of Ranchi and Dumka district were dominated over APL in terms of borrowing. Mostly farmers (BPL and APL) used it for agricultural purpose in both the districts. A considerable number of BPL and APL respondents spent the loan amount for consumption purpose. A small number of households were used loans for marriage purpose.

Table 15: Source-wise loans by household (in Rs.)

Sources of Borrowing	BPL				APL			
	Ranchi		Dumka		Ranchi		Dumka	
	Amount	HH (%)	Amount	HH (%)	Amount	HH (%)	Amount	HH (%)
Organized sector								
Co-operative Bank	0	0	6750	29	0	0	738	5
Commercial Banks	27500	8	13333	21	741	4	4488	21
Rural Banks	41250	17	0	0	741	4	0	0
Unorganized sector								
Friends & Relative	7142	50	0	0	346	7	48	2
Shopkeepers	888	8	0	0	0	0	14	2
Landlord	0	0	0	0	0	0	48	2
Money lender	20000	4	3875	29	2037	7	0	0
SHG	1500	8	16500	14	0	0	238	2
Others	35000	4	12000	7	0	0	0	0

Table 16: Proportion of different type of loans by Households (%)

Purpose of borrowing	BPL		APL	
	Ranchi	Dumka	Ranchi	Dumka
Borrowing Households (% of sample HH)	45	37	22	36
Agriculture	67	72	67	60
Marriage	04	14	00	07
Consumption	29	14	33	33

The details of house holds having savings accounts with different banks and financial institutions has been presented in Table 17. A close look at this table reveals that the households of both BPL and APL categories preferred the commercial banks for maintaining their savings account followed by insurance company and in some other financial institutions.

Table 17: Households having savings account (%)

Purpose of borrowing	BPL		APL	
	Ranchi	Dumka	Ranchi	Dumka
Total	28	26	59	29
Commercial Banks	73	80	63	75
Co-operative Bank	00	00	06	00
Insurance Co. (LIC etc.)	53	10	56	50
Post Office	00	00	06	08
Others	07	10	25	08

Conclusions

Jharkhand is a tribal state which has high incidence of poverty. A majority of OBC, SC and ST population fall under BPL category due to a number of agro-climatic and socio-economic factors. BPL households often live misery and face poor quality of life as they lack the basic amenities. Poverty in the region leads to migration and both migration within the state and out-side state is common. Youth prefers to migrate out-side state but with increase in age within state migration picks up. A good proportion of rural households has connection with the commercial banks, cooperative banks and other financial institutions. The commercial banks have better reach among the rural households and they can be instrumental in poverty alleviation programmes.

The important causes/determinants of rural poverty in Jharkhand can be summarized as; lack of education, poor land base with small and marginal land holdings. Lack of employement opportunities at local level and poor infrastructure compounds the problem. In addition to

these factors, poor quality of natural resources like; acidic, laterite and red soils, water scarcity leading to mono-cropping in the state have also contributed towards rural poverty. With changing climatic scenario, and undulating terrain lacking capacity to retain rain water forces the farmers to take a single crop in the state, thereby reducing the opportunities to a better livelihood.

Information and communication technologies can play a pivotal role as it the common means of seeking information for improved farming practices. People are using modern technologies like mobile phone for the linkage between people and institution for use of agriculture-related technology, knowledge, skills and information. Hence, the technological inteventions can integrates farmers, agricultural scientists, extensionist, input dealers and the private sectors to harness the knowledge and information from various sources for better farming and improved livelihoods. There is a considerable potential for establishment of forest based processing units in state, can provide employment to local people and will reduce the migration phenomenon thereby enhancing the livelihoods of rural poor.

References:

Annual Report (2004-05). Department of Food, Civil Supplies and commerce, Government of Jharkhand, pp50.

Approach Paper Eleventh Five Year Plan 2007-2012: http://planningcommission.nic.in/plans/planrel/appdraft.pdf ; last accessed on 24/09/07.

Asia. The World Bank. http://siteresources.worldbank.org/SOUTHASIAEXT/Resources/.../fullreport.pdf .

Poverty Alleviation. http://wcd.nic.in/research/.../4%5B1%5D.2%20Poverty%20%20alleviation.pdf

Aasha Kapur Mehta and Shashanka Bhide….. Poverty and Poverty Dynamics in India: Estimates, Determinants and Policy Responses. www.chronicpoverty.org/uploads/publication_files/mehta_bhide.pdf

Bandyopadhyay, D (2003). Land reforms and agriculture: The West Bengal Experince, EPW, March 1.

Banerjee, Abhijit.,V., Gartler Paul,J and Ghatak,Maitreesh (2002). Empowerment and Efficiency: Tenancy reform in West Bengal, Journal of Political Economy,Vol.110 No.2 April,pp.239-280.

Dasgupta, Anirban (2004). Agrarian reforms in West Bengal: A closer look at actual facts, Department of Economics,University of California,Riverside.

Deshingkar, P. (2010). Migration, remote rural areas and chronic poverty in India, ODI Working Papers 323, December 2010. http//www.odi.org.uk.resources/download/4531/pdf (accessed on 14th sept.,2011) .

Fasoranti , MM (2010).The influence of micro-credit on poverty alleviation among rural dwellers: A sace study of Akoko North West Local Government Area of Ondo State, *African Journal of Business Management*, Vol.4 (8), pp.1438-1446.

Gang, Ira N., Sen, Kunal and Yun, Myeong-Su, Poverty in Rural India: Caste and Tribe. Review of Income and Wealth, Vol. 54, No. 1, pp. 50-70, March 2008. Available at SSRN: http://ssrn.com/abstract=1096748 or doi:10.1111/j.1475-4991.2007.00259 .x

http://en.wikipedia.org/wiki/Poverty_in_India .

Krishna, Anirudh (2004). E*scaping Poverty and Becoming Poor: Who Gains, Who Loses, andWhy?* World Development Vol. 32, No. 1, pp. 121–136.

Krishna, Anirudh, M Kapila, M. Porwal and V. Singh (2005). *Why Growth is not Enough:Household Poverty Dynamics in Northeast Gujarat, India. Journal of Development Studies,* Vol. 41, No. 7.

Krishna, Anirduh (2006). *Pathways Out of and Into Poverty in 36 Villages of Andhra Pradesh,India. World Development,* Vol. 34, No. 2, pp. 271-288.

National Sample Survey II National Sample Survey Organisation: http://mospi.nic.in/mospi_nsso_rept_pubn.htm ; last accessed on 24/09/10

Ogwumike FO (2001). "Profile and dimention of overty in Nigeria",Paper presented at NCEMA workshop on poverty reduction, Development policy centre, Ibadan,3rd-21st August.

Odusola, AF (2001). “Conceptual issues in poverty and poverty measurement” Paper presented at NCEMA Workshop on poverty alleviation policies and strategies,15th-26th,October.

Planning Commission, Govt. of India. (2007). Poverty Estimates for 2004-05. New Delhi: Press Information Bureau.

Sen, A.K. (1999) *Development as Freedom.* New Delhi: Oxford University Press.

Singh,K.M.; M.S.Meena, A. Kumar and R.K.P.Singh. 2012. Dimensions of Poverty in Bihar. Development Economics: Regional & Country Studies eJournal, Vol 1, Issue 13, May 04, 2012. http://dx.doi.org/10.2139/ssrn.2017506

Singh, R.K.P.; K.M.Singh and A.K.Jha. 2012. Effect of Migration on Agricultural Productivity and Women Empowerment in Bihar. Labor: Demographics & Economics of the Family eJournal Vol 4, Issue 73, July 31, 2012. http://dx.doi.org/10.2139/ssrn.2111155

Singh,,K.M.; M.S.Meena, A.Kumar and R.K.P.Singh. 2012. Socio-Economic Determinants of Rural Poverty: An Empirical Exploration of Jharkhand State, India. Development Economics: Regional & Country Studies eJournal, Vol 1, Issue 15, May 09, 2012. http://dx.doi.org/10.2139/ssrn.2017593

Srivastava, Ravi, S. (2006). Land reforms,employment & poverty in India.International conference on land, poverty, social justice and development,Institute of Social Studies,The Hague, January 12-14.

Tilak, J.B.G. (2002) Education and Poverty, *Journal of Human Development* 3 (2) (July): 191-207.

UNDP (1996) *Human Development Report*. New York: Oxford University Press.

World bank (2007). Jharkhand: Addressing the Challenges of Inclusive Development. Report No. 36437-IN Poverty Reduction and Economic Management. India Country Management Unit, South.