# II. MPI in India: A Case Study

### 271 MILLION FEWER POOR PEOPLE IN INDIA

The scale of multidimensional poverty in India deserves a chapter on its own. India has made momentous progress in reducing multidimensional poverty. The incidence of multidimensional poverty was almost halved between 2005/06 and 2015/16, climbing down to 27.5%. The global Multidimensional Poverty Index (MPI) was cut by half due to faster progress among the poorest. Thus within ten years, the number of poor people in India fell by more than 271 million – a truly massive gain.

India's scale of multidimensional poverty reduction over the decade from 2005/06 to 2015/16 - from 635 million poor persons to 364 million - brings to mind the speedy pace of China's income poverty reduction, which occurred over more than 20 years. The data necessary to measure changes in China's global MPI over time are not available. But according to China's 2010 monetary poverty line, 268 million people exited poverty between 1995 and 2005 (at which point there were still 287 million poor people). By 2015, only 56 million people were 'consumption poor'. If the World Bank's \$1.25/day poverty line is used instead, 267 million people came out of poverty from 1990 to 2000 in China.5 Even allowing that monetary poverty and multidimensional poverty affect people differently, the scale of India's multidimensional poverty reduction has global implications that could parallel China's progress.

## ONE IN FOUR POOR PEOPLE IS A CHILD UNDER 10

If one considers the 364 million people who are MPI poor in 2015/16, 156 million (34.6%) are children. In fact, of all the poor people in India, just over one in four - 27.1% - has not yet celebrated their tenth birthday. The good news is that multidimensional poverty among children under 10 has fallen the fastest. In 2005/06 there were 292 million poor children in India, so the latest figures represent a 47% decrease or 136 million fewer children growing up in multidimensional poverty. When considering the durable and lifetime consequences of childhood deprivation, particularly in nutrition and schooling, this is a tremendously good sign for India's future.

<sup>5.</sup> Chen and Ravallion (2010) report the number of people who were poor in 1990, 1999, and 2002. In the case of either a linear extrapolation forward from 1999 or back from 2002, roughly 267 million people appear to have emerged from poverty between 1990 and 2000. Also, Shen, Zhan, and Li (2018) track a modified MPI for rural residents over three time periods: 1995, 2002, and 2013. According to their estimations, 202.6 million rural residents exited poverty from 1995 to 2002, which if the trend continued in a linear fashion to ten years, would be 289.6 million.

### FASTEST PROGRESS FOR THE POOREST GROUPS

Traditionally disadvantaged subgroups such as rural dwellers, lower castes and tribes, Muslims, and young children are still the poorest in 2015/16. For example, half of the people belonging to any of the Scheduled Tribes communities are MPI poor, whereas only 15% of the higher castes are. Every third Muslim is multidimensionally poor, compared to every sixth Christian. Two in five children under 10 years of age are poor (41%), but less than one quarter of people aged 18 to 60 (24%) are poor.

But the landscape of the poorest has improved dramatically and, if current trends continue, is set to change. The poorest groups – across states, castes, religions, and ages – had the biggest reductions in

MPI 2005/06 to 2015/16, showing that they have been "catching up," though they still experience much higher rates of poverty. This marks a dramatic reversal. From 1998/99 to 2005/06 the opposite trend prevailed: India's poorest groups had the slowest progress. They were being left behind (Alkire and Seth 2015).

Among states, Jharkhand had the greatest improvement, with Arunachal Pradesh, Bihar, Chhattisgarh, and Nagaland only slightly behind. However, Bihar is still the poorest state in 2015/16, with more than half of its population in poverty. In 2015/16, the four poorest states – Bihar, Jharkhand, Uttar Pradesh, and Madhya Pradesh – were still home to 196 million MPI poor people – over half of all the MPI poor people in India. Yet the least

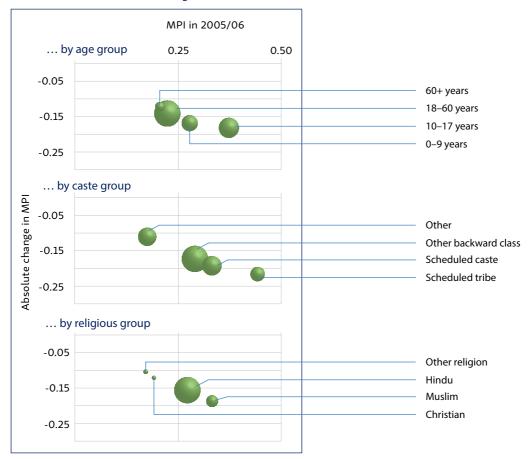


MPI in 2005/06 0.05 0.10 0.25 0.50 0.15 0.20 0.30 0.35 0.40 0.45 0.00 Delhi Guiarat Assam Manipur Uttar Pradesh Goa Uttarakhand Maharashtra -0.05 Madhya Pradesh West Bengal Mizoram Absolute change in MPI Karnataka Odisha -0.10 Bihar Kerala Punjab Himachal Pradesh -0.15 Haryana -0.20 Tamil Nadu Sikkim Tripura Jammu and Kashmir Nagaland Chhattisgarh Andhra Pradesh -0.25 Arunacha Pradesh Meghalaya Jharkhand Rajasthan -0.30

FIGURE II.1 Absolute Change in MPI between 2005/06 and 2015/16

Note: Size of bubble is proportional to the number of poor persons in 2005/06. Source: Alkire, Oldiges and Kanagaratnam 2018.

FIGURES II.2 – II.4 Absolute Change in MPI between 2005/06 and 2015/16...



poor regions were not at all stagnant either. Rather, they also reduced poverty. In fact, relative to their starting levels, they netted some of the highest relative rates of reduction. For example Kerala, one of the least poor regions in 2006, reduced its MPI by around 92%.

This positive trend of pro-poor poverty reduction is seen also across religions and caste groups. In both cases, the poorest groups (Muslims and Scheduled Tribes) reduced poverty the most over the ten years from 2005/06 to 2015/16. Yet these two groups still have the highest rates of poverty. For instance, while 80% of those who identified themselves as being in a Scheduled Tribe had been poor in 2005/06, in 2015/16, 50% of people belonging Scheduled Tribes are still poor. In fact, if we look at the societal distribution of deprivations in India among the

poor, vulnerable, and non-poor, we see that whereas 91% of people experienced any deprivation in 2005/06, it is 82.4% in 2015/16. So deprivation-free persons have doubled from 9% to 18% of the population, and those with very low deprivations rose also. But the percentage of vulnerable people increased by only 2%, and across all the poor people, the poorer they were, the more their poverty decreased. So for example, while 7.3% of the population were deprived in 70% or more of the weighted indicators in 2005/06 it is 1.2% in 2015/16. This slightly technical mapping of all experienced deprivations verifies the societal change that is evident in the faster reduction for the poorest groups.



### AT-A-GLANCE: MULTIDIMENSIONAL POVERTY IN INDIA IN 2015/16

In 2015/16, more than 364 million people are still MPI poor in India. This number is higher than the combined populations of the most populous Western European countries, including Germany, France, the United Kingdom, Spain, Portugal, Italy, the Netherlands, and Belgium.

India's 2015/16 MPI is 0.121, with 27.5% of the population identified as multidimensionally poor and poor people experiencing an average of 43.9% of weighted deprivations. Just over 9% of the population are still vulnerable to poverty, meaning that they are deprived in 20% to 33% of weighted indicators. And, sadly, 113 million people – 8.6% of India's people – live in severe poverty. Each one of these people experiences more than 50% of weighted deprivations.

Across nearly every state, poor nutrition is the largest contributor to multidimensional poverty, responsible for 28.3% of India's MPI. Not having a household member with at least six years of education is the second largest contributor, at 16%. Insufficient access to clean water and child mortality contribute least, at 2.8% and 3.3%, respectively. Relatively few poor people experience deprivations in school attendance – a significant gain.

# INDIA'S 640 DISTRICTS: POCKETS OF POVERTY AND PROGRESS

The 2015/16 district-level data for India reveal deep pockets of poverty but also impressive progress across the country. The poorest district is Alirajpur in Madhya

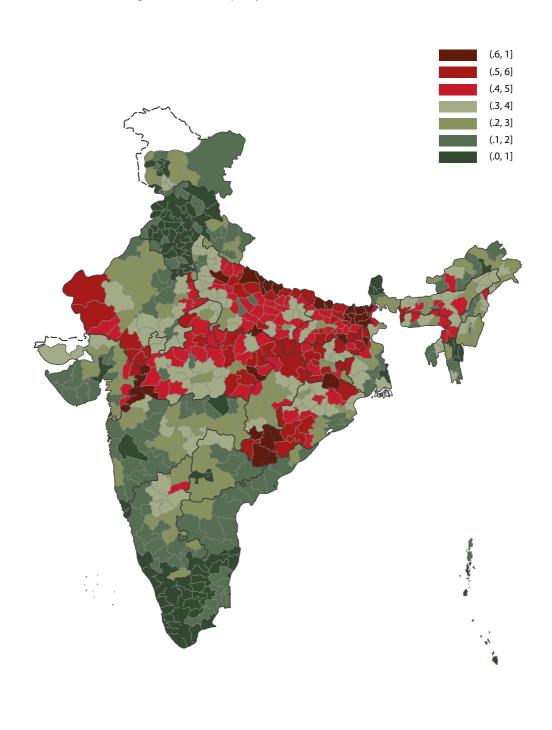
Pradesh, where 76.5% of people are poor – the same as Sierra Leone in Sub-Saharan Africa. Only eight countries have higher rates of MPI.<sup>6</sup> In four districts more than 70% of people are poor; these are located in Uttar Pradesh and Madhya Pradesh. Twenty-seven districts have 60 to 70% of their people in poverty. At the other end of the scale, in 19 districts less than 1% of people are poor, and in 42 districts, poverty rates are 2 to 5%.

The map depicts a clear divide between districts located in southern and north-central India. For example, in the 134 districts of Maharashtra, Telangana, Andhra Pradesh, Karnataka, Tamil Nadu, and Kerala, there are just two districts with poverty rates above 40%. These are Nandurbar in northern Maharashtra bordering Gujarat (60%) and Yadgir in northeastern Karnataka, where almost every second person is multidimensionally poor. In Tamil Nadu and Kerala, most district-level headcount ratios hover around 10% or less - rates that are comparable to those of Eastern European and South American regions. Interestingly, districts in the far northern states such as Punjab, Haryana, and Himachal Pradesh show a similar pattern.

The major contrast, however, are districts that spread all the way from northwestern Uttar Pradesh to eastern Bihar along the Indo-Gangetic Plain, and from pockets in western Madhya Pradesh to Odisha via many isolated and neglected districts in Jharkhand and Chhattisgarh (note that DHS 2015/16 district level disaggregation

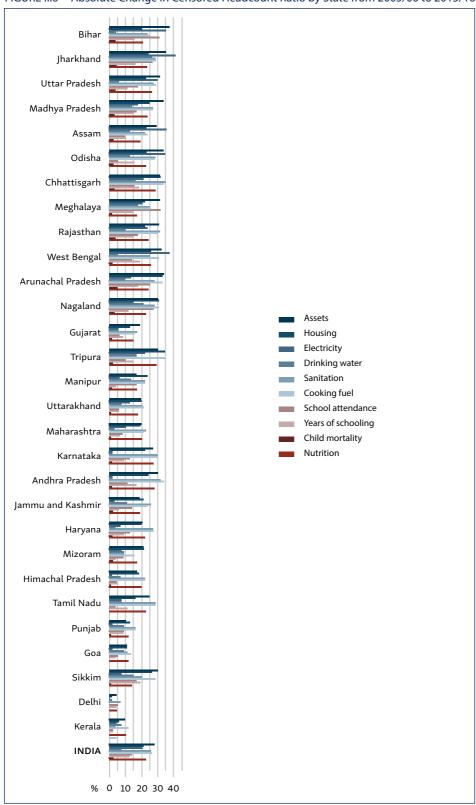
<sup>6.</sup> South Sudan, Niger, Chad, Burkina Faso, Ethiopia, Somalia, Mali, and Madagascar.

FIGURE II.5 Percentage of MPI Poor People by District in India 2015/16



Note: The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations or UNDP or OPHI concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries.

FIGURE II.6 Absolute Change in Censored Headcount Ratio by State from 2005/06 to 2015/16



groups together some of Chhattisgarh's districts). These states reduced MPI at a record pace, yet many districts still face daunting challenges. A case in point is Bihar. In 11 of its 38 districts more than six in ten people are poor, and in two districts almost 70 percent are multidimensionally poor (Madhepura, Araria).

Within India, 40.4 million people live in districts where more than 60% of people are poor – 20.8 million live in the poorest districts in Bihar, 10.6 million in the poorest districts in Uttar Pradesh, and the remainder in the poorest districts in Chhattisgarh, Gujarat, Jharkhand, Madhya Pradesh, and Odisha. Outside India, in South Asia, 27.4 million people live in subnational regions where more than 60% of people are poor – 6.5 million in Pakistan's Balochistan (72.6%), 8.5 million in Bangladesh's Sylhet (62.3%), and the remaining 12.4 million in Afghanistan.

#### SUSTAINING MOMENTUM

The finding that 271 million fewer Indians are MPI poor in 2015/16 is dramatic – especially as it came during a decade of population growth. Over a quarter of a billion people are no longer forced to battle simultaneous deprivations. When observing these remarkable results, it is important to reflect on the time period considered – much can change in ten years. Also, these figures are from 2015/16, so they may not reflect the situation in India currently. It is fervently hoped that India's data will be updated more regularly and, more importantly, that the trends will continue.

India's MPI reduction redraws the global picture on MPI, with South Asia no longer housing the largest share of the world's poor. The world has already acknowledged China's global leadership in monetary poverty reduction. Although these are different measures, by any standard, India's MPI reduction could be momentous – yet to end poverty it needs to be sustained across the next 15 years.

TABLE II.1 MPI, H, A, and Reduction in MPI and H 2005/06–2015/16 by Group

		2005/06	90/			201	2015/16		ABSOLUTE F 2005/06 -	ABSOLUTE REDUCTION 2005/06 – 2015/16
-	MPI	H Incidence	A Intensity	Population Share 2006	MPI	H Incidence	A Intensity	Population Share 2016	Change in MPI	Change in H
INDIA	0.279	54.7%	51.1%	100.0%	0.121	27.5%	43.9%	100.0%	-0.158*	-27.2%*
Andhra Pradesh	0.234	49.9%	47.0%	7.1%	0.065	15.8%	40.9%	6.8%	-0.17*	-34.1%*
Arunachal Pradesh	0.309	59.7%	51.8%	0.1%	0.106	24.0%	44.1%	0.1%	-0.203*	-35.7%*
Assam	0.312	60.7%	51.4%	2.7%	0.16	35.8%	44.6%	2.4%	-0.152*	-24.8%*
Bihar	0.446	77.1%	57.8%	8.0%	0.246	52.2%	47.2%	8.9%	-0.2*	-25.0%*
Chhattisgarh	0.353	70.0%	50.5%	2.2%	0.151	36.3%	41.4%	2.3%	-0.203*	-33.7%*
Delhi	0.051	11.5%	44.4%	1.1%	0.016	3.8%	42.3%	1.3%	-0.035*	-7.7%*
Goa	0.087	20.4%	42.5%	0.1%	0.021	9.6%	37.2%	0.1%	*990.0-	-14.8%*
Gujarat	0.185	38.5%	48.0%	4.9%	0.09	21.4%	42.2%	4.7%	-0.095*	-17.1%*
Haryana	0.182	38.5%	47.2%	2.0%	0.046	11.0%	42.3%	2.3%	-0.135*	-27.5%*
Himachal Pradesh	0.129	31.1%	41.5%	0.6%	0.031	8.2%	37.4%	0.5%	*860.0-	-22.9%*
Jammu and Kashmir	0.189	40.8%	46.4%	0.9%	0.063	15.2%	41.7%	1.0%	-0.126*	-25.6%*
Jharkhand	0.425	74.7%	57.0%	2.7%	0.205	45.8%	44.7%	2.7%	-0.221*	-28.8%*
Karnataka	0.224	48.1%	46.5%	5.6%	0.068	17.1%	39.8%	4.9%	-0.156*	-31.0%*
Kerala	0.052	13.2%	39.6%	2.5%	0.004	1.1%	37.4%	2.9%	-0.048*	-12.2%*
Madhya Pradesh	0.358	67.7%	52.8%	6.3%	0.18	40.6%	44.2%	6.5%	-0.178*	-27.1%*
Maharashtra	0.182	39.4%	46.2%	9.4%	0.069	16.8%	41.3%	9.6%	-0.113*	-22.6%*
Manipur	0.207	45.1%	45.8%	0.7%	0.083	20.7%	40.3%	0.2%	-0.123*	-24.4%*
Meghalaya	0.334	60.5%	55.2%	0.3%	0.145	32.7%	44.5%	0.2%	-0.188*	-27.8%*
Mizoram	0.139	30.8%	45.0%	0.1%	0.044	9.7%	45.2%	0.1%	-0.095*	-21.2%*
Nagaland	0.294	96.9%	51.6%	0.1%	0.097	23.3%	41.7%	0.1%	-0.196*	-33.6%*
Odisha	0.33	63.5%	52.0%	3.7%	0.154	35.5%	43.3%	3.4%	-0.176*	-28.0%*

TABLE II.1 MPI, H, A, and Reduction in MPI and H 2005/06–2015/16 by Group (continued)

		200	2005/06			201	2015/16		ABSOLUTE REDUCTION 2005/06 – 2015/16	EDUCTION 2015/16
	MPI	H Incidence	A Intensity	Population Share 2006	MPI	H Incidence	A Intensity	Population Share 2016	Change in MPI	Change in H
Punjab	0.108	24.0%	45.0%	2.5%	0.025	6.0%	41.2%	2.3%	-0.083*	-18.0%*
Rajasthan	0.327	61.7%	52.9%	5.8%	0.143	31.6%	45.2%	5.5%	-0.183*	-30.0%*
Sikkim	0.176	37.6%	46.7%	0.1%	0.019	4.9%	38.1%	0.0%	-0.157*	-32.7%*
Tamil Nadu	0.155	37.0%	41.8%	5.5%	0.028	7.4%	37.5%	%9.9	-0.127*	-29.6%*
Tripura	0.265	54.4%	48.6%	0.3%	980.0	20.1%	42.7%	0.3%	-0.179*	-34.3%*
Uttar Pradesh	0.36	%6.89	52.2%	16.6%	0.18	40.4%	44.7%	15.7%	-0.18*	-28.5%*
Uttarakhand	0.179	38.7%	46.1%	0.8%	0.072	17.1%	41.8%	0.8%	-0.107*	-21.6%*
West Bengal	0.298	57.3%	52.0%	7.9%	0.109	26.0%	41.9%	7.6%	-0.189*	-31.4%*
Scheduled Caste	0.338	65.0%	51.9%	19.1%	0.145	32.9%	44.1%	20.7%	-0.193*	-32.2%*
Schedule Tribe	0.447	%8.62	90.99	8.4%	0.229	20.0%	45.8%	9.4%	-0.218*	-29.8%*
Other Backward Class	0.291	57.9%	50.2%	40.2%	0.117	26.9%	43.5%	42.9%	-0.174*	-31.0%*
Other Caste Group	0.176	36.1%	%6.84	29.3%	0.065	15.3%	42.5%	22.7%	-0.111*	-20.8%*
Hindu	0.277	54.9%	50.4%	80.3%	0.12	27.7%	43.5%	80.2%	-0.156*	-27.2%*
Muslim	0.331	60.3%	54.9%	14.1%	0.144	31.1%	46.4%	14.1%	-0.187*	-29.3%*
Christian	0.191	38.8%	49.2%	2.3%	0.069	16.1%	42.9%	2.4%	-0.122*	-22.7%*
Other Religion	0.172	35.2%	48.9%	3.3%	0.067	15.5%	43.0%	3.3%	-0.105*	-19.7%*
Age 0–9 Years	0.371	68.1%	54.5%	22.3%	0.189	40.9%	46.3%	18.2%	-0.182*	-27.3%*
Age 10-17 Years	0.289	56.1%	51.6%	17.7%	0.121	27.3%	44.1%	15.8%	-0.169*	-28.7%*
Age 18–60 Years	0.244	49.2%	49.5%	53.6%	0.102	23.6%	43.0%	57.5%	-0.142*	-25.6%*
Age 60+ Years	0.228	49.2%	46.2%	6.3%	0.105	25.4%	41.3%	8.5%	-0.122*	-23.8%*
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<sup>\*</sup> All changes are significant at 1% level.