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# Asset Inequality in India: Going from Bad to Worse

Mandira Sarma, Partha Saha, Nandini Jayakumar

## Introduction

Assets are an important indicator of economic well-being of households. Acquired through inheritance, gifts (including dowry) and accumulated savings, assets provide means of livelihood as well as security against adverse economic shocks. In his widely acclaimed recent book, Thomas Piketty has argued that inherited assets across generations are an important source of perpetuating inequality of wealth and income around the world (Piketty, 2014).

At the macro level, studies have found that asset and income inequality have a negative impact on growth (Benabou, 1996; Alesina and Rodrik, 1994; Birdsall and Londono, 1997). Of various studies that have analysed distribution of wealth and assets at household level, Takayama (1994) for Japan, Carney and Gale (2000) for the United States and Davies *et al.* (2009) for 38 countries in the world are particularly noteworthy. For India, ownership of assets has been studied by Vaidyanathan (1993), Subramanian and Jayraj (2006) and Jaydev *et al.* (2007). Following this strand of literature, this paper presents various aspects of asset inequality of Indian households, separately for rural and urban households. We use household-level data from three consecutive rounds of the All India Debt and Investment Survey (AIDIS), pertaining to the years 1991–92 (48th round), 2002–03 (59th round) and 2012–13 (70th round), thus covering a period of roughly two decades.

The paper finds a distinct trend, in both rural and urban India, towards sharply increasing asset concentration at the top while households at the bottom continue to own very little assets. Over the span of these twenty years, Indian households witnessed persistent and growing inequality in asset distribution. Increase in inequality was more pronounced in urban India than in rural India. While land continued to be the most important form of asset for rural households, both land and buildings were important items for urban households. The stark inequality we observe during the period is mainly driven by unequal holding of these major assets. We also observe a continuing unfavourable relative asset share of Dalit (Scheduled Caste or SC), Adivasi (Scheduled Tribe or ST) and Muslim households vis-à-vis non-Dalit, non-Adivasi and non-Muslim households (henceforth referred to as ‘Others’). While the rise in asset inequality between 1991–92 and 2002–03 has been reported by earlier studies such as Subramanian and Jayaraj (2006) and Jayadev *et al.* (2007), this paper contributes to the

literature by extending the analysis of asset inequality by another decade, from 2002–03 to 2012–13.

This paper is organised as follows. The next section presents a brief review of literature. In the third section, we briefly discuss some definitions used in this paper. The fourth section presents the major asset categories and the composition of asset holding that we will be using for subsequent sections. The fifth, sixth and seventh sections are a discussion on asset inequality in India, which is the focus of this paper. The fifth section analyses asset distribution and associated Gini coefficients. The sixth presents analysis of inequality along social categories. And in the seventh section we present an inequality decomposition analysis. The last section summarises and concludes the paper.

### A Brief Review of the Literature

The literature on asset inequality in India is relatively sparse. An early study by Vaidyanathan (1993) attempted to analyse features of rural asset holdings and its regional and temporal variations during 1961–81. In the absence of unit-level data, that study was based on various AIDIS reports. Vaidyanathan observed that distribution of productive assets was more unequal than the distribution of total assets in rural India during this period. For a later decade, Subramanian and Jayaraj (2006) and Jaydev *et al.* (2007) presented analysis of distribution of assets using unit-level AIDIS data for 1991–92 and 2002–03. Both these studies found that the decade of 1991–2002 (coinciding with the first decade of economic liberalisation in India) was characterised by huge inequality of asset distribution and a relative stability of the asset/wealth shares over the decade. They also observed that the incidence of assetlessness among SC and ST households was thrice that of other households. Jayadev *et al.* (2007) examined per capita wealth disparities along different dimensions such as caste, size distribution and occupation as well as across Indian states between the two survey years. On disparities across social groups, they observed that ‘the wealth hierarchy matches the caste hierarchy’, with the average values of assets owned by the SC and ST households being the lowest in both the survey years, and that of other households being the highest. Thorat (2002) pointed out that the caste system often laid down the foundation for unequal distribution of economic rights related to property, employment and education among caste groups. Based on the Employment and Unemployment Survey (NSS, 1993–94), Thorat (2002) reported that only one-fifth of SC households in India cultivated land and only about one-fourth of SC households were engaged in self-employment activities in rural areas. The extremely low proportions of SC households involved in cultivation and self-employment indicated less access to land and capital among SC households. Kozel and Parker (2003) observed that low-caste status operated as a social barrier to many socio-economic opportunities.

Based on their field studies in Uttar Pradesh and Bihar, they noted that SC and ST households possessed fewer private assets, and in particular, less and poorer quality land, and therefore depended mainly on earnings from casual labour. Similar findings have been observed by many field-based studies on rural India (see, for example, Rawal and Swaminathan, 2009).

To sum up, the existing literature clearly shows that asset distribution in India is highly unequal. In the international comparisons also, India has been placed as a country with highly unequal wealth distribution. The *Global Wealth Report 2014* found India to be one of nine countries that experienced a 'rapid rise' in wealth inequality during 2000–14 (Shorrocks *et al.*, 2014).

### Data and Definitions

The paper uses household-level data from three consecutive rounds of the All-India Debt Investment Surveys (AIDIS) carried out by the National Sample Survey Office (NSSO). The reference years for these surveys were 1991–92 (48th round), 2002–03 (59th round) and 2012–13 (70th round).

In all the three survey rounds considered here, all items owned by the households having money value were considered as household assets. These include land, buildings, livestock, agricultural machinery, non-farm business equipment, transport equipment, shares, deposits, and dues receivable in cash or in kind.<sup>1</sup> The 48th (1991–92) and the 59th (2002–03) rounds also covered household durables and jewellery. This information was not collected in the 70th (2012–13) round presumably because respondents are likely to be reluctant to share the information, resulting in particularly high under-reporting. For the sake of comparability, we excluded durables and jewellery from all the survey rounds in our analysis.

A small change was introduced in the 70th round in respect of valuation of land and buildings. In the 48th and 59th rounds, values of land and buildings were reported by household respondents but investigators were advised to take the help of other knowledgeable persons to ascertain the current market price. In the 70th round, values of land and buildings were not obtained from household respondents but were imputed on the basis of market prices obtained through key informants.<sup>2</sup>

The 48th round survey (1991–92) classified households into three social groups – Scheduled Castes (SC), Scheduled Tribes (ST), and 'others'. In the 59th and 70th rounds, Other Backward Class (OBC) households were classified separately and, apart from identifying the caste groups, separate information on religion of the households was also collected. For analysing disparities in asset ownership across social groups over all the three rounds, we classify households as SC, ST and 'others' (including Muslims and OBC). Making use of additional information available from the 59th and 70th rounds, we also classify households as SC, ST, Muslims, OBC and 'others' for a more detailed analysis of disparities for 2002–03 and 2012–13.<sup>3</sup>

### Composition of Asset Holdings

In Table 1, we present percentage share of different categories of assets in total assets of rural and urban households for the three survey years.

#### Rural households

Land is the most important asset owned by households in rural India, followed by buildings. For rural India as a whole, land accounted for more than two-thirds of the total value of assets while buildings constituted more than 20 per cent of total value of assets in these three survey years. Land and buildings together accounted for more than 90 per cent of total value of assets of rural households.

While dominance of land and building in asset portfolio continued, the share of livestock and transport equipment steadily declined over two decades in rural India (Table 1, columns I–III). The share of agricultural machinery fell between 1991–92 and 2002–03 but recovered in the subsequent decade.<sup>4</sup> Business equipment (non-farm) and financial assets constituted a small portion of the total asset value of rural households during all the three survey years.

#### Urban households

Like in rural India, for urban households too, land and buildings were the most important items of assets (columns IV–VI, Table 1). Together, they accounted for about 83 per cent of total value of urban household assets in 1991–92 and 2002–03, while their combined share rose to about 92 per cent in 2012–13. The third most important component of urban asset portfolio was financial assets, although its share in total asset value was lower in 2012–13 than in 1991–92 and 2002–03. The share of transport and business equipment declined over the years. As expected, livestock and agricultural machinery comprised a miniscule proportion of asset portfolios of urban households.

### Inequality of Asset Distribution

In this section, we present a detailed analysis of the asset distribution among rural and urban households. Table 2 provides asset distribution by asset decile for rural (columns I–III) and urban households (columns IV–VI).

#### Rural households

The asset distribution in rural India was found to be extremely unequal in all the three survey years. Data also show an increasing concentration of assets among higher deciles (Table 2, Columns I–III). The top 10 per cent of rural households owned half of the assets in 1991–92; by 2012–13, their share increased to 56.5 per cent. Of them, the share of richest 5 per cent households was 37 per cent in 1991–92 and 43 per cent in 2012–13. On the other extreme, the meagre share of assets owned by the bottom 10

**TABLE 1 Percentage share of different asset categories in total value of assets of Indian households**

Category of asset	Rural households			Urban households		
	I 1991– 92	II 2002– 03	III 2012– 13	IV 1991– 92	V 2002– 03	VI 2012– 13
Land	68.3	66.6	72.6	40.2	42.1	47.0
Building	22.7	24.8	21.1	44.5	41.3	44.9
Livestock	3.6	2.2	1.6	0.5	0.2	0.1
Agricultural machinery	2.4	2.1	0.4	0.3	0.2	0.0
Non-farm business equipment	0.3	0.4	0.3	1.7	1.5	0.8
Transport equipment	1.3	1.5	2.1	3.4	4.2	2.5
Financial assets	1.4	2.5	1.9	9.5	10.5	4.8
All assets	100.0	100.0	100.0	100.0	100.0	100.0

Note: Financial assets include dues receivable.

Source: Calculated using AIDIS data.

**TABLE 2 Percentage share of assets held by asset deciles**

Deciles of gross asset holding	Rural households			Urban households		
	I 1991–92	II 2002–03	III 2012–13	IV 1991–92	V 2002–03	VI 2012–13
0 – 10	0.21	0.23	0.25	0.00	0.01	0.00
10 – 20	0.84	0.95	0.89	0.02	0.05	0.04
20 – 30	1.56	1.68	1.5	0.25	0.45	0.30
30 – 40	2.52	2.53	2.26	0.99	1.38	0.98
40 – 50	3.75	3.61	3.23	2.09	2.55	1.96
50 – 60	5.25	5.09	4.51	3.72	4.20	3.40
60 – 70	7.39	7.13	6.31	6.08	6.67	5.45
70 – 80	10.62	10.33	9.16	9.67	10.74	8.76
80 – 90	17.17	16.88	15.39	16.94	18.42	15.38
90 – 100	50.7	51.57	56.5	60.24	55.54	63.72
Top 5per cent	36.62	37.31	42.71	44.75	40.00	50.70
Middle 35per cent	49.25	48.6	44.65	48.18	51.36	42.62
Bottom 60per cent	14.12	14.09	12.64	7.07	8.64	6.68

Source: Calculated using AIDIS data.

per cent showed almost no improvement – from 0.21 in 1991–92 to 0.25 in 2012–13. The share of bottom 60 per cent of rural households declined from 14 per cent in 1991–92 to 12.6 in 2012–13.

### Urban households

The share of richest households in total value of assets is even higher in urban India. In all the three survey years, share of assets owned by the richest decile was higher in urban India than in rural India. In 2012–13, while top 10 per cent rural households accounted for 56 per cent of rural assets, top 10 per cent urban households owned 64 per cent of total assets (Table 2). Urban India also saw a greater increase in concentration of wealth during the last decade. Among urban households, the share of richest 10 per cent in total value of assets increased by about eight percentage points between 2002–03 and 2012–13. Even within the top-most wealth decile, it was the top five per cent households that gained the most and their share in total assets increased by more than ten percentage points (Table 2). On the other hand, the share of assets owned by bottom 60 per cent of urban households declined from 8.6 per cent in 2002–03 to 6.7 per cent in 2012–13 (Table 2).

To sum up, Table 2 shows that inequality of asset ownership in India increased over the two decades. While the share of the richest rural and urban households in total value of assets increased, asset poverty increased among the poorest households.

### Distribution of wealth (net asset holdings)

In addition to information on household assets, AIDIS also collect information on household indebtedness. Consistent with the literature on wealth inequality, we estimate household wealth as total value of assets net of total debt (cash loans payable by households as on 30th June of 1991, 2002, and 2012). Table 3 presents how the total wealth was distributed within different deciles.

Table 3 shows that, in both rural and urban India, the share in total net wealth diminished between 2002–03 and 2012–13 for households in all deciles except the top-most decile. For the top-most decile, the share in net wealth increased by five percentage points in rural India and by eight percentage points in urban India. It is noteworthy that the total net wealth of bottom decile of households in urban India was negative throughout the past two decades.

### Gini coefficients

Table 4 shows aggregate Gini coefficients of gross assets and net wealth.<sup>5</sup> Following points emerge from these.

First, the Gini coefficient of wealth distribution is extremely high and rose significantly between 2002–03 and 2012–13. For India as a whole, in 2012–13, the Gini coefficient of gross assets was 0.74.<sup>6</sup>

**TABLE 3 Percentage share of net assets (wealth) held by deciles**

Deciles of net assets	Rural households			Urban households		
	I 1991– 92	II 2002– 03	III 2012– 13	IV 1991– 92	V 2002– 03	VI 2012– 13
0 – 10	0.1	0.1	0.0	–0.3	–0.2	–0.3
10 – 20	0.8	0.9	0.8	0.0	0.0	0.0
20 – 30	1.5	1.6	1.4	0.2	0.4	0.2
30 – 40	2.5	2.5	2.2	0.9	1.3	0.9
40 – 50	3.7	3.6	3.1	2.0	2.5	1.9
50 – 60	5.2	5.0	4.4	3.6	4.1	3.3
60 – 70	7.4	7.1	6.3	6.0	6.6	5.4
70 – 80	10.6	10.3	9.1	9.7	10.7	8.7
80 – 90	17.2	16.9	15.3	16.9	18.4	15.2
90 – 100	51.1	52.1	57.4	61.2	56.1	64.6

Source: Computed from AIDIS unit level data for 1991–92, 2002–03, 2012–13, NSS.

**TABLE 4 Gini coefficients of gross asset holdings and net wealth, rural, urban and all households, India, 1991–92, 2002–03 and 2012–13**

	1991–92	2002–03	2012–13
Gross asset holding			
Rural	0.65	0.65	0.69
Urban	0.75	0.72	0.77
All households	0.68	0.65	0.74
Net wealth			
All households	0.69	0.69	0.76

Source: Computed using AIDIS data.

Secondly, in all the three survey years, Gini coefficients of net wealth were higher than the Gini coefficients of gross asset holdings. In other words, a greater share of assets of poorer households is eroded by debt than that of relatively richer households.

Table 5 presents the values of Gini coefficients for different asset categories for rural (columns I–III) and urban (columns IV–VI) households. The table shows that the rise in asset inequality in rural India can be primarily attributed to rising inequality in ownership of land and livestock. In other categories, inequality in ownership decreased between 1991–92 and 2012–13. However, as land is the most important asset for rural households, an increase in inequality in land ownership translated into an increase in overall inequality. The increase in inequality was much more pronounced in urban India than in rural India, and the principal



**TABLE 5 Gini coefficient for different categories of assets**

Category of assets	Rural households			Urban households		
	I 1991– 92	II 2002– 03	III 2012– 13	IV 1991– 92	V 2002– 03	VI 2012– 13
Land	0.73	0.73	0.77	0.83	0.81	0.83
Building	0.61	0.59	0.59	0.80	0.74	0.84
Livestock	0.69	0.74	0.75	0.96	0.97	0.97
Agricultural machinery	0.91	0.92	0.89	0.99	0.99	0.99
Non-farm business equipment	0.98	0.97	0.97	0.97	0.96	0.97
Transport equipment	0.90	0.92	0.91	0.92	0.91	0.87
Financial assets	0.96	0.92	0.88	0.88	0.87	0.85
All assets	0.65	0.65	0.69	0.75	0.72	0.77

*Note:* Financial assets include dues receivable.

*Source:* Calculated from AIDIS unit-level data for 48th, 59th, 70th Rounds (1991–92, 2002–03, 2012–13).

contributor to the rising asset inequality in urban India was increasing concentration in ownership of buildings. Gini coefficient of value of buildings increased from 0.74 in 2002–03 to 0.84 in 2012–13.

### **Disparities across Social Groups and between Rural and Urban Households**

Thorat (2002) shows that social discrimination and economic exclusion are intimately related and have a fundamental bearing on the pattern of ownership of assets. In this section, we present some aspects of disparities in asset ownership across social groups. As discussed in the third section, we consider two socio-economic categorisations here, viz., a broad categorisation consisting of SC, ST and non-SC/ST households for comparing all the three survey rounds and a finer categorisation consisting of SC, ST, Muslim, OBC and 'Others' for 2002–03 and 2012–13.

Table 6 shows the ratio of average asset holding of non-SC/ST households to that of average asset holding of SC and ST households.<sup>7</sup> The table shows very clearly that the average value of assets of SC and ST households is much lower than that of non-SC/ST households. For rural households, the overall asset holding of non-SC/ST households relative to SC households remained more or less stable: 2.7 times in 1991–92 and 2002–03 and 2.5 times in 2012–13. Thus, in terms of asset accumulation, there is no significant improvement in relative position of SC households compared to non-SC/ST households. In case of rural ST households, the latest round of survey (2012–13) indicated deterioration in their relative

asset position (Panel 2, columns I–III, Table 6) compared to 2002–03.

Looking at category-wise data, it emerges that unfavourable asset position of SC and ST households was largely driven by low levels of ownership of land by them. Since, most other categories of assets account for a very small proportion of total asset holdings (Table 1), even a marginal improvement in relative position of SC/ST households in terms of ownership of these assets did not translate into mitigating the overall disadvantage to any significant degree.

In urban India, the relative asset position of both SC and ST households vis-à-vis non-SC/ST households showed some improvement

**TABLE 6** Relative asset position of ‘others’ vis-à-vis SC and ST households

Category of assets	Rural households			Urban households		
	I 1991– 92	II 2002– 03	III 2012– 13	IV 1991– 92	V 2002– 03	VI 2012– 13
Panel 1: Ratio of average value of assets of non-SC/ST to that of SC households						
Land	3.03	3.11	3.00	2.75	2.74	2.76
Building	2.06	1.87	1.60	2.91	2.40	3.73
Livestock	1.94	1.99	1.75	1.73	1.66	1.51
Agricultural Ma- chinery	4.94	4.36	2.57	5.25	6.70	4.16
Non-Farm Business	3.75	4.10	2.47	5.42	5.87	7.94
Equipment						
Transport Equipment	3.86	4.04	2.45	1.99	4.07	3.03
Financial Assets	3.00	1.98	1.75	2.46	2.13	2.14
All Assets	2.74	2.65	2.50	2.77	2.57	3.11
Panel 2: Ratio of average value of assets of non-SC/ST to that of ST households						
Land	2.83	2.54	2.70	1.97	2.09	1.68
Building	2.27	2.29	2.15	2.58	2.16	3.43
Livestock	1.22	1.03	0.97	0.89	1.02	1.00
Agricultural Machinery	4.01	2.62	1.72	1.56	1.28	1.03
Non-Farm Business	5.63	6.12	5.03	7.87	2.03	5.95
Equipment						
Transport Equipment	2.34	2.89	2.20	3.48	2.12	1.80
Financial Assets	1.11	2.35	1.99	2.57	1.23	1.34
All Assets	2.55	2.41	2.48	2.32	1.97	2.17

Note: Financial assets include dues receivable

Source: Calculated from AIDIS unit-level data for 1991–92, 2002–03, 2012–13, NSSO.

during the first decade (1991-92 to 2002-03). However, during the second decade (2002-03 to 2012-13), the relative asset holding of both these socio-economic groups vis-à-vis that of non-SC/ST households deteriorated (columns IV-VI, Table 6). This deterioration in urban India was almost entirely driven by worsening of relative ownership of buildings. Between 2002-03 and 2012-13, the ratio of average value of buildings owned by non-SC/ST households vis-à-vis SC households increased from 2.4 to 3.73, while the ratio vis-à-vis ST households increased from 2.16 to 3.43.

Using availability of more detailed classification of caste and religious groups in the 59th and 70th round surveys, Table 7 presents ratios of average asset holding of households not belonging to a marginalised caste/religious group (that is, 'other' households) to average asset holding of SC, ST, Muslim and OBC households. Separating OBC and non-Muslim households brings out the disparities across social groups even more strongly. As shown in the table, in both the years, average asset holding of households that did not belong to a marginalised community was four times the average holding of SC households. In 2012-13, average asset holding of households that did not belong to a marginalised community was 3.9 times the average holding of ST households in rural India and 3.3 times the average holding of ST households in urban India.

Table 8 shows the access index, defined as the ratio of the share of a group in total assets to the share of the group in the population, for different social groups. The access index is less than one if the share of a group in total value of assets is less than the group's share in population. The table shows that, in both rural and urban India, access indices for SC, ST and Muslim households were less than one, implying that these groups had a disproportionately low ownership of assets. The access indices were above one for households that did not belong to any marginalised group and for rural OBC households. Access indices of marginalised groups show a decline in urban India between 2002-03 and 2012-13, suggesting an increasing level of exclusion over this period.

The Theil index of inequality can be used to examine how much of

**TABLE 7 Ratio of average value of assets of households not belonging to a marginalised caste/religious group (other households) vis-à-vis average value of assets of SC, ST, Muslim and OBC households, rural and urban, 2002-03 and 2012-13**

Other households vs.	Rural households		Urban households	
	2002-03	2012-13	2002-03	2012-13
SC households	4.04	3.90	3.50	4.71
ST households	3.68	3.87	2.68	3.29
Muslim	2.37	2.46	2.50	3.23
OBC households	1.90	1.86	1.83	2.24

Source: Calculated using AIDS data

TABLE 8 Access index, by social groups

Social group	Rural households			Urban households		
	I 1991– 92	II 2002– 03	III 2012– 13	IV 1991– 92	V 2002– 03	VI 2012– 13
Scheduled Caste	0.36	0.47	0.5	0.38	0.44	0.36
Scheduled Tribe	0.58	0.51	0.5	0.55	0.57	0.52
Muslim	–	0.8	0.79	–	0.61	0.53
OBC	–	1	1.04	–	0.83	0.76
Households other than Scheduled Castes and Tribes	1.28	1.24	1.24	1.08	1.12	1.13
Households other than Scheduled Castes, Scheduled Tribes, Muslims and OBC	–	1.90	1.94	–	1.52	1.71

Source: Calculated using AIDS data

Note: Comparable estimates for Muslim and OBC households not available for 1991–92

the overall asset inequality is on account of inequalities within different social groups in rural and urban areas, and how much of it is on account of disparities between social groups and on account of rural–urban disparities.<sup>8</sup> Table 9 presents the contributions of inequality within social groups, of the disparities across social groups, and of the disparities between rural and urban populations in total Theil inequality. These contributions are determined by inequality within each group, the share of each group in total value of assets, and average disparities between these groups (social groups, and rural and urban populations). The table brings out some important points.

First, in 2002–03, inequality within the rural population contributed about 60 per cent to the overall inequality while about 37 per cent was on account of inequality within the urban population. Between 2002–03 and 2012–13, there was an increase in both rural and urban inequality. However, over this period, there was a huge increase in overall share of urban households in total household wealth, both on account of an increase in the share of urban population as well as on account of a greater accumulation of assets in the urban areas. Consequently, in 2012–13, inequality among urban households came to be the major contributor to overall inequality, accounting for about 65 per cent of total asset inequality in India.

Secondly, Dalits, Adivasis and Muslims are disadvantaged as a group, and therefore have low within-group inequality. On the other hand, inequality is much higher within OBCs and within ‘other’ households, in both rural and urban areas. Between 2002–03 and 2012–13, there was a large increase in contribution of within-group inequality among urban ‘other’ households to total inequality.

**TABLE 9 Contribution of inequality within different social groups, between social groups, and between rural and urban households in all-India Theil asset inequality, 2002-03 and 2012-13**

	Asset shares		Theil index		Percentage contribution to all-India Theil index	
	2002-03	2012-13	2002-03	2012-13	2002-03	2012-13
<b>Rural</b>						
<i>Within social groups</i>						
Scheduled caste	0.07	0.03	0.73	0.78	4.8	1.9
Scheduled tribe	0.03	0.02	0.82	0.74	2.7	1.1
Muslim	0.05	0.03	0.88	0.88	4.2	1.8
OBC	0.24	0.19	0.80	0.72	18.8	10.1
Others	0.25	0.12	0.89	1.13	21.9	9.9
<i>Disparity between social groups in rural areas</i>	0.64	0.38	0.12	0.15	7.5	4.3
<i>Total rural</i>	0.64	0.38	0.96	1.01	60.1	29.1
<b>Urban</b>						
<i>Within social groups</i>						
Scheduled caste	0.02	0.03	0.86	0.88	1.9	1.7
Scheduled tribe	0.01	0.01	1.09	0.85	0.8	0.6
Muslim	0.03	0.03	0.88	1.08	2.7	2.6
OBC	0.09	0.12	1.10	1.01	9.8	8.9
Others	0.20	0.42	1.10	1.01	21.1	32.3
<i>Disparity between social groups in urban areas</i>	0.35	0.61	0.02	0.41	0.7	18.8
<i>Total urban</i>	0.35	0.61	1.08	1.42	37.0	64.9
<b>Rural-urban disparity</b>						
<i>Disparity between rural and urban households</i>			0.03	0.08	3.0	6.0
<b>Overall Theil Inequality Index</b>			1.02	1.32	100.0	100.0

Source: Calculated from AIDIS unit-level data for 2002-03, 2012-13, NSSO.

Thirdly, the Theil index for the disparities between households belonging to different social groups increased in both rural and urban areas between 2002-03 and 2012-13. In particular, with an increase in the asset share of urban households, disparities between social groups among urban households became a major contributor to overall disparities and accounted for almost 19 per cent of total asset inequality in India in

2012–13. Disparities between rural households belonging to different social groups accounted for another 4.3 per cent of total asset inequality.

Finally, the Theil index for rural–urban disparity also increased between 2002–03 and 2012–13. In 2012–13, about 6 per cent of overall asset inequality was on account of rural–urban disparity in average value of assets.

### Summary and Conclusions

Using household level data from three consecutive AIDIS covering a period of two decades (1991–92 to 2012–13), we find clear evidence of glaring and growing inequality of asset ownership in India. Different measures and different approaches indicate towards the same conclusion – inequality in asset ownership has risen during this period. The main conclusions of our analysis can be summarised as follows.

While inequality has risen in both rural and urban India, urban inequality is much higher than rural inequality. Also, the pace towards higher inequality is much faster in urban than in rural India. As indicated by Gini coefficients and relative asset positions for different assets, it turns out that the growing inequality, in both rural and urban India, was mostly driven by highly unequal holding of land and buildings, the two most important forms of asset.

Decomposition of asset inequality shows that asset inequality among urban households has emerged as a major contributor to overall asset inequality in India. There has been a significant rise in disparities across social groups as well as rural–urban disparities. While higher asset inequality is seen among OBCs and ‘other’ households, Dalits, Adivasis and Muslims face an overall disadvantage as a group. Social group disparities among urban households are, in particular, a major contributor to overall asset inequality in India.

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### Notes

- 1 Detailed item-wise information is available within each of these broad categories.
- 2 Vaidyanathan (1993) pointed out that valuation of some of the assets is likely to be problematic because of lack of sufficiently widespread and competitive markets for these assets.
- 3 All SC and ST households that reported their religion as Muslim were classified as per their caste status while OBC households that reported their religion as Muslim were classified as Muslims.
- 4 In the 59th round AIDIS, tractors (excluding trolley) were classified as part of agricultural machinery and implement. But in the 70th round, tractors were classified as transport equipment. For the sake of comparability across rounds, we reclassified tractors, trailers and associated equipment under agricultural machinery in the 70th Round.

- 5 The Gini coefficient is a measure of inequality that varies between 0 (a state of perfect equality) and 1 (a situation where one household owns all the wealth and others have nothing)
- 6 Davies et al. (2009) computed Gini for wealth distributions (measured in US Dollars using PPP exchange rates) for different countries including India for 2000. Their estimate of India's wealth Gini was 0.66, which was higher than that of Maldives (Gini=0.57), China (Gini = 0.55).
- 7 Vaidyanathan (1993) used the Wholesale Price Index (WPI) and Subramanian and Jayraj (2006) used both WPI and Consumer Price Index (CPI) as 'rough surrogates' for an asset price deflator. However, these indices do not capture price movements of major asset categories. Since real asset ownership cannot be computed in absence of a suitable asset price deflator, we use ratios of asset holdings of different groups to examine the pattern of disparities.
- 8 Theil Index is based on the concept of entropy. Its value ranges between 0 (a condition of perfect equality) and  $\ln(n)$  (a condition of worst inequality; where  $n$  is the total number of households).

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