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EXCLUSION AND PERSISTENCE  
OF POVERTY AMONG ADIVASIS  
IN INDIA

A disaggregated analysis

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The objective of this chapter is to document the level of living and poverty incidence among the Adivasis<sup>1</sup> at the aggregate level as well as at the level of districts in India. It is well documented that the well-being of social groups in India differs. Recent research has tried to quantify the disparities across population groups. As a population group, Scheduled Tribes (STs) are at the bottom on a range of development indicators including consumption and poverty, and disparities with other groups are reported to be worsening (de Haan and Dubey 2005; de Haan *et al.* 2009; GOI 2007; Newman and Thorat 2010; Desai and Dubey 2011). However, in a more recent study, Thorat and Dubey (2012)<sup>2</sup> show that though the Adivasis continue to be at the bottom of the development ladder with the highest level of poverty incidence during 2009–10, during 2004–05 to 2009–10, the pace of poverty reduction among *Adivasis has accelerated significantly*. This chapter further substantiates this point, but also brings in further disaggregation with respect to the STs highlighting the need for more context-specific understanding of deprivations.

The recent literature also suggests that certain population groups identifiable by their caste, religion and ethnicity have not been able to participate in the growth process (GoI 2006). The two main population groups identifiable from the data are the untouchables or *Scheduled Castes* (SCs) and the STs.<sup>3</sup> The SCs are the larger group of the two, accounting for nearly 17 per cent of the Indian population and their underdevelopment is attributed to social exclusion as a direct

consequence of the Hindu social order. The other excluded group is the STs (also called *Adivasis* or Tribals), accounting for about 9 per cent of the Indian population, but have been excluded even from the detailed analysis that the SC has received in recent times. While some of the STs, if not all, have remained outside the purview of the rigid Hindu hierarchal social order, in terms of the welfare indicators, they are, on the average lower than even the SCs.

Though scattered over the geographical domain of India, there are regions where STs have moderate to very high concentration. It is argued that their exclusion is a consequence of geographical isolation as these groups inhabit areas that are not easily accessible. There are thousands of such groups scattered across the length and breadth of India with a diverse socio-cultural, ethnic and even economic organisation. In this chapter we focus on the deprivations among the *Adivasis*, especially in consumption and poverty. The analyses are reported at the aggregate as well as the disaggregated level across the districts with varying levels of ST population concentration.

The rest of the chapter is organised in the following fashion. In the next section, a brief description of the data used and distribution of ST population is discussed. This is followed by description of the level of living and poverty incidence among STs vis-à-vis other (OTH) population groups at aggregate level in section three. In section four, the analyses is extended to disaggregated level. In section five, the results of decomposition of change in poverty into growth and distribution is reported. Findings of the chapter and policy issues are summarised in section six.

### Data-related issues

Analyses in this chapter is based on the household level National Sample Survey Organisation (NSSO) data on consumption expenditure collected during the three most recent and comparable round of surveys, 50th, 61st and 66th. The reference periods are July 1993 to June 1994, July 2004 to June 2005 and July 2009 to June 2010. The households in these surveys are selected using a stratified sampling design. Therefore, weights or multipliers are an integral part of the data (GoI 1983).<sup>4</sup>

The quinquennial rounds of NSSO surveys cover almost the entire territory of India except some inaccessible areas that are less than 0.01 per cent of the Indian Territory and have an even lower proportion of population. In general, for geographical domains, NSS data does not permit analyses at a lower than NSS regional. And even at the

NSS region or for smaller states, it is often not possible to calculate poverty and other indicators by socio-religious groups. Keeping this limitation of the data in mind, we have looked at the concentration of Adivasi population across districts in India. Based on the share of ST population, we could divide the districts in six mutually exclusive groups as reported in table 12.1.

It is apparent from the table that 21 per cent of the districts (94 out of 453) in 1991 do not have a single ST household. Another 36 per cent of the districts have 5 per cent or less of ST population and only 51 districts (just over 12 per cent of the total districts) have 50 per cent or more ST population with only about 30 districts with 75 per cent or more ST population.<sup>5</sup> In this last category, most of the districts belong to northeastern states except Jhabua district in Madhya Pradesh that has about 86 per cent ST population and is located in the central part of India.

From the distribution of ST population across districts, it emerges that unlike the distribution of SCs among the districts in most of India, the ST population is concentrated only in a few, just about 50–60 districts (as per 1991 census districts). Also, unlike SCs who have no numerical majority in any of the districts, STs are in the majority in about 50 districts (as per 1991 census). One of the hypotheses in the recent literature points at the caste dominance<sup>6</sup> as one of the leading factors in determining the participation in growth. The varying degree of concentration of ST population among districts provides an opportunity to test this hypotheses in the case of STs.

### *Sample size*

We are using household level consumption expenditure data to measure poverty and malnutrition at the disaggregated level. Given that

*Table 12.1* Distribution of population STs across districts (census)

<i>Pop share of STs</i>	<i>Distribution of dist (no.)</i>	<i>Per cent of districts</i>
Nil	94	20.8
0.1 to 5	165	36.4
5 to 10	44	9.7
10 to 20	52	11.5
20 to 50	47	10.4
50 to 75	21	4.6
75 to 100	30	6.6

Source: Tabulation by the author from Census of India, 1991 district data.

the households in NSSO surveys are selected through a stratified sampling design, the probability of the ST households being in the NSS sample in a large number of districts is very small as shown in table 12.1. Therefore, for an analysis of ST deprivations, we clubbed together the districts based on the share of population estimated from NSS unit level data.

Estimated population shares and sample sizes across social groups (comparable in 50th, 61st and 66th round) is reported in table 12.2. In column 1 of the table, numbers indicate ST population share, with 5 indicating 50 per cent or more ST population in the district. It is to be noted that districts in category five are scattered across India. However, a closer scrutiny suggests location-wise two very distinct groups emerge, districts located among the states in the northeastern region and districts located in the so-called major states.

Though there are a few recent studies that estimate the district level consumption and poverty incidence (Bhandari and Dubey 2009; Chaudhuri and Gupta 2009), there are some words of caution here. First, districts in India have been undergoing constant reorganisation. As a result, the number of districts and the geographical domain of a large number of districts in the data during the three quinquennial rounds of surveys is vastly different. Moreover, given the NSSO sampling strategy, there are many districts where sample sizes are too small (e.g. there are 64 districts in the 61st round survey that have a total of less than 100 households selected for the survey which was depleted even further during the 66th round). In order to have comparable geographical areas with adequate sample size for calculation of the statistic of interest, therefore, we have resorted to combining contiguous districts. There are about 43 ‘districts’<sup>7</sup> (created by merging out of a total of 127 districts) for which the results are reported in this chapter.

### *Measures of deprivation*

For the measurement of poverty, there are two indispensable requirements, welfare profile of the population and poverty norm. In this chapter household consumption expenditure data, arguably the best suited for measuring level of living and poverty, collected by the NSSO is used. The other requirement, a suitable poverty norm, is contentious. Several aspects of the poverty norm – its specification, spatial variation, adjustment for temporal change and spatial variation in prices – have been hotly debated (Dubey and Palmer-Jones 2005a; 2005b; 2005c).<sup>8</sup> Keeping clear of these issues, the poverty

norm used by the Planning Commission, Government of India for calculating poverty incidence for 1993–94 and 2004–05 is used. For 2009–10, the 2004–05 Planning Commission PLs have been updated using appropriate price indexes as recommended in GoI (1993).<sup>9</sup>

We have converted the nominal PCTEs at constant (1993–94) prices. The price deflator that we used to convert the household expenditure at constant prices is the implicit price deflator derived from the state-wise poverty line for two sectors separately. This is equivalent to deriving a deflator using state and sector-wise CPIs. The value of deflator is defined as

$$Def_t = \frac{PL_t}{PL_{1993-94}}$$

In this chapter the incidence of poverty in the two sectors and among different social groups is captured using only one measure, Head Count Ratio (HCR).<sup>10</sup>

In addition to measurement of consumption expenditure and poverty incidence, we report summary measure of inequality, Gini coefficient. Further, in recent times, researchers have decomposed changes in incidence of poverty attributable to growth and distribution components. In this chapter we report the result of this exercise for the period 1993–94 and 2004–05.

### **Consumption and poverty incidence: the macro picture**

It has been pointed out above that there are several studies in recent times that report poverty incidence and level of living by socio-religious groups. In one of the most recent chapters, Thorat and Dubey (2012) report that though Adivasis continue to have the highest level of poverty incidence in 2009–10, the rate of expenditure growth and poverty reduction has been quite different over different time periods (see appendix tables 12.9 and 12.10). While during the 1980s, the rate of consumption expenditure growth and poverty reduction has been higher, the 1990s appear to have been worst as far as STs are concerned. However, during 2004–05 to 2009–10, the consumption expenditure growth and reduction in poverty among the STs accelerated significantly (tables 12.1 and 12.2).

However, the story at the disaggregated level has been quite different (de Haan et al 2009). In table 12.2, the mean per capita consumption

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Table 12.2 Sample size by population distribution of STs

<i>Share ST pop</i>	<i>ST</i>	<i>SC</i>	<i>OTH</i>	<i>Total</i>
<i>66th round</i>				
0	na	2,942	11,685	14,631
1	936	7,888	36,827	45,647
2	639	1,860	7,780	10,279
3	4,034	3,268	12,882	20,184
4	1,697	311	1,441	3,449
5	5,844	119	685	6,648
<i>Total</i>	<i>13,150</i>	<i>16,388</i>	<i>71,300</i>	<i>1,00,838</i>
<i>61st round</i>				
0	na	2,088	8,450	10,538
1	900	10,682	45,001	56,583
2	1,159	2,658	12,376	16,193
3	1,930	2,428	10,547	14,905
4	7,805	254	2,275	10,334
5	4,616	1,951	8,356	14,923
<i>Total</i>	<i>16,410</i>	<i>20,061</i>	<i>87,005</i>	<i>1,23,476</i>
<i>50th round</i>				
0	na	2,313	9,595	12,045
1	1,689	9,651	44,700	55,954
2	859	2,135	10,957	13,956
3	1,904	2,233	9,139	13,283
4	5,375	180	1,879	7,440
5	3,634	1,792	7,284	12,716
<i>Total</i>	<i>13,461</i>	<i>18,304</i>	<i>83,554</i>	<i>115,394</i>

Source: Author's tabulation using NSS CES unit record data, respective rounds.

expenditure for STs, SCs and OTH groups is reported for the 50th, 61st and 66th rounds for six groups of districts as discussed above.

The first panel in table 12.3 shows the hierarchy in mean consumption expenditure reported above. Mean consumption of STs as a group in 2009–10 was less than 74 per cent of the OTH group comprising non-SC and non-ST population. The disparity has increased markedly between 1993–94 and 2004–05 first before improving in 2009–10. Compared to STs, SCs in 2009–10 were marginally better off at about 77 per cent of mean consumption of OTH.

But the disparities between ST and OTH is remarkably different in different parts of the country. In group five, where STs have a

Table 12.3 Mean consumption and inequality

<i>Share ST pop</i>	<i>ST</i>	<i>SC</i>	<i>OTH</i>	<i>All</i>	<i>ST%OTH</i>	<i>Gini</i>
<i>66th Round (2009–10)</i>						
0	na	295	394	370	na	0.318
1	468	343	507	472	99.2	0.383
2	382	326	476	439	87.0	0.391
3	283	319	435	380	74.5	0.355
4	259	307	401	311	83.3	0.351
5	358	269	397	360	99.4	0.276
<i>Total</i>	315	326	469	426	73.9	0.371
<i>61st round (2004–05)</i>						
0	na	287	384	362	na	0.335
1	317	303	437	406	72.5	0.360
2	263	286	390	358	67.4	0.321
3	264	303	379	346	69.7	0.327
4	224	296	414	330	54.1	0.376
5	423	352	354	390	119.5	0.242
<i>Total</i>	265	298	416	379	63.7	0.351
<i>50th round (1993–94)</i>						
0	Na	244	336	316	na	0.307
1	274	265	367	344	74.7	0.340
2	261	244	337	314	77.4	0.316
3	227	252	320	290	70.9	0.286
4	228	266	371	306	61.5	0.329
5	337	275	279	304	120.8	0.237
<i>Total</i>	247	258	353	325	70.0	0.326

Source: Author's calculation from NSSO CES unit record data, respective rounds.

Note: Mean consumption refers to mean per capita consumption expenditure at constant (1993–94) prices. Inequality has been calculated on real mean consumption expenditure.

numerical majority, the mean consumption of STs is about the same as that of OTH group 2009–10. The largest disparity is found in group three where share of STs in total population is significant but still in minority, their mean consumption is by far the lowest at over 74 per cent of that of the OTH group. In areas where STs form a smaller minority (groups one and two), STs are marginally better off than the average for STs, but well below that of the group OTH in the same areas. The main message that emerges from this table is that during 2004–10, the relative distance between STs and OTH has narrowed.

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If the population dominance<sup>11</sup> argument is used to scrutinise these results, then until a group has majority in the population, its participation in the income earning and growth is severely hindered. The calculations reported in table 12.3 suggest that there is substance in the dominance hypothesis. The other interesting result is the level of inequality as captured by the Gini coefficient. The distribution is most equitable where STs are the dominant group and it is the most unequal where there is substantial but less than majority ST presence (group one, two and three in table 12.3).

Table 12.4 reports the average annual change in the consumption expenditure over the three rounds. The average annual change among the STs has been less than half of what has been among the OTH group during 1993–2005. However, during 2004–10, there is a remarkable increase in the growth of consumption expenditure, the rate has increased to 3.8 per cent per annum compared to only 0.7 per cent in the earlier period. The most significant message from table 12.4 is the large deceleration in the growth of consumption expenditure in group 5 districts where the STs are in majority, more than 50 per cent

*Table 12.4 Average annual change in mean per capita consumption*

<i>Share ST pop</i>	<i>ST</i>	<i>SC</i>	<i>OTH</i>	<i>ALL</i>
<i>2004–05 to 2009–10</i>				
0	Na	0.6	0.5	0.4
1	9.5	2.6	3.2	3.3
2	9.0	2.8	4.4	4.5
3	1.4	1.1	3.0	2.0
4	3.1	0.7	-0.6	-1.2
5	-3.1	-4.7	2.4	-1.5
<i>Total</i>	3.8	1.9	2.5	2.5
<i>1993–94 to 2004–05</i>				
0	Na	1.6	1.3	1.3
1	1.4	1.3	1.7	1.6
2	0.1	1.6	1.4	1.3
3	1.5	1.8	1.7	1.8
4	-0.2	1.0	1.1	0.7
5	2.3	2.5	2.4	2.6
<i>Total</i>	0.7	1.4	1.6	1.5

Source: As in table 12.3.

Table 12.5 Poverty incidence during 1993–94, 2004–05 and 2009–10 (in per cent)

Share of STs in Pop	1993–94			2004–05			2009–10		
	ST	OTH	ALL	ST	OTH	ALL	ST	OTH	ALL
0	na	32.2	36.7	na	26.0	29.5	na	25.0	28.3
1	46.0	29.9	33.9	32.8	21.1	24.6	24.5	15.2	18.3
2	47.6	30.4	35.3	40.6	21.5	26.8	33.7	20.4	22.6
3	54.1	33.4	39.9	39.5	25.1	29.3	25.0	18.0	20.9
4	53.4	29.0	40.2	56.5	28.0	40.5	39.9	25.3	31.9
5	25.3	42.3	34.8	7.5	19.9	13.0	30.0	18.2	27.0
Total	49.7	30.7	35.8	43.8	22.8	27.6	32.5	17.7	21.6

Source: As in table 12.3.

in the total population. On the other hand, in the districts which have a really minority ST population, overall growth in consumption in the second period has been remarkably high.

In table 12.5, poverty incidence (head count ratio) is reported at three time-points. Going by the disparities in mean consumption and inequality, HCRs mirror similar pattern and inter-group difference. In 2009–10, the ST-OTH difference in HCR is about 10 per cent points at the aggregate level. In 1993–94, the gap was 14 per cent points that worsened in 2004–05 to 16 per cent points.

Going by the share of ST population among the districts, for less than majority population of STs in the districts, the poverty ratios have been higher with the largest gap (over 28 per cent points) between the two groups for the districts which have less than majority ST population and are located in the so-called major states in 2004–05. But in 2009–10, there is a change in the ordering. First, in the districts that have more than 50 per cent of ST population, HCR increased dramatically, from under 8 per cent in 2004–05 to 30 per cent in 2009–10. Secondly, all other groups of districts experienced significant reduction in poverty incidence during 2009–10.

While the temporal change in poverty incidence in the 61st round over the 50th round has been consistent with changes in the mean consumption expenditure and inequality, the change in 2009–10 over 2004–05 is worrisome. The key message from the table is that the disparities in poverty incidence between STs and OTH have declined during 2009–10 compared to 2004–05. This is driven largely by the increase of poverty incidence in the groups one to four districts.

### Consumption and poverty: districts

As pointed out earlier, there are only 43 districts for which the district level calculations are reported. These 43 districts have been created from a total 126 districts that account for over 21 per cent of total districts in India. These 126 districts (43 after merging contiguous districts) account for over 12 per cent of total population but have 54 per cent of total ST population. Thus, the calculations in this section cover about 12 per cent of total population and over 54 per cent of ST population of India.

In table 12.6, the mean per capita consumption expenditure is reported for STs and OTH for the 50th and 61st rounds. There seven districts in which mean consumption of STs either at par or higher than OTH. Compared to these, there six districts with substantial ST population that have highest ST-OTH disparities.

There are some very interesting observations that are emerging from this table. Firstly, the location of the districts is quite distinct. Most of the districts where ST-OTH gap is favouring STs are located in the northeastern region. These are smaller states that fall under VI Schedule or the dominant tribal population among the districts makes them fall under the V Schedule. One of the specific provisions of the VI Schedule states is incidence of direct taxes where the Indigenous population is exempted from paying individual direct taxes. Secondly, the districts with largest ST-OTH gap in mean consumption are located in major states, Gujarat, Madhya Pradesh, Maharashtra, Orissa and Rajasthan. Thirdly, out of the major states which have the largest ST-OTH consumption differences, Gujarat, Maharashtra and Rajasthan have benefited the most from the recent episode of liberalisation and economic growth. Clearly, the participation of STs in growth is not happening even in the fastest-growing states, and in the slow-growing states like Orissa whatever little growth there is also is unevenly distributed.

The differences in consumption could persist between population groups for some more time even if different groups get an equitable share from the surging economic growth. Table 12.6, though, suggests otherwise. In these six districts (with highest ST-OTH consumption gap), the ST-OTH gap has increased during 1993–94 and 2004–05. The annual average change in mean real consumption expenditure over the two time-points suggests that the largest increase in APCTE (over 10 per cent per annum) is recorded among the OTH groups in the six districts that have largest ST-OTH mean APCTE difference. Compared to this, the annual average increase in the real mean

Table 12.6 Mean consumption and disparities in consumption

State- dist	State	1993-94 (in Rs)		2004-05		ST-OTH50 (%)	ST-OTH61 (%)	AAC-ST (%)	AAC-OTH (%)
		ST	OTH	ST	OTH				
301	APR	302	664	465	598	45.5	77.8	4.9	2.6
302	APR	378	591	547	479	64.0	114.2	4.1	-1.1
303	APR	251	318	362	374	78.9	96.8	4.0	0.3
401	ASS	260	232	326	277	112.1	117.7	2.3	-1.4
403	ASS	257	266	358	362	96.6	98.9	3.6	0.1
406	ASS	252	309	371	409	81.6	90.7	4.3	0.9
410	ASS	259	326	270	359	79.4	75.2	0.4	3.0
518	JHA	220	287	219	284	76.7	77.1	0.0	2.7
523	JHA	274	390	222	257	70.3	86.4	-1.7	1.4
524	JHA	279	445	289	390	62.7	74.1	0.3	3.2
707	GUJ	229	311	237	450	73.6	52.7	0.3	8.2
713	GUJ	322	416	312	630	77.4	49.5	-0.3	9.3
714	GUJ	279	472	357	644	59.1	55.4	2.5	7.3
1306	MPR	201	344	196	321	58.4	61.1	-0.2	5.8
1309	MPR	224	424	234	579	52.8	40.4	0.4	13.4
1313	MPR	205	315	207	326	65.1	63.5	0.1	5.2
1314	MPR	207	452	173	230	45.8	75.2	-1.5	3.0
1315	CHH	205	261	204	297	78.5	68.7	0.0	4.1
1316	CHH	227	299	283	327	75.9	86.5	2.2	1.4
1317	CHH	213	301	240	267	70.8	89.9	1.2	1.0
1318	CHH	197	300	178	355	65.7	50.1	-0.9	9.0
1402	MAH	309	635	249	632	48.7	39.4	-1.8	14.0
1405	MAH	180	283	188	344	63.6	54.7	0.4	7.5
1501	MAN	295	405	327	325	72.8	100.6	1.0	-0.1

1601	MEG	396	527	450	706	75.1	63.7	1.2	5.2
1602	MEG	351	377	390	437	93.1	89.2	1.0	1.1
1701	MIZ	442	698	603	601	63.3	100.3	3.3	0.0
1702	MIZ	431	404	487	406	106.7	120.0	1.2	-1.5
1801	NAG	499	499	778	618	100.0	125.9	5.1	-1.9
1802	NAG	426	505	618	1060	84.4	58.3	4.1	6.5
1901	ORI	218	287	170	258	76.0	65.9	-2.0	4.7
1902	ORI	185	343	187	426	53.9	43.9	0.1	11.6
1903	ORI	193	317	218	344	60.9	63.4	1.2	5.3
1907	ORI	169	218	168	225	77.5	74.7	-0.1	3.1
1908	ORI	168	326	143	355	51.5	40.3	-1.4	13.5
2110	RAJ	378	365	255	445	103.6	57.3	-3.0	6.8
2111	RAJ	237	427	227	454	55.5	50.0	-0.4	9.1
2201	SIK	285	298	340	357	95.6	95.2	1.8	0.5
2202	SIK	356	345	556	531	103.2	104.7	5.1	-0.4
2401	TRI	316	404	321	430	78.2	74.7	0.1	3.1
2402	TRI	300	368	248	310	81.5	80.0	-1.6	2.3
2901	DAD	214	594	287	779	36.0	36.8	3.1	15.6
3201	LAD	523	556	727	861	94.1	84.4	3.5	1.7

Source: As in table 12.3.

Note: AAC: Average Annual Change in Mean Per Capita Consumption.

See appendix table 12.9 for name and composition of districts.

consumption among the STs in the districts that have favourable gap (ST-OTH) in mean consumption has experienced the highest growth though substantially lower than the OTH group in the districts that have largest ST-OTH gap. In fact, there is perceptible decline in the mean consumption of OTH groups that have a dominant ST population group and are located in the northeastern region.

The patterns observed in the mean consumption expenditure and changes therein are reflected in the incidence of poverty reported in table 12.7. Given that districts located in the northeastern region have experienced significant growth in mean consumption and the ST-OTH difference favouring STs in these districts, the level of poverty in these districts is substantially lower compared to the districts with a sizeable ST population but located in major states. For example, among 16 districts that have less than 10 per cent HCR, all are located in the northeast with three districts reporting no poverty at all.

On the other hand, the highest incidence of poverty (over 84 per cent) is recorded in Koraput district located in Orissa. In fact out of seven districts that have more than 70 per cent incidence of poverty, four districts are in Orissa, two in Chhattisgarh and one in Madhya Pradesh. An additional 10 districts have poverty incidence in the range of 50–70 per cent located in Chhattisgarh, Gujarat, Jharkhand, Madhya Pradesh, Maharashtra, Orissa and Rajasthan.

There are two other important issues that emerge from this table. One, there is substantial ST-OTH disparity in poverty incidence too (as observed earlier in mean real consumption). Secondly, there is some kind of inertia in the poverty incidence, as the high level of poverty incidence in some of the districts continues to be there despite the impressive economic growth experience that the Indian economy has had over the last 20 years.

The district level analyses from the 66th round is not included in the discussion but given the dramatic deceleration in growth of MPCE and increase in poverty, the poverty levels in the districts in category five could have increased or remained stagnant.

### **Has growth been helpful in reducing poverty?**

In the last two sections we have shown that the poverty incidence did decline but this decline has been different for both STs and Others across districts with varying levels of ST population. It has also been noted that in districts falling in group one and five (the ST population share is either very small or over 50 per cent), the reduction in poverty

Table 12.7 Incidence of poverty (in per cent)

State	State dist code	61st		50th	
		HCR ST	HCR OTH	HCR ST	HCR OTH
APR	301	7.4	0.6	36.3	8.5
APR	302	5.0	10.5	44.0	1.6
APR	303	22.2	14.2	52.1	30.7
ASS	401	15.3	40.4	6.8	65.2
ASS	403	4.5	6.5	32.1	37.8
ASS	406	8.4	8.2	37.7	21.2
ASS	410	25.5	2.2	44.8	23.3
JHA	518	64.6	46.7	55.9	44.1
JHA	523	59.0	59.2	45.7	25.4
JHA	524	29.3	13.2	38.2	15.9
GUJ	707	52.9	15.2	48.3	25.5
GUJ	713	29.1	5.9	5.3	17.3
GUJ	714	14.9	5.6	22.5	18.4
MPR	1306	73.1	30.2	58.3	22.7
MPR	1309	50.6	20.3	53.4	29.9
MPR	1313	57.8	35.6	69.1	36.0
CHH	1314	78.5	48.7	46.2	42.9
CHH	1315	51.9	43.5	55.9	46.3
CHH	1316	40.6	26.6	57.6	42.3
CHH	1317	34.7	29.1	40.8	19.2
CHH	1318	72.0	46.7	62.4	46.4
MAH	1402	60.2	15.9	16.1	7.6
MAH	1405	62.8	26.4	70.5	31.7
MAN	1501	7.0	5.2	26.5	0.0
MEG	1601	3.3	0.0	4.8	2.8
MEG	1602	3.6	0.0	35.0	41.9
MIZ	1701	0.0	0.0	3.4	0.0
MIZ	1702	3.7	0.0	6.2	0.0
NAG	1801	0.0	0.0	1.2	0.0
NAG	1802	0.0	0.0	2.3	0.0
ORI	1901	79.9	55.2	49.7	33.5
ORI	1902	70.5	15.3	72.7	30.9
ORI	1903	63.3	33.7	67.4	21.4
ORI	1907	79.1	63.6	75.7	57.0
ORI	1908	84.7	43.9	78.1	47.7
RAJ	2110	34.1	14.1	53.2	20.4
RAJ	2111	51.1	7.3	54.0	16.9
SIK	2201	20.7	19.6	30.3	29.7
SIK	2202	6.3	8.3	37.7	24.0
TRI	2401	32.6	15.1	29.2	11.4
TRI	2402	44.7	36.0	43.3	21.6
DAD	2901	44.3	5.2	58.5	6.6
LAD	3201	6.3	0.0	9.3	0.0

Source: As in table 12.3.

has been substantial. It is conceivable that growth has not been uniform across geographical domains (as proxied by differences in the increase in real mean per capita expenditure in tables 12.3 and 12.7), consequently relative contribution of growth in reducing poverty may be different across districts. But since several redistributive policies have been in place including affirmative action for STs and SCs to make growth more equitable, it would be interesting to see how these policies have been faring as far as reduction in poverty is concerned. In this section we have decomposed the relative contribution of growth and redistribution policies in reducing poverty in districts. Once again the exercise has been done only for ST and Others clubbed into five groups based on share of ST population.<sup>12</sup>

Change in poverty ratio can be broadly attributed to change in per capita expenditure and change in relative size distribution.<sup>13</sup> The mean effect is defined as change in poverty due to change in real mean per capita expenditure (PCTE) while keeping relative size distribution at base year. Similarly, the distribution effect can be defined as a change in poverty measurement due to the change in relative size distribution while keeping MPCE constant at base year. Recall that the districts have been divided into six groups based on population share of STs. The decomposition exercise has been carried out for the group of districts one to five. As shown in table 12.5, among STs the poverty incidence has declined in all groups except group five.

The results of the decomposition exercise are reported in table 12.8. Column two of the table shows the observed decline in poverty incidence ( $\Delta H$ ) for STs and Others for districts groups one to five. Column 3 shows the reduction in hypothetical HCR. It is interpreted as the change in the HCR because of the change in PCTE (growth effect) provided the distribution of expenditure is held at base year (1993–94 in this case) level. Column 4 shows what would have happened to HCR if mean PCTE is held constant at base year level but distribution is changed to terminal year level (2004–05 in this case).

As can be seen from column 3, for STs, decline in HCR because of the change in mean PCTE (growth effect is not uniform, when share of STs in the population is very small they have benefited from both growth as well redistribution (actual decline in HCR,  $\Delta H$ , is algebraic sum of columns 3 and 4)). In group two districts, had the relative distribution been constant, the HCR for STs would have marginally increased. The small decline in HCR for this group, therefore comes from redistribution effect. In group three districts, the distribution

## EXCLUSION AND PERSISTENCE OF POVERTY

*Table 12.8* Decomposition of change in head count ratio

<i>Share of ST Population</i>	$\Delta H$ (actual)	<i>Mean Effect (calculated)</i>	<i>Redistribution Effect (calculated)</i>
1	2	3	4
<i>STs</i>			
1	-18.89	-13.64	-5.25
2	-4.06	0.29	-4.35
3	-12.29	-15.13	2.85
4	3.73	5.11	-1.39
5	-13.21	-15.40	2.19
<i>Others</i>			
1	-13.65	-24.11	10.46
2	-14.01	-19.71	5.70
3	-11.57	-27.24	15.67
4	-6.62	-13.91	7.29
5	-16.87	-30.69	13.82

Source: As in table 12.4.

Note: Share ST population refers to share of ST populations in total population in group of districts defined in table 12.1.

deteriorated though marginally. But in group districts, because of the marginal decline in PCTE, HCR could have increased by over 5 per cent points. But with the marginal contribution from redistribution, the increase is relatively lower. Thus, in general ‘growth has not been good’ for STs where the ST populations is substantial but not dominant. Similarly, for Others, the growth would have been good (the decline in poverty should be far higher than actually observed), but it has been offset by an increase in inequality.<sup>14</sup>

The decomposition at the disaggregated level for STs and OTH is not yet available for 2004–10 but Thorat and Dubey (2012) report that in the rural areas, the growth has contributed to substantial reduction in the poverty incidence. However, in the urban areas, a large part of the reduction of poverty incidence has been offset due to an increase in inequality among the STs.

### Conclusion and policy issues

In this chapter levels and changes of mean consumption expenditure and poverty incidence is reported at three time-points, 1993–94,

2004–05 and 2009–10 for STs at the aggregate as well as at the district level. The focus of the analysis is the level and change in consumption and poverty incidence among STs and the disparities in these two indicators between STs and other population groups (OTH).

The findings of the chapter reaffirms the persistence of disparities in mean consumption and poverty incidence between STs and OTHs. At macro-levels, the worrying factor is the stagnant ST-OTH disparities on both the indicators. Average annual change in mean consumption of STs has been substantially lower than the growth experienced by the OTH group during 1990s, which is fostering the disparities. However, the recent data show that the STs have benefited from growth.

The proportion of STs who have benefited during this period could be smaller as they are located in the areas that do not have a majority ST population. Though detailed sectoral growth data is not available at the district level, location of these districts (where STs are the dominant population group) in Schedule V and VI areas seems to have helped in the first period. In most of these Scheduled Areas, the service sector led growth has benefited the STs. This is further corroborated when we looked at the role of growth in reduction of poverty. The decomposition exercise carried out suggests that, in general, STs have not benefited either from growth or redistribution during the first period but during the second period they have.

The deprivation levels of STs residing in major states and with less than a majority ST population appear to be the most vulnerable groups among all STs. The incidence of poverty in excess of 50 per cent among the districts with substantial ST populations and located in the states that are recognised as the most investor-friendly and have been fastest-growing, Gujarat and Maharashtra, suggests non-participation of STs in the current episode of economic growth. The analysis also indicates that some of these districts do not fall in economically stagnating regions and the benefits of growth are concentrating among the majority OTH and fostering inequality.

## Notes

- 1 Although the term ‘ST’ is used here to denote, implicitly, a single population group, in reality there are more than 4,000 distinct tribes spread over the length and breadth of the country defined in the Indian Constitution. Each one of these tribes is different from the others in their socio-cultural, linguistic and religious characteristics.
- 2 See table 12.9 in the appendix.

- 3 The terms 'Scheduled Caste' and 'Scheduled Tribe' are of relatively recent origin and include caste and tribes notified by the Government of India. The third deprived group identified on the basis of religion is Muslims (GoI 2007).
- 4 Weights or multipliers provide the number of households each one of the surveyed households represent in the data. For details on NSS sampling design and other related issues, see GoI (1983, 1994 and 2004). See also Gangopadhyay et al. (1997) and Dubey and Gangopadhyay (1998).
- 5 Since the 1991 census, there has been a reorganisation of districts, taking the total number of districts in India to well over 600. With the reorganisation of the districts in several states, the number of districts with substantial ST population has increased.
- 6 Share of different social groups in a district varies. However, if a particular group has over 50 per cent share in population, it could be considered to be in majority.
- 7 Although there are more districts that have over 50 per cent ST population, for comparability of geographical areas and reliability of estimates, these districts have been merged to create fewer comparable geographical domains that are being referred here as districts.
- 8 See GoI (1979, 1993), Dubey and Gangopadhyay (1998), Deaton and Tarozzi (1999), Deaton and Dreze (2002) for details on these issues.
- 9 A new set of urban and rural PLs have been proposed by the Expert Group (GoI 2009). But the suitability of these PLs is still being debated. Moreover, choice of a particular poverty norm does not make any qualitative difference in the measurement of poverty across population groups (Dubey and Gangopadhyay 1998).
- 10 There are several other indices that are prescribed in the literature, e.g. Poverty Gap Index (PGI), Foster Greer and Thorbecke (FGT) Index, Sen Index etc. We have used HCR as our objective is to highlight the disparities across social groups. Moreover, at least first two indices, PGI and FGT, show a similar variation and trend.
- 11 Given the socio-religious distribution of the Indian population, a population group – social or religious – could be defined as a dominant group if the share of the social or religious group in the population is more than 50 per cent. For example in a large number of districts in northeastern states, the share of STs in the total population is often more than 50 per cent, thus making STs the dominant group.
- 12 The districts where there are no STs have been left out of this analysis.
- 13 In recent times, a number of researchers have tried to decompose the relative contribution of growth and redistribution in reduction of poverty. See for example Kakwani and Subbarao (1990), Jain and Tendulkar (1990), Datt and Ravallion (1992) and Kakwani (2000). We have used Kakwani (2000) methodology to decompose the change in poverty incidence in this chapter. The details of the methodological issues are discussed in Dubey and Tiwari (2010).
- 14 In all the calculations in this chapter, we have used NSS CES data, which for reasons well known, shows lower level as well as change in inequality. Both levels and change in household-income-based inequality measures are substantially higher.

## References

- Bhandari, Laveesh and Amaresh Dubey. 2009. *District Level Poverty Estimates in 2004–05*. New Delhi: Indicus Analytics, Mimeo.
- Chaudhuri, S. and Nivedita Gupta. 2009. 'Level of Living and Poverty Patterns: A District-wise Analysis for India', *Economic and Political Weekly*, 44(9): 94–110.
- Datt, Gaurav and Martin Ravallion. 1992. 'Growth and Redistribution Component of Changes in Poverty Measures: A Decomposition With Application to Brazil and India in 1980s', *Journal of Development Economics*, 38(2): 275–95.
- Deaton, A. and J. Dreze. 2002. 'Poverty and Inequality in India: A Re-Examination', *Economic and Political Weekly*, 37(36): 3729–48.
- Deaton, A. and A. Tarozzi. 1999. *Prices and Poverty in India*. Princeton: Mimeo.
- De Haan, A. and A. Dubey, 2005. 'Orissa: Poverty, Disparities, or the Development of Under-Development?' (with Arjan de Haan), *Economic and Political Weekly*, 40 (18): 2321–29.
- De Haan, A., A. Dubey and G. Sabharwal. 2009. 'Between Emergency Responses and Rights-based Approaches: Addressing Poverty and Undernutrition in Eastern India', *IDS Bulletin*, 40(4): 39–44.
- Desai, S. and A. Dubey. 2011. 'Caste in 21st Century India: Competing Narrative', *Economic and Political Weekly*, 46(11): 40–49.
- Dubey, A. 2003. 'Quantitative Analysis of Social Group Disparities in India', Paper submitted to the *Department for International Development*, New Delhi: British High Commission, June.
- Dubey, A. and S. Gangopadhyay. 1998. *Counting the Poor: Where Are the Poor in India?* Sarvekshana, Analytical Report, No. 1, February.
- Dubey, A. and R. W. Palmer-Jones. 2005a. 'Poverty Counts in India During 1983: New Poverty Counts and Robust Poverty Comparisons', *Artha Vijnana*, 47(3–4): 287–328.
- Dubey, A. and R. W. Palmer-Jones. 2005b. 'Prices, Price Indexes and Poverty Counts in India During 1980s and 1990s: Calculation of UVCPs', *Artha Vijnana*, 47(3–4): 259–86.
- Dubey, A. and R. W. Palmer-Jones. 2005c. 'Prices, Price Indexes and Poverty Counts in India During 1980s and 1990s: From CPIs to Poverty Lines?', *Artha Vijnana*, 47(3–4): 259–86.
- Dubey, A. and S. Tiwari. 2010. *Decomposing Poverty Into Growth and Redistribution Components*. New Delhi: JNU, CSRD, Mimeo.
- Gangopadhyay, S., L. R. Jain and A. Dubey. 1997. *Poverty Measures and Socioeconomic Characteristics: 1987–88 and 1993–94*. Report submitted to the CSO. New Delhi: Department of Statistics, Government of India.
- Government of India. 1979. *Report of the Task Force on Projections of Minimum Needs and Effective Consumption Demand*. New Delhi: Planning Commission, Perspective Planning Division, January.

- Government of India. 1983. *Instructions to Field Staff: 38th Round (1983)*, Calcutta: National Sample Survey Organisation, Survey Design Research Division.
- Government of India. 1993. *Report of the Expert Group on Estimation of Proportion and Number of Poor*. New Delhi: Planning Commission, Perspective Planning Division, July.
- Government of India. 1994. *Note on Sample Design and Estimation Procedure: 50th Round (July 1993–June 1994)*. New Delhi: National Sample Survey Organisation, Survey Design Research Division, March.
- Government of India. 2004. *Note on Sample Design and Estimation Procedure: 61st Round (July 2004–June 2005)*. New Delhi: National Sample Survey Organisation, Survey Design Research Division, March.
- Government of India. 2006. *Towards Faster and More Inclusive Growth: An Approach to the 11 Five Year Plan*. New Delhi: Planning Commission, December.
- Government of India. 2007. *The National Tribal Policy (Draft)*. New Delhi: Ministry of Tribal Affairs.
- Government of India. 2009. *Report of the Expert Group to Review the Methodology for Estimation of Poverty*. New Delhi: Planning Commission.
- Jain, L. and S. Tendulkar. 1990. 'The Role of Growth and Distribution in the Observed Change in Head-Count-Ration Measure of Poverty: A Decomposition Exercise for India', *Indian Economic Review*, 25(2): 165–205.
- Kakwani, N. and Subbarao K. 1990. 'Rural Poverty and Its Alleviation in India', *Economic and Political Weekly*, 25(13): A2–A16.
- Kakwani, N. 2000. 'On Measuring Growth and Inequality Components of Poverty With Application to Thailand', *Journal of Quantitative Economics*, 16(1): 67–79.
- Newman, K. S. and S. K. Thorat. 2010. *Blocked by Caste: Economic Discrimination in Modern India*. New Delhi: Oxford University Press.
- Rajaraman, I., O. P. Bohra and V. Renganathan. 1996. 'Augmentation of Panchayat Resources', *Economic and Political Weekly*, 31(18): 1071–83.
- Thorat, S. K. and Amaresh Dubey. 2012. 'Has Growth Been Socially Inclusive During 1993-94-2009-10?', *Economic and Political Weekly*, 47(10): 43–54.

# APPENDIX

Table 12.9 HCR and by socio-religious groups and sector (in per cent)

SRGs	1983			1993-94			2004-05			2009-10		
	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
ALL	46.5	42.2	45.6	36.9	32.8	35.9	28.0	25.8	27.5	21.9	20.8	21.6
ST	63.9	55.3	63.3	50.2	42.9	49.6	44.7	34.2	43.8	33.0	28.6	32.5
SC	59.0	55.8	58.4	48.3	49.7	48.6	37.1	40.9	37.9	29.6	32.8	30.3
OTHERS	40.8	39.8	40.5	31.2	29.6	30.7	22.7	22.6	22.7	17.5	18.2	17.7
Hindus	47.0	40.3	45.6	36.5	30.6	35.1	28.0	23.6	26.9	22.7	18.8	21.7
Muslims	51.2	57.2	53.1	45.0	47.7	45.9	33.0	40.6	35.5	20.5	34.3	25.1
ORM	30.2	29.3	29.9	27.1	22.4	25.7	18.2	13.7	16.9	11.7	11.2	11.5

Source: Thorat and Dubey (2012).

Table 12.10 Annualised growth of MPCE by socio-religious groups and sector (in per cent)

SRGs	Rural						Urban						Total					
	1983 to 1993-94		1993-94 to 2004-05		2004-05 to 2009-10		1983 to 1993-94		1993-94 to 2004-05		2004-05 to 2009-10		1983 to 1993-94		1993-94 to 2004-05		2004-05 to 2009-10	
	1983-94	2004-05	1993-94	2004-05	2004-05	2009-10	1983-94	2004-05	1993-94	2004-05	2004-05	2009-10	1983-94	2004-05	1993-94	2004-05	2004-05	2009-10
ALL	0.9	1.3	1.3	1.7	1.7	1.7	1.4	1.9	1.9	1.9	3.0	3.0	1.2	1.5	1.2	1.5	2.5	2.5
ST	1.9	0.5	0.5	3.0	3.0	3.0	1.5	1.8	1.8	1.8	5.0	5.0	2.0	0.6	2.0	0.6	3.7	3.7
SC	1.0	1.3	1.3	1.6	1.6	1.6	0.9	1.4	1.4	1.4	2.5	2.5	1.0	1.4	1.0	1.4	1.9	1.9
Others	0.8	1.4	1.4	1.7	1.7	1.7	1.5	2.0	2.0	2.0	3.0	3.0	1.3	1.6	1.3	1.6	2.6	2.6
Hindus	1.0	1.2	1.2	1.5	1.5	1.5	1.4	1.9	1.9	1.9	3.0	3.0	1.3	1.5	1.3	1.5	2.3	2.3
Muslims	0.8	1.7	1.7	1.8	1.8	1.8	1.3	1.5	1.5	1.5	3.0	3.0	1.1	1.5	1.1	1.5	2.3	2.3
ORM	-0.1	2.2	2.2	4.4	4.4	4.4	1.6	2.2	2.2	2.2	2.5	2.5	0.6	2.2	0.6	2.2	4.0	4.0

Source: Thorat and Dubey (2012).

Table 12.11 State and districts

State	State district code	Districts	Merged with districts in col 3	Sample	
				ST	Total
Arunachal Pradesh	301	Tawang	West Kameng, East Kameng, Papum Pare, Lower Subansari, Upper Subansari	604	827
Arunachal Pradesh	302	West Siang	East Siang, Dibang Valley, Upper Siang	406	600
Arunachal Pradesh	303	Lohit	Changlang, Tirap	311	616
Assam	401	Dhubri	Kokrajhar, Bongaigaon	115	530
Assam	403	Nalbari	Darrang	122	420
Assam	406	Lakhimpur	Dhemaji, Jorhat	123	420
Assam	410	Karbi anglong	North Cachar Hills	172	240
Jharkahnd	518	Deoghar	Dhanbad, Bokaro	147	600
Jharkahnd	523	Ranchi		282	280
Jharkahnd	524	Purbi singhbhum		127	240
Gujarat	707	Sabarkantha	Gandhinagar, Panchmahals, Dohad	149	597
Gujarat	713	Surat		101	438
Gujarat	714	Valsad		148	280
Madhya Pradesh	1306	Satna	The Dangs, Navasari	164	720
Madhya Pradesh	1309	Jhabua	Rewa, Shahdol, Sidhi, Umaria	164	720
Madhya Pradesh	1313	Narsimhapur	Dhar, Indore	256	517
Madhya Pradesh	1314	Mandla	Chhindwara, Seoni	109	400
Chhattisgarh	1315	Surguja	Balaghat, Dindori	112	360
Chhattisgarh	1316	Bilaspur	Koriya	166	320
Chhattisgarh	1317	Raigarh	Korba, Jahangir-Champa, Kawardha Jashpur	117	757
				115	280

Chhattisgarh	1318	Rajnandgaon	Durg, Bastar, Kanker, Dantewada	300	879
Maharashtra	1402	Thane		128	946
Maharashtra	1405	Dhule	Nandurbar	125	320
Manipur	1501	Senapati	Tamenglong, Churachanpur, Chandel, Ukhrul	1144	1,217
Meghalaya	1601	East Khasi Hills	Jaintia Hills, Ri-Bhoi	661	720
Meghalaya	1602	West Khasi Hills	East Garo Hills, West Garo Hills, South Garo Hills	739	876
Mizoram	1701	Aizawl	Mamit, Kolasib, Serchip	1095	1,113
Mizoram	1702	Lunglei	Chhimitupui, Lawngtlai, Saiha	775	799
Nagaland	1801	Kohima	Dimapur	373	440
Nagaland	1802	Phek	Zunheboto, Wokha, Mokokchung, Tuensang, Mon	828	840
Orissa	1901	Sambalpur	Balangir, Baragarh, Jharsuguda, Debagarh, Sonapur	140	757
Orissa	1902	Sundargarh	Kendujhar	211	440
Orissa	1903	Mayurbhanj		111	240
Orissa	1907	Phulabani	Kalahandi, Baudh, Nuapada	128	460
Orissa	1908	Koraput	Raygada, Nabarangapur, Malkangiri	279	540
Rajasthan	2110	Udaipur	Rajsamund	108	360
Rajasthan	2111	Dungarpur	Chittaurgarh, Banswara	165	439
Sikkim	2201	North District	South District, West District	286	640
Sikkim	2202	East District		153	480
Tripura	2401	West Tripura		263	1,120
Tripura	2402	North Tripura	South Tripura, Dhalai	229	1,200
DAD	2901	Dadra and Nagar Haveli		150	240
Lakshadweep	3201	Lakshadweep		184	199

Source: Thorat and Dubey (2012).



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