

CHAPTER 1

INTRODUCTION

Poverty is defined as a condition in which a person is not able to maintain a standard of living because of inadequate income or imprudent expenditure (Gillin, 1946). According to an estimate of World Bank approximately 1.2 billion people worldwide consume less than one dollar per day (World Bank, 2000). Around 75% of the poor work and live in rural areas, and projections suggest that over 60% will continue to do so in 2025 (Ravallion, 2000). The proportion of poor in rural areas has remained strikingly high as compared to urban poor. Thus, there is a need to focus on reducing rural poverty and to redirect attention and expenditure for agricultural development, as agriculture comprises the largest component of rural economy in developing countries.

Poverty continues to be a major problem in many parts of the developing world including India. The magnitude of rural poverty in India is larger as compared to urban poverty which resembles well with the world scenario. The recent i.e., 61st round of National Sample Survey Organization (NSSO) in 2004-05 shows that poverty affects 28.3% of rural population and 25.7% of the urban population in India. According to the official estimates of Planning Commission of India there is a marked reduction in poverty of rural households. However, although rural poverty is declining, it still remains substantially high in India.

1.1 RURAL POVERTY IN INDIA

The structural transformation of rural economies in India has broadly passed through three phases. In the first phase, during early 1950s to mid-1960s, the agricultural sector was restructured by implementing land reforms and by building up basic physical and institutional infrastructure such as development of irrigation and supply of institutional credit to the farmers. The second phase starting from mid to late 1960s was characterized by the green revolution and its extension. The last phase i.e., the 1990s is characterized by introduction of macroeconomic reforms including structural adjustments and globalization which had a profound impact on rural economy influencing the rural

poor. The following sections give an insight of the rural poverty in India during pre reform i.e., before 1991-92 and post reform i.e., after 1991-92 periods. The poverty ratios are presented here for rural-urban sector and for all India during 1973-74 to 2004-05 (Table 1.1.1). The poverty ratios are based on the household consumption expenditure survey conducted by NSSO for the quinquennial rounds. All the years considered are based on the Uniform Recall Period (URP) except for the year 1999-00 which is based on the Mixed Recall Period (MRP) while in 2004-05 poverty ratios are estimated based on both the recall periods.

Table 1.1.1: Percentage of Population in India below poverty line

Year	Rural (%)	Urban (%)	All India (%)	Rural reduction per year (%)	Overall reduction per year (%)
1973-74	56.4	49.0	54.9		
1977-78	53.1	45.2	51.3	0.83	0.90
1983	45.7	40.8	44.5	1.48	1.30
1987-88	39.1	38.2	38.9	1.47	1.20
1993-94	37.3	32.4	36.0	0.36	0.50
1999-00 MRP	27.1	23.6	26.9	--	--
2004-05	28.3	25.7	27.5	0.90	0.80
2004-05 MRP	21.8	21.7	21.8	1.06	1.00

Source: Government of India, Planning Commission, 1997, 2001, 2007

Note: MRP = Mixed recall period, where for some items recall period is 365 days, while for the rest it is 30 days.

1.1.1 Rural Poverty during Pre-reform Period

Rural poverty in India declined from 56.4% in 1973-74 to 53.1% in 1977-78. It further declined to 45.7% in 1983, to 39.1% in 1987-88 and finally reaching at 37.3% in 1993-94 (Table 1.1.1). The rate of decline was faster during the eighties as compared to the seventies, when economy was on higher growth path, as the average annual growth rate of Gross Domestic Product (GDP) was 2.71% during 1970s as compared to 5.86% in 1980s (Economic Survey, various years). A faster decline in rural poverty during the eighties can be attributed to higher growth in agricultural production, slower growth in foodgrains prices, and presence of safety nets such as crop insurance schemes.

Ahluwalia (1978) observed in a state level study of India that rural poverty depicted a fluctuating pattern with the incidence of rural poverty falling in the periods of good agricultural performance and rising in the periods of poor performance, suggesting evidence of trickle down associated with agricultural growth. However, in seven states accounting for three-quarters of rural poor, a significant inverse relationship was observed between the incidence of rural poverty and per capita agricultural Net Domestic Product (NDP). In 1987-88 decline in rural poverty was primarily achieved by depletion of government stock through large volume of Public Distribution System (Tendulkar and Jain, 1995).

The Planning Commission estimates show a declining trend in the incidence of rural poverty during 1980s. This is consistent with the observed rise in real wages in rural areas in most parts of the country during this period (Jose, 1988). The rise in real wages in agriculture is mainly due to a shift of labor force from agricultural to non-agricultural occupation (Bhalla *et al.*, 1991). The expansion of self-employment as well as wage employment schemes under the poverty alleviation programmes during the eighties have contributed in the rise of agricultural wages by increasing the off-farm employment opportunities. These employment generation programmes account for at least 60% incremental employment generation in rural areas in 1980s (Rao *et al.*, 1988).

The reform process started in India since mid-1991 ranging from price, tax, fiscal and monetary to trade reforms causing impact on prices and income. Liberalization and removal of agricultural trade restriction changed the cropping pattern and increased the prices of foodgrains in the short-run. Accordingly, the incidence of rural poverty in 1992 is estimated as 44%, which rose from 35% in 1990-91 (Chandrasekhar and Sen, 1996). It can be seen that rural poverty increased substantially during the first 18 months of reform at all India level. According to Tendulkar and Jain (1995), rural areas in Andhra Pradesh (AP), Assam, Bihar, Karnataka, Maharashtra, Uttar Pradesh (UP) and Rajasthan experienced sharp reduction in average per capita total expenditure. Rural poverty in these states increased sharply during the reform period. The poverty gap ratio calculated by World Bank (Sen, 1997) in 1992 increased to 10.9%, higher than that of 1986-87 at 10%, indicating that economic reforms have adversely affected the rural poor. Significant reduction in taxes and a uniform reduction in subsidies may have altered the distribution of income in favor of the

rich sections. Moreover, reduction of public expenditures, especially in states where poverty is widespread, could have a dampening effect on employment and wages. Persistence of a high rate of inflation seems to have been more effective than the slow rise in employment in affecting the levels of living of the poor, particularly rural poor who are insufficiently covered by the public distribution system, in this period.

1.1.2 Rural Poverty during Post-reform Period

Between 1977-78 and 1987-88 a decline of 32 million rural poor was observed. On the contrary, reversal of this declining trend occurred in the immediate post-reform period, as the number of rural poor rose by 12 million persons in 1993-94. In the immediate post-reform period the growth rate in GDP came down significantly, the rate of inflation was high persisting around 10% and the expenditure on social sector including the poverty alleviation programmes was less, especially at the state level (Guhan, 1995). Moreover, rise in PDS prices resulted in decline of per capita availability of foodgrains (Rao and Radhakrishna, 1997). These factors may explain the slow pace of reduction in rural poverty in this period as compared to that of eighties.

It is observed from the studies that the slow rate of decline in the incidence of rural poverty during immediate post-reform period is attributable to the macroeconomic stabilization and not to the structural adjustment (Gupta, 1995; Nayyar, 1996; Prabhu, 1996). This is because structural reforms yield results in the medium and in the long term whereas the impact of stabilization measures is immediate. According to Sen (1996), the stabilization measures may have affected the rural poor more than the urban poor through the reduced demand for rural labor. On the contrary, it has been argued that the rise in rural poverty in India in the immediate post-reform period is attributed to factors which are not directly linked to economic reforms such as low agricultural output, depletion of stock of foodgrains with the government, rise in the procurement prices of foodgrains, etc (Tendulkar and Jain, 1995; Maheshawari, 2002).

The incidence of rural poverty in the latter half of the 1990s i.e., after the reforms, gives a relatively favorable picture when compared to the reform period. There is a

marked decline of 7.1 percentage points in the incidence of rural poverty in 1993-94 as compared to 1999-00, as observed by Deaton (2001). However, the official estimates show a decline of about 10 percentage point in the same period. The estimates for 1993-94 to 2004-05, based on URP, depict a fall of nine percentage points in the proportion of rural population below the poverty line (Table 1.1.1). It is evident from the estimates that there has been a substantial reduction in the rural poverty in the post-reform period.

This reduction in rural poverty is on account of the improvement in per capita GDP growth and also due to public expenditure on agriculture, rural development, and social sectors. The real GDP growth rate at 6.1% during 1992-93 to 2000-01 was higher than in the pre-reform decade (Reserve Bank of India, 2003a). Over the years, there exists a strong impact of economic growth on reduction of poverty in India (Ravallion and Datt, 1996). The annual growth rate of GDP from agriculture and the allied sectors declined from 3.1% during 1981-1991 to 2.76% in 1991-2001. Since the growth rate of rural population declined from 1.79% to 1.65% during 1991 to 2001, the per capita growth rate in agricultural GDP was still positive at 1.11% per annum in the post-reform decade, though lower than in the pre-reform decade. The study by Ahluwalia (1978) also established that rise in agricultural output per head leads to reduction in the incidence of rural poverty.

In addition to growth in agricultural output there are some other factors also responsible for reduction of rural poverty in India in 1999-00. The rate of inflation came down significantly during the second half of the 1990s when compared to the immediate post-reform period. The all India Consumer Price Index (CPI) for agricultural laborers, which rose at the rate of 12.5% per annum between 1986-87 and 1994-95, fell to 6.1% per annum between 1995-96 and 1999-00 (Government of India, 2003). In addition, public expenditure on rural development has a direct impact on income of the rural poor. Per capita real expenditure on rural development at state level declined by 21% in 1995-96 as compared to 1990-91, but rose again by four per cent in 1999-00 in comparison to 1990-91 (Dev and Mooij, 2003). The recovery was high for the poorest states, such as, Bihar, Madhya Pradesh, Orissa, Rajasthan, and Uttar Pradesh. These states together

experienced a cut of 30 % in their per capita real expenditures on rural development in 1995-96 as compared to 1990-91, and were 21% higher in 1999-00 in comparison to 1990-91 (Dev and Mooij, 2003).

The factors enumerated above may have resulted in reducing the incidence of rural poverty in 1999-00 in comparison to 1993-94. Both the official and the adjusted estimates show that the incidence of poverty was significantly lower in 1999-00 than in 1993-94. However, the official estimates for 1999-00 are not comparable with the earlier rounds of NSS. The adjusted estimates by Deaton and Dreze (2002) for the year 1999-00 exhibit the incidence of rural poverty in India to be 30.2%. This shows a slower rate of decline in rural poverty in the post-reform period when compared to the pre-reform period i.e., during 1980s. Deaton and Dreze (2002) show a decline of 6.7 percentage points during 1993-94 to 1999-00, while Sundaram and Tendulkar (2003) show a 5.3 percentage point decline. Sen and Himanshu (2003) show a decline of only around three percentage points. Changes in the absolute number of rural poor also seem to vary during 1993 to 2000. According to official estimates of Planning Commission there is a decline of 50 million rural poor while Sen and Himanshu (2003) reported an increase of 1.5 million rural poor in the country.

A striking feature of the post-reform experience brought out by Deaton and Dreze (2002) is the increase in inter-state inequalities. Looking at the regional dimension of rural poverty, there is a concentration of rural poor in 06 states viz., Orissa, Bihar, Assam, West Bengal (WB), Madhya Pradesh (MP) and Uttar Pradesh (UP) out of 15 major states of India. In these states the proportion of rural poor remains high ranging from 50% to 30% incidence of rural poverty in 1993-94 as well as in 1999-00. However, in 2004-05, the proportion of rural poor in Orissa and Bihar remained high i.e., above 40% followed by MP and UP which is above 30%. Over the span of 10 years i.e., from 1993-94 to 2004-05, the incidence of rural poverty declined in all the states, though in Orissa and MP this decline was minimal (Table 1.2.1).

A further disaggregation by NSS regions brought out the inter-state differences in rural poverty (Datta and Sharma, 2000). On the whole, there appears to be a

concentration of rural poor in two broad geographical areas, viz., the Eastern region consisting of Assam, Bihar, Orissa, WB and Eastern UP, and the Central region covering large parts of MP, Maharashtra, North Karnataka and Southern and Central UP. These two regions are characterized by different natural resource endowments. The states depicting persistent rural poverty are those with slow growth in agricultural production (Fan *et al.*, 1999; Datt and Ravallion, 1997, 1998 and 2002; Ghosh, 2009). However, Orissa experienced a negative growth rate in agriculture. But in Bihar, UP, MP and Assam the rate of growth in agricultural output does not explain the decline in rural poverty during the period.

Table 1.2.1: State-wise incidence of rural poverty in India

State	1973-74	1977-78	1983	1987-88	1993-94	1999-00	2004-05	
							URP	MRP
Andhra Pradesh	48.44	38.11	26.53	20.92	15.92	11.05	11.2	7.5
Assam	52.67	59.82	42.60	39.35	45.01	40.04	22.3	17.0
Bihar	62.99	63.25	64.37	52.63	58.21	44.30	42.1	32.9
Gujarat	46.35	41.76	29.80	28.67	22.18	13.17	19.1	13.9
Haryana	34.23	27.73	20.56	16.22	28.02	8.27	13.6	9.2
Karnataka	55.14	48.18	36.33	32.82	29.88	17.38	20.8	12.0
Kerala	59.19	51.48	39.03	29.10	25.76	9.38	13.2	9.6
Madhya Pradesh	65.66	62.52	48.90	41.92	40.54	37.06	36.9	29.8
Maharashtra	57.71	63.97	45.23	40.78	37.93	23.72	29.6	22.2
Orissa	67.28	72.38	67.53	57.64	49.72	48.01	46.8	39.8
Punjab	28.21	16.37	13.20	12.60	11.95	10.05	9.1	5.9
Rajasthan	44.76	35.89	33.50	33.21	26.46	13.74	18.7	14.3
Tamil Nadu	57.43	57.68	53.99	45.80	32.48	20.55	22.8	16.9
Uttar Pradesh	56.53	47.60	46.45	41.10	42.28	31.10	33.4	25.3
West Bengal	73.10	68.34	63.05	48.30	40.80	37.85	28.6	24.2
All India	56.44	53.07	45.65	39.09	37.27	27.1	28.3	21.8

Source: Planning Commission, Government of India, various years

The proportion of rural poor in 2004-05 is though the highest for Orissa followed by Bihar, MP, and UP (Map 1.1). However, the states of Bihar, MP, and UP have been experiencing a fluctuating trend in the incidence of rural poverty during 1977-88 to 2004-05 while Orissa experienced a declining trend during the same period. Although, there is a low proportion of rural poor in UP in 2004-05 as compared to Orissa, still the absolute number of rural poor is the highest in UP in 2004-05 with 473 million rural people below

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the poverty line based on URP, while 357.68 million rural poor based on MRP in the same year. UP is followed by Bihar with 336.72 and 262.92 million rural poor based on URP and MRP respectively in 2004-05 (Table 1.2.2). However, the absolute number of rural poor in UP is found to have declined from 1999-00 to 2004-05 as per MRP figures but it depicting a fluctuating trend in subsequent years during 1977-78 to 2004-05 based on URP (Table 2.2.1). Moreover, UP alone accounts for 21.41% of rural poor in India, based on URP in 2004-05, which constitutes the highest percentage of rural poor population in the country. Hence, there is a need to address the issues related to rural poverty in UP along with the factors that may help to reduce the levels of rural poverty in the state.

Map 1.1: Incidence of Rural Poverty across the states in India in 2004-05 based on Uniform Recall Period

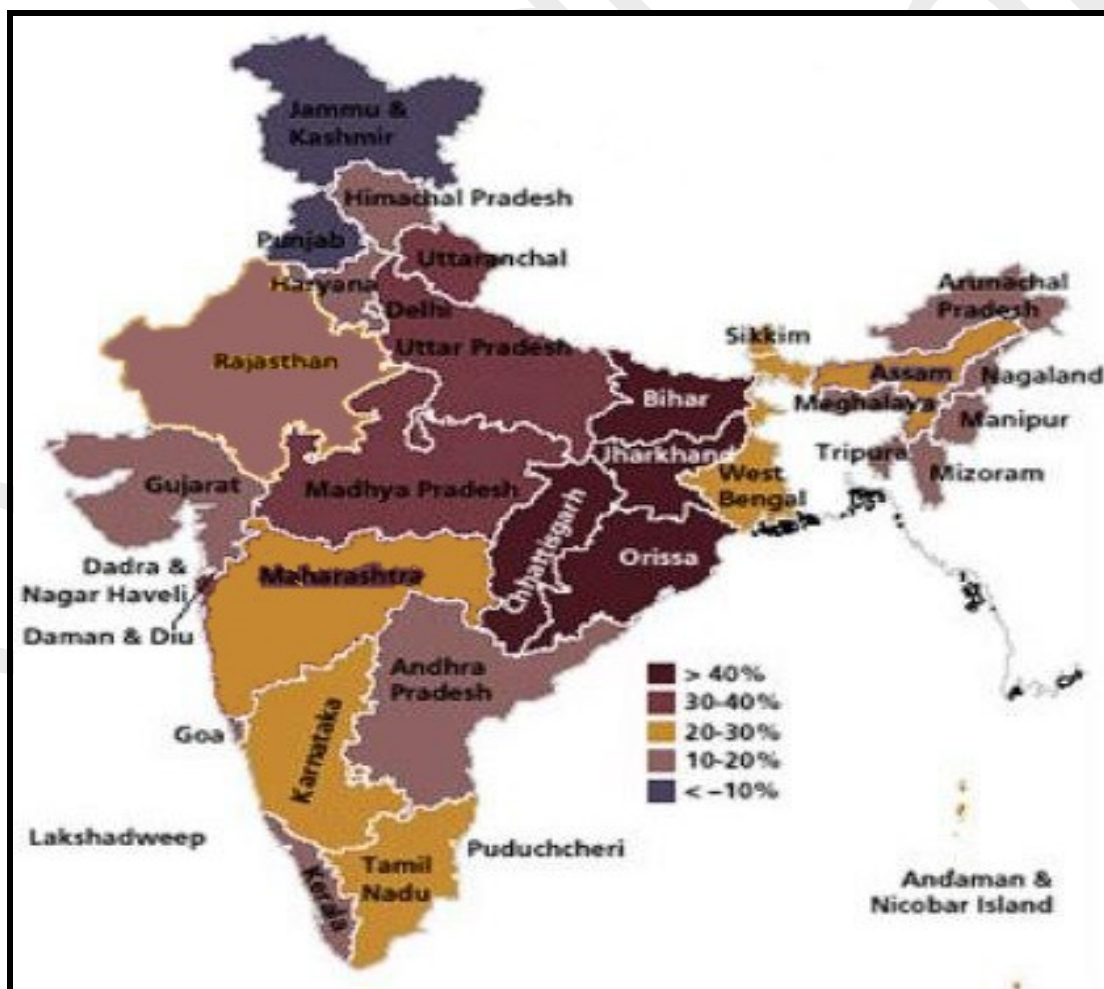


Table 1.2.2: State-wise number of rural poor and percentage of rural poor in India

States	No. of rural poor (in millions)			Rural poor as % of all India		
	1999-00 MRP	2004-05		1999-00 MRP	2004-05	
		URP	MRP		URP	MRP
Andhra Pradesh	58.13	64.70	43.21	3.00	2.92	2.53
Assam	92.17	54.50	41.46	4.76	2.46	2.43
Bihar	376.51	336.72	262.92	19.48	15.24	15.43
Gujarat	39.80	63.49	46.25	2.05	2.87	2.71
Haryana	11.94	21.49	14.57	0.61	0.97	0.85
Karnataka	59.91	75.05	43.33	3.10	3.39	2.54
Kerala	20.97	32.43	23.59	1.08	1.46	1.38
Madhya Pradesh	272.32	175.65	141.99	14.31	7.95	8.33
Maharashtra	125.12	171.13	128.43	6.47	7.74	7.54
Orissa	143.69	151.75	129.29	7.43	6.86	7.59
Punjab	10.20	15.12	9.78	0.52	0.68	0.57
Rajasthan	55.06	87.38	66.69	2.84	3.95	3.91
Tamil Nadu	80.51	76.50	56.51	4.16	3.46	3.31
Uttar Pradesh	412.01	473.00	357.68	21.32	21.41	21.00
West Bengal	180.11	173.22	146.59	9.32	7.84	8.60
All India	1932.43	2209.24	1702.99	100.00	100.00	100.00

Source: Planning Commission, Government of India

1.2 RURAL POVERTY IN UTTAR PRADESH

1.2.1 Profile of Rural Poor

Poor households in rural areas differ with respect to the deprivation they experience, and the material, human and social resources they can avail. Poverty has been often considered in terms of landholdings, occupation, education, caste, etc., by the rural poor. The state of UP is a landlocked area, having 80% of rural population with agrarian economy. The agriculture sector of the state accounts for 60% employment of the main working population in the state (Statistical Abstract, 2001). According to 1983 and 1993-94 rounds of NSS, nearly two-third of rural households, employed as agricultural laborers (66.3% and 63.5% respectively), were below the poverty line as compared to half of the households working as casual laborers in rural non-farm sector (48.2% and 52.3% respectively). This indicates that poverty is persistent in the population who are engaged as agricultural laborers in comparison to non-agricultural laborers in rural areas. Moreover, the Scheduled Castes (SCs) and Scheduled Tribes (STs) earn less as compared

to upper castes in all occupations, except for agricultural labor in rural areas. In a study of UP and Bihar by Kozel and Parker (2007), it is highlighted that, both the states constitutes high concentration of the poorest and most vulnerable population with a high level of heterogeneity among them.

Poverty falls as land ownership rises. This is because, after labor, land is the most important asset for the poor (Kozel and Parker, 2003). Many of the poorest households in UP own little or no land. Landholdings in UP are becoming more fragmented over time as average landholdings per household have fallen substantially. According to 1983 NSS round in UP, 27% of the population (accounting for 30% of rural poor) owned less than half hectare of land. By 1993-94, the number of households owning less than half hectare rose to 43% and accounted for 54% of the rural poor. However, poverty fell between 1993-94 and 1999-00 but nearly 62% of rural poor continued owning less than half hectare of land.

The average size of operational landholding in UP reduced to 0.86 ha in 1995-96 from 0.90 ha in 1990-91, and remained below the national average of 1.41 ha. The ratio of marginal, small, semi-medium, medium and large category of farmers were 75.43%, 14.56%, 7.36%, 2.47% and 0.18% respectively. About 90% farmers were under marginal and small categories with an average landholding of 0.56 ha (Government of UP, various years). SC/STs own less or no land as compared to upper caste. Per capita landholding for SC/STs in UP in mid-nineties was 0.26 acres per person as compared to 0.70 acres per person of upper castes (World Bank, 1998). Poverty is also associated with the levels of formal education in urban as well as rural areas. In 1993-94 NSS round, the incidence of poverty was the highest i.e., 50.6% for those head of households who were not literate. It is observed that the socio-economic conditions of the poor are highly correlated with rural poverty in the state. The rural poor with low socio-economic status are more adversely affected with the presence of inequalities within the state.

1.2.2 Trends in Rural Poverty

UP has a higher level of rural poverty in comparison to most of the other Indian states. Only Bihar, Chhattisgarh, Jharkhand, MP and Orissa had a higher headcount ratio

as compared to UP in 2004-05. The progress in reduction of poverty in UP has been uneven over the past two decades and the state still lacks behind other states in combating poverty. The proportion of poor population of India living in UP has risen from 17% in 1983 to over 20% in 1999-00. Planning Commission (official) estimates suggest a decline in the incidence of rural poverty from 46.4% in 1983 to 41.1% in 1987-88 in UP. However, progress in reducing rural poverty diminished in 1993-94 with an increase in the incidence from 41.1% in 1987-88 to 42.3% in 1993-94 (Table 1.2.2.1).

The official estimates suggest a rapid reduction in rural poverty in UP as the headcount ratio declined from 42.3% in 1993-94 to 33.4% in 2004-05, which is based on URP figures, showing a reduction of about nine percentage points. According to the estimates of Planning Commission, in 2004-05, around 33% of the rural population of UP was living below the poverty line as compared to 28.3% for the country. The corrected estimates given by Deaton (2001) for the incidence of rural poverty at 33.7% as compared to the official estimates of 31.1% in 1999-00 show that still there is a substantial reduction in the incidence of rural poverty in UP. The headcount ratio declined by 8.3 percentage points in UP during 1993-94 to 2004-05, which compares well with the decline of poverty in India during the period.

A comparison based on MRP reveals that headcount ratio declined from 31.1% in 1999-00 to 25.3% in 2004-05 with a decrease of 5.8 percentage point. This indicates that the reduction in the incidence of rural poverty is 1.16 percentage points per annum. However, the decline in the incidence of rural poverty based on URP shows that during 1993-94 to 2004-05 there is a decline of 8.9 percentage points from 42.3% in 1993-94 to 33.4% in 2004-05. This decline accounts for 0.81 percentage point reduction in a year. This suggests that the rate of decline in rural poverty was relatively faster during 1999-2005 as compared to 1993-05. The reduction in the headcount ratio might be explained by the fact that many households are clustered around the poverty line, therefore a little growth can result in a substantial reduction of people living below the poverty line. Despite substantial decline in the headcount ratio of rural poverty, the absolute number of rural poor has remained the highest at 473 million in the state (Table 1.2.2.1).

The estimates based on per capita expenditure distributions from the 55th NSS round suggest significant improvements in the depth and severity of rural poverty in latter half of 1990s. According to a study by Himanshu (2007), the depth of rural poverty in UP raised marginally from 10.25% in 1987-88 to 10.60% in 1993-94 followed by a decline in 2004-05 at 6.7%. Similar, is the trend for the severity of rural poverty which rose marginally from 3.4% in 1987-88 to 3.64% in 1993-94 and then declined to 1.93% in 2004-05. However, the absolute number of rural poor in the state depicts a fluctuating trend over the years based on URP while it declined from 1999-00 to 2004-05 as depicted from MRP figures (Table 1.2.2.1). However, the share of rural poor in UP is the highest which needs to be addressed.

Table 1.2.2.1: Rural poverty and Number of Rural Poor in Uttar Pradesh and India

NSS Round	Incidence		No. of Rural Poor (in million)	
	Uttar Pradesh (%)	All India (%)	Uttar Pradesh	Rural poor in UP as % of All India
1977-78	47.6	53.1	407.41	15.42
1983	46.4	45.7	448.03	17.78
1987-88	41.1	39.1	429.74	18.53
1993-94	42.3	37.3	496.18	20.33
1999-00 MRP	31.1	27.1	412.01	21.32
2004-05	33.4	28.3	473.00	21.41
2004-05 MRP	25.3	21.8	357.68	21.00

Source: Planning Commission, Government of India

Note: MRP = Mixed recall period, where for some items recall period is 365 days, while for the rest it is 30 days.

1.2.3 Inter-linkage of Rural Poverty and Agriculture in Uttar Pradesh

Historically, the rate of rural poverty reduction in India is closely related to the rate of growth in agricultural sector. Growth in the economy of UP was sluggish until late 1990s, after which higher growth rates are found in non-agricultural sector. The share of agriculture and allied services in 1994 was 41.11% as compared to that of industry and services sector at 19.82% and 39.07% respectively. The share of agriculture sector declined in 2000 to 39.06 while the industry and services sectors registered an increase at 20.04% and 40.90% respectively. In 2005, the agriculture sector experienced a further decline and it got reduced to 34.85%. In contrast, the industry as well as the services

sectors further increased to 20.65% and 44.49% respectively. However, the rise in the share of industry is marginal as compared to that of the services sector in the state (CMIE, various years).

The improvement and growth in agriculture help in raising the rural wages which have a direct impact in reducing rural poverty in UP. Therefore, the impact of agricultural growth on rural poverty in UP is prominent. The spread of green revolution since the mid-seventies resulted in decline of rural poverty through higher agricultural growth. Analyzing the growth performance of Indian agriculture at the state and district levels over four decades for 43 crops, Bhalla and Singh (2001) noted that better utilization of modern inputs and infrastructure such as investment in irrigation, tubewells, use of fertilizer, HYV seeds, markets, credit, etc., raised crop yield. This highlights the importance of technology and infrastructure in raising productivity by attaining higher physical yield. The agricultural productivity of foodgrains in 2005-06 for UP was 20.57 q/ha which was higher from the national average of 17.15 q/ha (Ministry of Agriculture, 2006). The growth levels in UP can be largely attributed to the use of modern inputs such as HYVs, fertilizer, irrigation, farm mechanization, etc (Desai and Namboodri, 1997; Thorat and Sirohi, 2002).

1.2.4 Disparities in Rural Poverty

Variations are observed in the levels of poverty in rural areas across the regions of the state. The relatively developed Western region has the lowest incidence of rural poverty. The headcount ratio is consistently declining in the region during 1987-88 to 2004-05 both for URP and MRP. Similar are the results for other three regions. Bundelkhand holds the highest proportion of rural poor during 1987-88 to 1993-94. However, in 1999-00 a sharp reduction in rural poverty is observed in this region, even for the adjusted poverty estimates. The Central region shows the highest incidence of poverty in 1999-00 while in 2004-05 it is the highest in the Eastern region (Table 1.2.4.1).

The reduction in rural poverty in the Central and the Eastern regions may be attributed to the rapid growth in the agriculture wages in these areas. Progress at reducing poverty in the 1980s and early 1990s was higher for the Eastern and the Western regions and much lower for the Bundelkhand and Central regions. Variations in population pressure, resource endowments and land productivity levels lie behind the disparities in rural poverty at regional level in the state.

Table 1.2.4.1: Regional Trends in Incidence of Rural poverty in Uttar Pradesh

Regions	1987-88 URP	1993-94 URP	1999-00 MRP	2004-05	
				URP	MRP
Western	37.5	29.3	21.7	24.6	19.1
Central	51.3	50.2	42.2	27.7	24.1
Eastern	57.9	48.8	36.4	37.9	31.9
Bundelkhand	69.9	67.4	20.9	16.8	14.3

Source: Planning Commission, various years

Note: URP = Uniform reference period using 30 day recall period,

MRP = Mixed recall period, where for some items recall period is 365 days, while for the rest it is 30 days.

The trends and factors associated with rural poverty in India as a whole and of UP as a constituent state may not differ considerably. However, considering the vastness and the complexities associated with it, may be ideal to undertake a microscopic study. This would help to examine the issue of rural poverty more closely and to identify ways of reducing it in UP. Moreover, the study aims to measure rural poverty at a more disaggregated level at the region and districts of the state. The macro-approach ignores the micro aspects including differences within the states. Burgess and Venables (2004) and Stern (2001) highlighted the existence of micro-level heterogeneity and diversity. Such studies focusing on inter-regional disparities within the states help in policy formulation at state level for diminishing the imbalances within and between the regions, and thus assisting in the overall development of the state. Therefore, the present study attempts to examine the rural poverty in UP at the regional and district level, and also the factors influencing it.

1.3 RELEVANCE OF THE STUDY

The factors reducing rural poverty in India, as discussed earlier, are agricultural output, relative prices of foodgrains, rural wages, government expenditure on rural infrastructure and poverty alleviation programmes, rate of inflation, economic growth, education, employment, caste, etc (Ahluwalia, 1978; Rao *et al.*, 1988; Bhalla *et al.*, 1991; Tendulkar and Jain, 1995; Sen, 1996; Rao and Radhakrishna, 1997; Radhakrishna *et al.*, 1997; Datt and Ravallion, 2002; Dev and Mooij, 2003). However, the present study has identified a few crucial factors i.e., farm size, economic growth, agricultural productivity, technology and infrastructure influencing rural poverty in India. The above mentioned factors have been selected as they are directly as well as indirectly influencing rural poverty in India. There exist number of state level analysis in India, showing the inter-state inequalities. However, very few studies are available, which capture the inequalities within the state, particularly in the context of UP with respect to rural poverty and its determinants.

This in-depth study, confined to UP, would throw light on the progress that the state has achieved in reducing rural poverty over the years. It would also give an idea that at regional and district levels what factors need attention of the policy makers to reduce poverty in rural areas and to raise the standard of living of rural poor. It is also evident from the preceding discussion that there exists inter-regional and inter-district disparities in resource endowments, economic development and cropping pattern in the state. On account of persistent disparities, different regions and districts have attained different levels of rural poverty. The present study entails to identify the regions and the districts with high and low level of rural poverty along with the variations in the factors influencing rural poverty at regional and district level.

Thus, with an aim to find ways to reduce rural poverty in UP, the present study attempts to examine agricultural productivity and its growth in the regions and districts, and also to identify the crucial indicators of technology and infrastructure in the state. This would give a scope to initiate necessary measures to reduce disparities across the regions/districts in their availability and concomitant effect on productivity. The study

also focuses on identifying the imperative indicators of infrastructure which would eventually lead to overall development of the regions and reduce persistent inequalities within UP. It would also enable the policy makers to take up preferential measures for improvement of agricultural sector in the state. The findings of the study would not only provide guidelines for specific measures in reducing rural poverty within UP, but would also lead to take measures for attaining higher growth in agricultural sector via improved agricultural productivity.

1.4 ORGANIZATION OF THE THESIS

The thesis comprises eight chapters. After the introductory chapter which describes the issues, indicates the relevance and importance of the present work, the remaining chapters are organized as follows:

- ❖ Chapter II reviews the existing literature and identifies the gap areas.
- ❖ Chapter III presents the research design with which the present study is carried out. It sets the objectives, outlines the study area and period of the study, identifies the indicators that are able to capture the explanatory variables and discusses their data sources.
- ❖ Chapter IV estimates the incidence, depth and severity of rural poverty, and draws description of the levels of rural poverty for the regions and districts of UP.
- ❖ Chapter V evaluates the regional and district level inequalities in the incidence, depth and severity of rural poverty vis-à-vis the identified factors influencing the level of rural poverty.
- ❖ Chapter VI captures the linkages between the level of incidence, depth and severity of rural poverty and the level of agricultural productivity in the districts. It also examines the causal relationships of agricultural productivity, farm size and economic growth with the incidence, depth and severity of rural poverty across the districts.
- ❖ Chapter VII analyses the impact of technology and infrastructure on agricultural productivity across the districts.

- ❖ Chapter VIII summarizes and concludes the findings of the present study and draws policy recommendations from the findings. The chapter also discusses limitations of the present study and provides some future research directions.