

# The Official Poor in India Summed Up

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## *Abstract*

*This paper aims to identify the poor households in terms of the levels of poverty and inequality by using income data from the nation-wide 'National Survey of Household Income and Expenditure (NSHIE-2004-05)' of the NCAER. The definition used by the Tendulkar Committee (41.8 per cent poor in rural and 25.7 per cent poor in urban India) is applied by using the per capita income level for arriving at the official 'poor' households. Further, a comparative profile of the poor and non-poor households is presented by using various socio-economic indicators collected in the survey. For instance, the results of the survey reveal that around one-fourth of the 14 million odd official 'poor' households in urban India own a two-wheeler each, one-third of them own a colour television each, and almost two-third own a pressure cooker each. Almost one in five urban official 'poor' households has at least one well-educated member who is graduate or above, member. The paper also attempts to test the sensitivity of the poverty measures to the different deprivation ratios estimated by the Planning Commission, the World Bank, Arjun Sengupta (NCEUS report) and Suresh Tendulkar.*

*Key Words:* Income-expenditure survey, Income inequality, Poverty, Demographic profile

## **BACKGROUND**

The National Council of Applied Economic Research (NCAER) has a long-standing tradition of research on the income, investment and saving of Indian households. In the mid-1980s, NCAER conceived the Market Information Survey of Households (MISH) to link household demographics with household consumption behaviour for key consumables and consumer durables. Over time, more attention started being paid to the income data being generated as a by-product of the 'listing' exercise, conducted to establish the sampling frame for each round. This income data generated public policy interest in its own right, as an additional perspective on poverty findings generated by the NSS (Bery and Shukla, 2003). The income data also provoked interest in the private sector as a benchmark of the 'growth of the middle class'. This interest was, for instance, reflected in McKinsey and Company's report *The Bird of Gold*, to which NCAER contributed, and which used the NCAER classification of income categories in order to forecast income transitions in urban and rural India.

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The main concept of income used in MISH is the concept of ‘perceived monetary income’, which includes all income received by the household as a whole, and by each of its members, during the reference year. A major concern about MISH surveys was the adequacy of a single income question, “What is your annual household income from all sources?” In a recent publication, *The Great Indian Poverty Debate* (Deaton and Kozel, 2005), it has been emphasized that there is need for better income data, improvements in the data, and broadening of the indicators by which relevant policy issues may be objectively addressed.

As part of the continuing effort to improve estimates of household income, the MISH was accordingly completely redesigned in 2005 and thereafter called *National Survey of Household Income and Expenditure (NSHIE)*, under the advice and with the guidance of external statistical experts, to take better account of these emerging interests, while retaining comparability with the past. In particular, the questions on income were expanded and reformulated to reflect international conventions<sup>1</sup>, and the sample design and sample frame were redesigned and expanded to reflect this greater interest in income. The detailed survey of 63,016 households (including 31,446 rural and 31,570 urban households) followed an initial listing exercise of 4,50,792 households (including 2,10,439 rural households and 2,40,353 urban households) covering 24 major Indian states. The major finding of the study is published in a book entitled *How India Earns, Spends and Saves*, which was released by the Deputy Chairman of the Planning Commission, Mr. Montek Singh Ahluwalia, in Delhi on 6 February 2008 (Rajesh Shukla, 2007).

The primary objective of this paper is to re-examine the status of poverty and inequality in India by using the income data of NSHIE that incorporates state-level poverty lines for rural and urban areas put out by the Planning Commission, assuming nil savings for the population below the poverty line. The use of NSHIE income data becomes important in view of the fact that the NSS 61<sup>st</sup> round (2004-05) data on household consumer expenditure is available roughly for the same period<sup>2</sup>. This provides a unique opportunity to carry out a comparative analysis of both poverty and inequality by using these two data sets.

## **DESCRIPTION OF NSHIE INCOME DATA**

In 2005, NCAER conceptualized a “National Survey of Household Income and Expenditure (NSHIE)” by substantially modifying its existing MISH. While the existing features of MISH were retained, a detailed module on household income and an abridged module on household consumption expenditure were added. On the basis of experiences gained through a review of the best national and international practices<sup>3</sup>, meaningful and desirable changes were made in the survey procedures such as the approach, concepts and definitions, sample design and sample size, and the content of questionnaire to generate more robust and reliable estimates of the household income<sup>4</sup>. Some of the major features of NSHIE are:

- *Period:* The accounting period used for the income distribution analysis is one year as per recommendations, and similarly, the ‘household’ (implying a group of two or more persons living together in the same house and sharing common food or other arrangements for essential living) has been adopted as the basic statistical unit.
- *Concept of income:* A hierarchy of components of income is built up by providing definitions of the total disposable household income. The recommended practical definition of income has been adopted for use in making international comparisons of income. Approximately 56 components of income were covered in the survey and one hour was spent in collecting the income data. The major components of income covered in the survey are income from regular salary/wages, income from self-employment in non-agriculture, income from wages (agricultural labour and casual labour), income from self-employment in agriculture (crop production, forestry, livestock, fisheries, etc.), income from other sources such as rent (from leased out land and from providing accommodation and capital formation), the interest dividends received, and employer-based pensions.
- *Sample design:* The target population of the survey included the total population in the country, with states and urban/rural categories as the sub-populations or target groups. A three-stage stratified sample design has been adopted for the survey to generate representative samples. Sample districts, villages and households formed the first, second and third stage sample units, respectively, for selection of the rural sample, while cities/towns, urban wards and households, respectively, were the three stages of selection

for the urban sample. Sampling was done independently within each state/UT and estimates were generated at the state/UT level.

- *Sample size and its allocation:* The sample sizes during the first, second and third stages in the rural and urban areas were determined on the basis of the available resources and the derived level of precision for key estimates from the survey, taking into account the experience of NCAER in conducting the earlier surveys such as MISH, etc. A total of 63,016 households were covered in NSHIE, that is, about twice of those covered in MISH,2001, which is distributed over larger geographical areas, particularly in rural parts, to increase the reliability of estimates (Table 1). For instance, in rural areas, the realized sample of 31,446 households out of the preliminary listed sample of 2,10,439 households was spread over 1976 villages in 250 districts and 64 NSS regions covering the 24 states/UTs. Similarly, in urban areas, a sample of 31,570 households, out of a preliminary listed sample of 2,40,353 households, was spread over 2255 urban wards in 342 towns and 64 NSS regions covering the 24 states/UTs.

**Table 1**  
**Sample Distribution**

<b>Location</b>	<b>Units</b>	<b>MISH (2001-02)</b>	<b>NSHIE (2004-05)</b>
<b><i>Rural</i></b>	Districts	221	250
	Villages	858	1,976
	<i>Households</i>		
	Listed	96,000	210,439
	Selected	8,580	31,446
<b><i>Urban</i></b>	Towns/cities	666	342
	UFS blocks	3,100	2,255
	<i>Households</i>		
	Listed	320,000	240,353
	Selected	31,000	31,570
<b><i>Total</i></b>	<i>Households</i>		
	Listed	416,000	450,792
	Selected	39,580	63,016

Source: NSHIE (2004-05) and MISH (2001-02).

- *Selection of households:* In MISH, the listed households in each sample place (villages in the rural areas and urban blocks in urban areas) were stratified into five income bands<sup>5</sup> on the basis of the reported annual household income. These income bands were specific to NCAER and are adjusted in nominal terms each year to reflect constant levels of real

household income in the initial year. From each stratum (income band), households were selected independently with equal probability.

However, in the NSHIE, there is a major change in the selection and use of stratification variable. For instance, for the urban sample, all the listed households were grouped into seven strata based on the principal source of income (regular salary/wage earnings, self-employment and labour) and the level of MPCE (Rs. 800 or less; between Rs. 801 and Rs. 2,500; and above Rs. 2,500). Similarly, in the case of the rural sample, the land possessed and the principal source of income are used as the stratification variables. All the listed households were grouped into eight strata based on the principal source of income (agriculture, salary/wage earnings and labour) and the level of land possessed (less than 2 acres, 2-10 acres and more than 10 acres). From each of the above strata, two households were selected at random with an equal probability of selection.

## **VALIDATION OF CHOICES AND RELIABILITY OF ESTIMATES**

Income and expenditure surveys often tend to bring to the fore certain stark trends and statistics, and invariably doubts are raised over the reliability of such data. There are no foolproof procedures by which one could establish the reliability of all survey results. However, certain procedures, when adopted, could raise the degree of confidence in the findings from a survey. The most widely used and fruitful procedure is to compare the survey estimates with the estimates generated by other reliable sources.

### **Demographics**

The comparison of key characteristics of the household estimated from NSHIE along with the NSSO 61<sup>st</sup> Round and Census 2001 are reported in Table 2. According to the NSHIE, there are 205.9 million households in the country, of which 30 per cent (61.4 million) live in urban and the rest (144.5 million) in rural areas. Estimate of average household size from NSHIE (5.1 members) appears consistent with the estimates obtained from NSS 61st round (4.9 members) and Census 2001 (5.4 members). A similar pattern is also observed in the case of the sex ratio – from NSHIE we get sex ratio at 927 against 950 by the NSS and 933 by the Census 2001.

All the three data sources are also fairly comparable on some other parameters, such as the distribution of households by socio-religious groups. Observe that the distribution of

population for different religious groups in NSHIE appears to be slightly different compared to the NSS and Census estimates. This is largely due to one state (Jammu and Kashmir) and the UTs left out in NSHIE.

**Table 2**  
**Demographics**

Characteristics	Rural			Urban		
	NCAER (2004-05)	Census* (2001)	NSS* (2004-05)	NCAER (2004-05)	Census* (2001)	NSS* (2004-05)
Estimated households (Million)	145	138	148	61	56	56
Estimated population (Million)	732	742	721	295	286	245
Household size	5.1	5.4	4.9	4.8	5.1	4.4
<i>Distribution of households (per cent)</i>						
<b>Social Group</b>						
Scheduled Caste (SC)	18.3	17.9	21.5	12.8	11.8	15.3
Scheduled Tribe (ST)	10.6	10.4	10.6	2.8	2.4	2.9
Others	71.2	71.7	67.8	84.4	85.8	81.8
<b>Religion</b>						
Hindu	88.3	82.3	85.1	83.7	75.6	80.6
Muslim	8.1	12.0	10.1	10.6	17.3	13.4
Christian	1.6	2.1	2.1	2.6	2.9	2.6
Sikh	1.6	1.9	1.8	2.2	1.8	1.6
Others	0.3	1.7	0.9	0.9	2.5	1.8
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: NSHIE (2004-05), Census (2001) and NSS (2004-05).

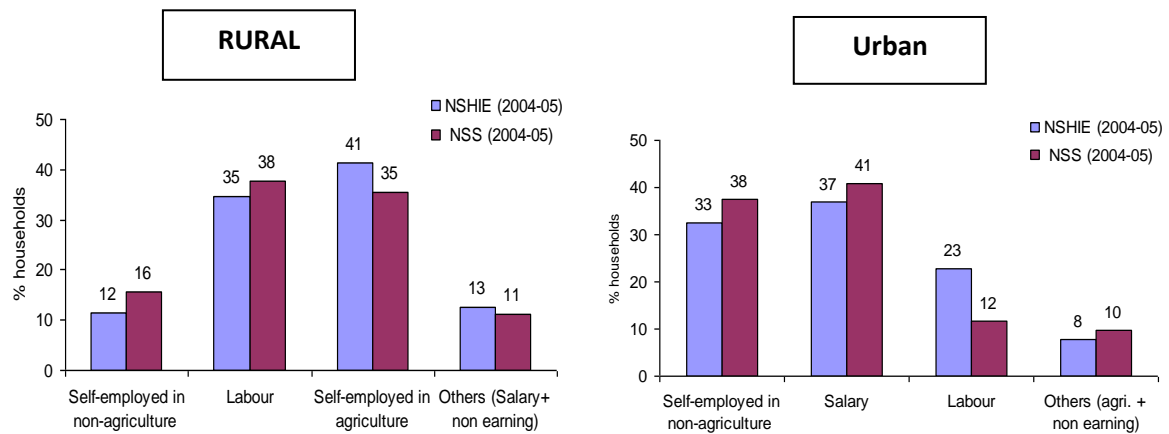
\* Author's calculation using Census 2001 for common states.

\*\* Author's calculation using the NSS 61<sup>st</sup> Round of consumption expenditure survey unit record data used for common states.

### Sources of Household Income

Labourers constitute the largest segment of the population, heading a little over 31 per cent of the country's households; self-employed agriculturists constitute the next largest segment (30.3 per cent), salaried households account for a little over 18 per cent, and the non-agricultural self-employed account for 17.5 per cent of the country's households. The figures differ for rural and urban areas—while the salaried account for just 10.5 per cent of the rural households, in urban areas, they account for 36.9 per cent of the total number of households.

**Figure 1: Distribution of Households by Source of Income**

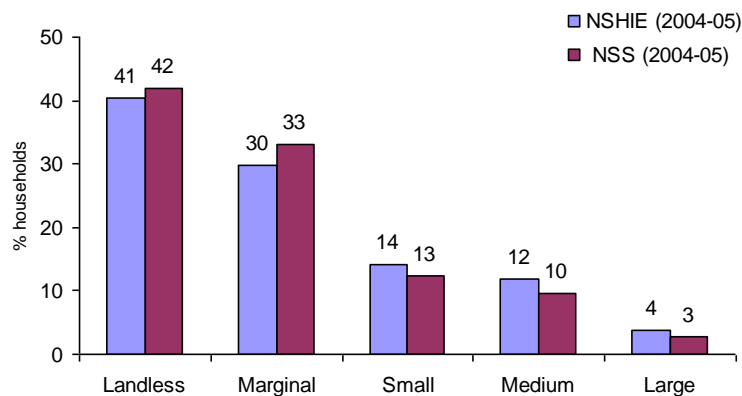


Sources: NSHIE (2004-05) and NSS (2004-05).

Similarly, the value of land owned by a rural household is perhaps an important indicator of the economic status of the household, which is certainly more relevant in the context of rural versus urban India. Nearly 40 per cent of the rural households in India do not possess any land while 30 per cent own between 0.1–2 acres of land.

The distribution of households by major sources of household income and land category from NSHIE appears consistent and fairly comparable with the estimates obtained from the NSS 61<sup>st</sup> Round (Figures 1 and 2).

**Figure 2: Distribution of Households by Land<sup>6</sup> Category—Rural**



Source: NSHIE (2004-05) and NSS (2004-05).

### **Estimates of Income, Expenditure and Saving**

The average household in India had an annual income of Rs. 65,041 in 2004-05, and an expenditure of Rs. 48,902, leaving it with a surplus of Rs. 16,139 to save and invest. Urban income levels are about 85 per cent more than the rural levels (Rs. 95,827 per annum versus Rs. 51,922 per annum). Since the expenses in urban areas are substantially higher (Rs. 69,065 per annum in urban areas versus Rs. 40,309 per annum in rural ones), the difference in the surplus income (of urban and rural areas) that could be saved or invested is not all that huge. As a result, the average urban household saves nearly double that of a rural household (Rs. 26,762 per annum in urban areas versus Rs. 11,613 for rural areas).

**Table 3**  
**Estimates of Household Average Income, Expenditure and Savings**  
**(Rs. per annum)**

<b>Location</b>	<b>Average Household Income</b>	<b>Average Household Expenditure</b>	<b>Average Household Savings</b>	<b>Savings/Income Ratio</b>
Rural	51,922	40,124	11,798	22.7
Urban	95,827	68,352	27,475	28.7
All India	65,041	48,558	16,483	25.3

*Source: NSHIE (2004-05).*

A common problem encountered in the case of income expenditure surveys is the under-statement of economic data (in terms of income, expenditure and savings) by the respondents. This leads to a higher margin of error in the estimates of income and expenditure. The gross income, as estimated by NSHIE, is found to be about 53 per cent of the personal disposable income provided by the National Accounts Statistics (NAS). An estimate of the surplus income (as an indicator of savings) is arrived at by subtracting the total household expenditure from the total household income. Through this method, this survey found estimates of savings as a proportion of the disposable income to be 25 per cent, as against the official estimate of 27.1 per cent for the year 2004-05.



**Table 4**  
**Estimates of Income, Expenditure and Savings**

Characteristics	NSHIE (2004-05) (24 states)	CSO (2004-05) (All India)	Ratio of NSHIE/CSO (%)
Estimated population (million)	1,027	1,090	94.2
Estimated households (million)	205.4	230.1	89.3
Personal disposable income (Rs. billion)	13,390	25,330	52.9
Private final consumption expenditure (Rs. billion)	10,044	18,900	53.1
Household saving (Rs. billion)	3,346	6,870	48.7
Saving rate (%)	25.0	27.1	92.3

*Source:* NSHIE (2004-05) and CSO (2004-05).

These differences in estimates can be attributed to the following factors. Firstly, this survey did not cover some of the smaller states and Union Territories which account for about 4 per cent of the population. Secondly, according to the Central Statistical Organization (CSO), the household sector by definition comprises individuals, non-government non-corporate enterprises of farm business and non-farm business like sole proprietorships and partnerships, and non-profit institutions. This survey, on the other hand, covers only households. Thirdly, certain components of income are not perceived as income by the respondents and hence they get excluded from incomes reported in income surveys. Items like reimbursements for travel, medical and other such expenses are not reported correctly in this survey.

### **Estimates of Sampling Error**

In order to check the reliability of data, a variety of methods are used. The most common among them is the evaluation of sampling and non-sampling errors. Sampling errors are measurable within the framework of the sample design and are also controllable by varying the size of the sample. For instance, the average income per household is Rs. 65,041 and its standard error is Rs. 4; the average amount of life insurance payments made per household is Rs. 1,227 and its sampling error is negligible, at Rs 1. About 6.2 per cent of all urban households reported payments towards life insurance and their (average) insurance payment amounts to Rs. 2,528. This estimate is subject to a standard error of Rs. 2.

**Table 5**  
**Estimates of Standard Errors**

<b>Per capita Income Quintile</b>	<b>% Share in Households</b>	<b>% Share in Total Income</b>	<b>Per Capita Income (Rs. Per Annum)</b>	<b>Standard Error of Mean</b>	<b>Standard Error (%)</b>	<b>Coefficient of Variation (%)</b>
Q1 Bottom quintile (0-20%)	18.0	6.3	3,692	1.40	0.0072	45.9
Q2 Second quintile (21-40%)	18.8	10.1	6,205	2.00	0.0063	40.7
Q3 Middle quintile (41-60%)	20.4	14.4	8,905	2.90	0.0066	42.4
Q4 Fourth quintile (61-80%)	20.7	21.3	13,311	4.50	0.0067	43.2
Q5 Top quintile (81-100%)	22.1	48.0	33,020	9.60	0.0059	37.9
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>13,018</b>	<b>3.60</b>	<b>0.0055</b>	<b>79.5</b>

*Source:* NSHIE (2004-05).

The standard error and coefficient of variation of the estimated average household income for various income quintiles is consistent and within permissible limits. This generates a fair degree of confidence in the estimates presented in this paper.

Another important source of error, which can vitiate the estimates, is the non-response rate. In the case of this survey, it was about 3 per cent and caused largely by unanticipated reasons such as the psychology of the respondent. Non-sampling errors arise mainly from three sources. Firstly, respondents refuse to cooperate and deny information; they supply partial information that may not be usable; or they deliberately provide false information. Secondly, the interviewers are also prone to have some preconceived notions whereby some biases creep into the schedules. Thirdly, the respondents may not remember all the relevant numbers sought by the interviewers. And this tends to considerably increase the margin of error in the data collected. There is no satisfactory procedure for a precise measurement of non-sampling errors. A team consisting of trained interviewers (250), supervisors (50), and NCAER professionals (14) from different language groups was engaged for about four months to undertake the task of primary data collection. The field team was thoroughly trained through all the phases of the surveys. Every care was taken to implement maximum possible quality control in recording the answers of the respondents.

## ESTIMATES OF POVERTY AND INEQUALITY

### Income Inequality: At the Aggregate Level

Disparities of income may be better understood by splitting households into per capita income quintiles. For instance, the findings of this survey reveal that people belonging to the lowest income quintile (Q1) have a mean annual per capita income of Rs. 3,692. While they comprise 18 per cent of the households, their share in the total incomes is only 6.3 per cent. In contrast, the highest income quintile (Q5) accounts for 22.1 per cent of the households, but 48 per cent of the total income. At Rs. 33,020 per annum, the mean annual per capita income of the top-most quintile is about nine times that of the lowest quintile. The figures for rural and urban areas are 8.3 and 9.9 times, respectively.

Gini<sup>7</sup> is calculated by using NSHIE income data after ranking the households according to the per capita income. At the aggregate level, the value of Gini is 0.466; the Gini ratio of urban areas (0.448) is higher than that of rural areas (0.429). The level of income inequality in India is higher than in some of the developed countries like the United States (0.408), Hong Kong (0.434), and Singapore (0.425), but lower than in the high-income inequality countries such as Argentina (0.528), Chile (0.571), Brazil (0.580), and Namibia (0.743) (UNDP Human Development Report, 2006).

**Table 6**  
**Income Distribution by Per Capita Income Quintiles (2004-05)**  
**(Percentage Share in Households and Income)**

Per capita income quintile	Rural			Urban			All India		
	% Share in total households	% Share in total income	Per capita income (Rs. Per annum)	% Share in total households	% Share in total income	Per capita income (Rs. Per annum)	% Share in total households	% Share in total income	Per capita income (Rs. Per annum)
Q1-Bottom quintile (0-20%)	17.9	6.7	3,091	18.1	5.8	5,166	18.0	6.3	3,692
Q2-Second quintile (21-40%)	18.9	10.3	4,990	18.7	9.8	9,250	18.8	10.1	6,205
Q3-Middle quintile (41-60%)	20.5	14.2	6,961	20.1	14.6	13,708	20.4	14.4	8,905
Q4-Fourth quintile (61-80%)	20.8	20.9	10,333	20.4	21.8	20,708	20.7	21.3	13,311
Q5-Top quintile (81-100%)	21.9	47.9	25,785	22.7	48.1	50,953	22.1	48.0	33,020
<b>Total</b>	<b>100.0</b>	<b>100</b>	<b>10,227</b>	<b>100.0</b>	<b>100</b>	<b>19,935</b>	<b>100.0</b>	<b>100</b>	<b>13,018</b>

Source: NSHIE (2004-05).

We have used state-wise expenditure poverty lines (EPL) for 2004-05, as defined by the Planning Commission, to calculate the poverty ratio based on the NSHIE income data, assuming that at the lower end of the distribution, the income is either lower or equal to the household expenditure. It is estimated that 214 million persons out of an estimated population of 1,027 million fall under the category of poor. This gives an all-India incidence of the poverty estimate of 20.8 per cent. The incidence of income poverty in rural and urban areas is estimated to be 21.7 per cent and 18.7 per cent, respectively.

The estimates of HCR and Gini coefficient obtained from NSHIE are compared with another NCAER income data, the Micro Impacts of Macro-economic and Adjustment Policies (MIMAP)<sup>8</sup> corresponding to 1994-95. The share of income of the bottom quintile declined by over half a percentage point (0.6) and the top quintile increased by 3.2 points during the period 1995–2004. At the individual level, the Gini ratio increased to 0.47 in 2004-05 relative to the figure of 0.43 in 1994-95.

**Table 7**  
**Income Distribution: A Comparison**  
**(Percentage Share in Households and Income)**

Per Capita Income Quintile Group	MIMAP (1994-95)			NSHIE (2004-05)		
	<i>Rural</i>	<i>Urban</i>	<i>All-India</i>	<i>Rural</i>	<i>Urban</i>	<i>All-India</i>
Q1-Bottom quintile (0-20%)	7.0	6.0	6.9	6.7	5.8	6.3
Q2-Second quintile (21-40%)	11.2	10.6	11.0	10.3	9.8	10.1
Q3-Middle quintile (41-60%)	15.7	15.5	15.6	14.2	14.6	14.4
Q4-Fourth quintile (61-80%)	21.5	22.4	21.7	20.9	21.8	21.3
Q5-Top quintile (81-100%)	44.6	45.5	44.8	47.9	48.1	48
Total	100.0	100.0	100.0	100	100	100
Average household income (Rs. Per annum)	27,411	57,675	35,103	51,921	95,822	65,038
Per capita income (Rs. Per annum)	4,860	11,309	6,499	10,227	19,935	13,018
Household size	5.6	5.1	5.5	5.1	4.8	5.0
HCR (%)	28.6	14.8	25.1	21.7	18.7	20.8
Gini	0.380	0.390	0.430	0.429	0.448	0.466

*Source:* NSHIE (2004-05) and the NCAER MIMAP (1994-95).

Another important point is that in 2004-05, the rural HCR declined by about 7 percentage points as compared to 1994-95. But in the urban sector, the income-based HCR appears to have increased. However, the MIMAP urban sample seems to exhibit under-representation of urban areas, especially in smaller towns and the incidence of urban poverty from the two sources may not be strictly comparable. It is, therefore, safe to conclude that the unprecedented growth in the economy driven by the impressive growth performance of the non-agricultural sector is not making the desired effect on poverty incidence, more so in the urban sector.

The HCR obtained from the NSHIE income data has similar levels and spatial variation as those put out by the Planning Commission using NSSO expenditure data (the NSS 61<sup>st</sup> Round). However, the Gini coefficient at 0.466, calculated from the NSHIE income data, is significantly higher than those obtained from the NSS CES data (0.30 and 0.27 for rural and urban India, respectively), more prominently in the urban areas. The second point to be noted is that the income-based Gini in 2004-05 increased by about 12.9 per cent in rural areas and 14.9 per cent in urban areas over the 1994-95 MIMAP-based calculations. The level of inequality in 2004-05, therefore, is even higher than that reported for some of the developed countries<sup>9</sup>. The true account of the level of inequality has not been available in India so far as most studies have been using NSS CES data, which always showed relative stability of inequality in India. While in a recent study, Debroy and Bhandari (2007) observe that there is a substantial increase in inequality in the urban areas, the calculation from NSHIE suggests that in the rural areas, the inequality is not only high but has been rising at the same rate as in the urban areas.

### **Estimates of Vulnerability**

The findings from the previous sections suggest that while the poverty incidence from NSHIE is comparable with that obtained from the NSSO CES data, it is the level and change in inequality as indicated by the Gini coefficient which is substantially higher. This explains at, least partly, the deceleration and/or stagnation in the rate of decline in poverty. These findings have important implications for the vulnerability of the households as the benefits accruing from the surge in economic growth over the past two decades are being concentrated among richer households.

The vulnerability of the households has entered the contemporary discourse. The National Commission on Enterprises in the Unorganized Sector (NCEUS) estimated that there are a large number of households in India which live on less than Rs. 20 per person per day. In this section, we report the proportion of ‘vulnerable households’ using NSHIE data (Table 8).

**Table 8**  
**Estimates of Poverty and Vulnerability**

<b>Location</b>	<b>Poverty Ratio (%): PCPL</b>	<b>Poverty Ratio (%): PCPL*2</b>	<b>PCI&lt; Rs.20 per Day</b>
Rural	21.7	61.7	52.7
Urban	18.7	48.1	19.7
Total	20.8	57.8	43.2

*Source: NSHIE (2004-05).*

*Notes:*

1. In column 2, the poverty ratio (HCR) is calculated by using the state and sector-wise poverty line released by the Planning Commission, Government of India.
2. In column 3, the Planning Commission's state-level urban and rural consumption poverty line is doubled and then applied directly to the household per capita income distribution state-by-state.
3. Column 4 reports the share of the population living on an income below Rs. 20 per capita per day.

On application of the definition of vulnerability used by the NCEUS, the share of the population calculated from the NSHIE indicates that the estimate of the vulnerable population (the poor, plus those falling between the PL and PL\*2) at less than 58 per cent is way below the figure of 77 per cent calculated in the NCEUS report (GOI, 2008). However, when we applied the mean per capita per day expenditure of the vulnerable group as defined in the NCEUS report, we got the figure of 43.3 per cent of the Indian population, which earns less than Rs. 20 per person per day. This is a whopping 33 per cent lower than the share of the population shown as poor and vulnerable in the NCEUS report. The rural–urban break-up of the poor and vulnerable groups suggests that the bulk of those falling in the poor and vulnerable category (that is, those earning less than Rs. 20 per capita per day) belong to the rural areas (close to 53 per cent of the population in the rural sector) whereas the corresponding figure in the urban sector is only about 20 per cent. In fact, the urban figure is less than even the poverty ratio for the urban sector (mixed recall period, 22.1 per cent).

## **Profile and Characteristics of ‘Poor Households’**

An important issue in policy matters is the targeting of poverty alleviation programmes for the poor. For this, one has to identify the poor. To identify the poor, one needs to find answers to the following questions: Who are they? Where do they live? What they do? What is their level of education? Consequently, we have attempted to identify the poor by observable characteristics, that is, by their socio-economic parameters. In this connection, we tried to study the profile of ‘poor people’ following the definition of the Tendulkar Committee. We have applied the official poverty ratios separately for rural (41.8 per cent) and urban areas (25.7 per cent) on NCAER’s National Survey of Household Income and Expenditure (NSHIE) data, 2004-05. In other words, we tried to study the bottom 41.8 per cent population in rural India after identifying the rural households on the basis of the per capita income, similarly, at 25.7 per cent in the case of urban India.

The household is the basic unit of analysis in this section as many of the parameters assessed here are not dependent on the individual. For example, the principal occupation of the household makes sense, while an individual usually reports one’s own occupation. Income is earned by an individual, but consumption is shared among the members of the household.

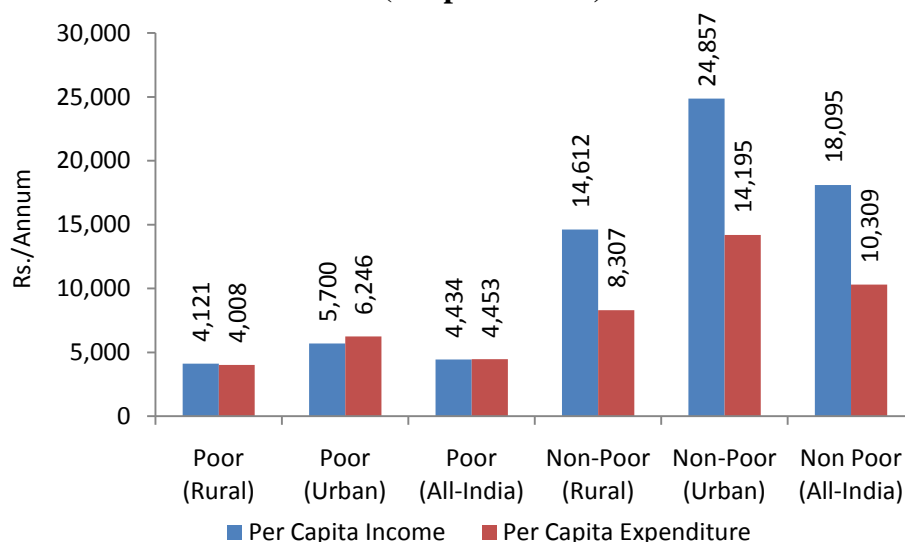
In the next sub-section, a socio-economic profile of the households has been discussed. It is followed by an analysis of the four major socio-economic characteristics of the household, namely the household size, social group of the household, the principal occupation of the household (in terms of the major source of income) and the education level of the chief earners, which is discussed in the sub-section titled ‘Socio-economic Characteristics’. For our purpose and interest, we report these details at the sectoral (rural–urban) level only. However, here we look at the characteristics of the non-poor also to be able to compare and contrast the characteristics of the two groups, that is, the poor and the non-poor.

### *Socio-economic Profile*

It is observed from NSHIE 2004-05 data that the per capita annual income of the poor household was Rs. 4,434 in 2004-05, whereas for the non-poor, it was Rs. 18,095. The differences in income between the poor and non-poor households were greater in urban than in rural India. It should be noted that the annual per capita income and the annual per capita

expenditure of the poor household is more or less the same whereas for the non-poor households, the annual per capita income is more than the annual per capita expenditure (Tables 9 and 12). The non-poor households spend about 57 per cent of their total incomes, in both rural and urban India.

**Figure 3: Average Per Capita Income and Expenditure of the Household (Rs. per annum)**



Source: NSHIE (2004-05).

It should also be noted that poor households spend about 60 per cent of their total annual per capita expenditure on food whereas the non-poor spend only 49 per cent (Table 4.4). This may be due to the fact that the volume of expenditure of non-poor household is more than the poor households (more than double) and the average household size is less in case of non-poor than the poor. This pattern is same for both rural and urban areas. Regarding expenditure on education, the non-poor households spend more than poor households. While in the case of expenditure on health, both the poor and non-poor households spend about 5 per cent of their total expenditure.

NSHIE 2004-05 reveals that about a fourth of the 14 million odd BPL households in urban India own a two-wheeler, a third of them a colour TV and more than half a pressure cooker. NSHIE 2004-05 also reveals that out of total 47 million non-poor urban households in India, about two-thirds own a two-wheeler, more than three-fourth a color TV, approximately 90 per cent of them own a pressure cooker and a little less than one-fifth own a car.



The 56 million-strong rural BPL population too exhibits varying degrees of consumption. While every tenth household has a two-wheeler (out of rural non- poor, every fourth of ten households possess a two- wheeler), every fifth BPL village kitchen and every second non- poor village kitchen has a pressure cooker, and about 6 per cent rural poor households and 36 per cent rural non- poor households a color TV.

It is also noted that about 28 per cent of the poor households were having outstanding loan. For non-poor households it was 22 per cent. It is also surprising to note that about 23 per cent rural non-poor households were carrying BPL cards.

**Table 9**  
**Socio-economic Profile**

Characteristics	Poor			Non-poor		
	Rural	Urban	All	Rural	Urban	All
Per capita income (Rs./annum)	4,121	5,700	4,434	14,612	24,857	18,095
Per capita expenditure (Rs./annum)						
Food	2,504	3,281	2,659	4,383	6,291	5,032
Education	213	434	257	566	1,207	784
Health	182	295	205	396	662	486
Others	1,109	2,236	1,333	2,962	6,035	4,007
Total	4,008	6,246	4,453	8,307	14,195	10,309
Share to total expenditure (%)						
Food	62.5	52.5	59.7	52.8	44.3	48.8
Education	5.3	6.9	5.8	6.8	8.5	7.6
Health	4.5	4.7	4.6	4.8	4.7	4.7
Others	27.7	35.9	29.9	35.6	42.5	38.9
Total	100.0	100.0	100.	100.	100.	100.0
% of Households owning						
Bicycle	70.1	63.8	68.8	68.5	49.6	61.9
Radio	47.3	40.6	46.0	55.5	43.6	51.4
Pressure cooker	18.6	55.9	26.2	50.4	87.8	63.5
Colour television	6.3	30.3	11.1	35.7	77.9	50.4
Refrigerator	0.9	10.5	2.9	11.8	54.3	26.6
Two-wheeler	9.0	24.9	12.2	39.0	63.9	47.7
Car	0.5	1.7	0.7	4.2	17.7	8.9
% of Households owning						
<i>Kuchha</i> houses	54.7	17.0	47.1	22.7	3.2	15.9
BPL card	46.2	33.7	43.7	24.7	14.5	21.2
Loan outstanding	28.4	24.1	27.5	23.2	19.9	22.0

Source: NSHIE (2004-05).

### *Socio-economic Characteristics*

The average household size is discussed in the following sub-section. This is followed by a discussion of the distribution of households by social groups in sub-section (b). Sub-section (c) describes the household distribution by the level of education of the chief earners. Finally, the distribution of household by type of occupation is given in sub-section (d.)

(a) Average Household Size: The household size simply implies the number of persons, including children, in the household. The average household size is computed for the poor and non-poor households separately, and reported in Table 10 for all the three socio-economic groups by rural and urban sectors. It is found that the household size was invariably higher for the poor than the non-poor in both the sectors in all the three groups. In the rural sector in 2004-05, the average household size of the poor was 5.40 while that of the non-poor was 4.81. Similarly, in the urban sector, it was 5.40 for the poor and 4.71 for the non-poor.

The household size does vary quite a bit across the social and education groups in both rural and urban areas for both the poor and the non-poor. But the variation is quite high across the occupation groups, particularly in rural areas for both the poor and the non-poor households. The largest average rural poor household was in the 'regular salary' (6.20) category whereas the lowest was found in the 'labour' (5.20) category.

An interesting question is as to why the poor households are larger than the non-poor ones. In general, the child mortality rate is higher for poor households; they are barely educated and also have inadequate access to basic services like healthcare and sanitation. The higher child mortality rate is possibly due to the fact that they have access to only poor medical and sanitation facilities. This encourages a higher fertility rate among the poor households. However, this does not imply that they have larger household sizes after taking into account their much larger infant mortality rates. The poor, on the other hand, have lower costs of bringing up a child, as often, he or she joins the labour force at an early age and augments the family income. A child, therefore, could be considered as an asset in poor households. Nevertheless, families with more children increase the dependency ratio and, hence, lower the per capita total expenditure of the household. The larger size of the poor

households is, therefore, a dilemma that may not be explained through economic factors alone. Clearly, issues like education, healthcare, sanitation, culture and access to information on family planning need to be examined in detail.

**Table 10**  
**Average Household Size**

	Population Groups	Poor			Non-poor		
		Rural	Urban	All	Rural	Urban	All
<b>Social Group</b>	Scheduled Caste (SC)	5.40	5.32	<b>5.38</b>	4.72	4.72	<b>4.72</b>
	Scheduled Tribe (ST)	5.14	4.86	<b>5.12</b>	4.42	4.60	<b>4.45</b>
	Other Backward Caste (OBC)	5.57	5.31	<b>5.51</b>	4.81	4.58	<b>4.74</b>
	Others	5.59	5.45	<b>5.55</b>	4.99	4.68	<b>4.85</b>
<b>Primary Source of Income</b>	Regular salary/wages	6.32	5.47	<b>5.79</b>	5.15	4.62	<b>4.83</b>
	Self-employed in non-agriculture	5.91	5.89	<b>5.90</b>	5.03	4.90	<b>4.96</b>
	Labour	5.22	5.05	<b>5.18</b>	4.19	4.19	<b>4.19</b>
	Self-employed in agriculture	5.80	5.79	<b>5.80</b>	4.97	5.35	<b>4.98</b>
	Others	4.93	5.44	<b>5.16</b>	4.85	4.12	<b>4.48</b>
<b>Level of Education of the Chief Earner</b>	Illiterate	5.43	5.37	<b>5.42</b>	4.63	4.72	<b>4.64</b>
	Up to the primary level	5.42	5.43	<b>5.43</b>	4.79	4.82	<b>4.79</b>
	Middle level + Matriculate	5.50	5.24	<b>5.43</b>	4.82	4.66	<b>4.77</b>
	Higher secondary level	5.68	5.33	<b>5.56</b>	5.02	4.57	<b>4.81</b>
	Graduate and above	5.70	5.54	<b>5.61</b>	5.12	4.62	<b>4.80</b>
	Others	5.69	3.56	<b>5.33</b>	5.17	5.01	<b>5.09</b>
	Total	5.46	5.34	<b>5.44</b>	4.83	4.65	<b>4.77</b>

Source: NSHIE (2004-05).

(b) Household Social Groups: NSHIE has information about the social group of the surveyed households. There were four social groups reported in the study, viz., Scheduled Tribe (ST), Scheduled Caste (SC), Other Backward Caste (OBC) and Others. Table 11 shows the distribution of the households and income among the four social groups for the poor and non-poor households in both rural and urban areas.

**Table 11**

**Distribution of Households and Income across Social Groups**

Social Group	Distribution of Households (%)			Distribution of Income (%)		
	Poor	Non-poor	Total	Poor	Non-poor	Total
<b>RURAL</b>						
Scheduled Caste (SC)	9.6	8.7	18.3	4.1	9.6	13.6
Scheduled Tribe (ST)	6.1	4.5	10.6	2.3	5.4	7.7
Other Backward Caste (OBC)	15.7	26.9	42.5	7.0	35.4	42.4
Others	7.5	21.0	28.6	3.5	32.8	36.3
<b>Total</b>	<b>38.8</b>	<b>61.2</b>	<b>100.0</b>	<b>16.8</b>	<b>83.2</b>	<b>100.0</b>
<b>URBAN</b>						
Scheduled Caste (SC)	4.4	8.5	12.8	1.4	8.0	9.4
Scheduled Tribe (ST)	1.0	1.7	2.8	0.3	1.7	2.0
Other Backward Caste (OBC)	10.6	26.9	37.4	3.3	28.4	31.7
Others	7.1	39.8	46.9	2.4	54.6	56.9
<b>Total</b>	<b>23.1</b>	<b>76.9</b>	<b>100.0</b>	<b>7.3</b>	<b>92.7</b>	<b>100.0</b>
<b>ALL-INDIA</b>						
Scheduled Caste (SC)	8.0	8.6	16.7	2.9	8.9	11.8
Scheduled Tribe (ST)	4.6	3.7	8.2	1.4	3.8	5.2
Other Backward Caste (OBC)	14.2	26.9	41.0	5.4	32.3	37.7
Others	7.4	26.6	34.1	3.0	42.4	45.4
<b>Total</b>	<b>34.2</b>	<b>65.8</b>	<b>100.0</b>	<b>12.7</b>	<b>87.3</b>	<b>100.0</b>

Source: NSHIE (2004-05).

An interesting comparison in the incidence of poverty within a social category is observed from the data. In 2004-05, about 55 per cent of the ST households, 48 per cent of the SC households, 35 per cent of the OBC households and only 22 per cent of the other households as a percentage of the total number of households, respectively, in that category were poor. In other words, the probability of a household being poor is much higher if the household belongs to is the SC or ST or OBC category, than if the household belongs to any other caste. This relative comparison indicates that the caste factors continue to play a significant role in the incidence of poverty among households.

This finding is more conspicuous when one examines the percentage of the non-poor households as a proportion of the total number of households in the country. It has been found that only around 4 per cent of the ST households were non-poor in 2004-05 followed by SCs at 8.6 per cent whereas the number of non-poor households belonging to OBCs and

other castes were about 27 per cent each, and this poverty was more pronounced in urban areas as compared to rural areas, particularly for other castes (39.8 per cent). It may be said that ST households have fared relatively worse than households of other categories throughout India, and in both the rural and urban areas.

**Table 12**

**Distribution of Households and Income within Social Groups**

Social Group	Poor			Non-poor		
	<i>Distribution of Poor Households (%)</i>	<i>Distribution of Income (%)</i>	<i>Gini Ratio (Based on PCI)</i>	<i>Distribution of Non-poor Households (%)</i>	<i>Distribution of Income (%)</i>	<i>Gini Ratio (Based on PCI)</i>
<b>RURAL</b>						
Scheduled Caste (SC)	24.7	24.1	0.16	14.3	11.5	0.30
Scheduled Tribe (ST)	15.6	13.5	0.18	7.4	6.5	0.36
Other Backward Caste (OBC)	40.4	41.7	0.16	43.9	42.5	0.34
Others	19.3	20.8	0.15	34.4	39.5	0.36
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>0.16</b>	<b>100.0</b>	<b>100.0</b>	<b>0.35</b>
<b>URBAN</b>						
Scheduled Caste (SC)	18.9	18.6	0.16	11.0	8.7	0.34
Scheduled Tribe (ST)	4.5	3.9	0.16	2.3	1.8	0.32
Other Backward Caste (OBC)	45.8	45.3	0.15	34.9	30.6	0.35
Others	30.9	32.1	0.17	51.8	58.9	0.39
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>0.16</b>	<b>100.0</b>	<b>100.0</b>	<b>0.38</b>
<b>ALL-INDIA</b>						
Scheduled Caste (SC)	23.5	22.7	0.18	13.1	10.2	0.34
Scheduled Tribe (ST)	13.3	11.0	0.19	5.6	4.3	0.36
Other Backward Caste (OBC)	41.5	42.6	0.18	40.8	37.0	0.36
Others	21.7	23.7	0.18	40.5	48.5	0.40
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>0.18</b>	<b>100.0</b>	<b>100.0</b>	<b>0.39</b>

Source: NSHIE (2004-05).

The other interesting finding is that the poor households in the country contribute only 13 per cent of the total household income. It is needless to say that these poor households constitute about 34 per cent of the total number of Indian households. It is interesting to note that they contribute much less in the total household income in the country as compared to their share in the population and this is true irrespective of the social groups. But the non-poor, OBCs and other caste households are contributing a much higher income as compared to their population share. However, the non-poor SCs and STs contribute more or less the same as compared to their population share.

Another contrasting picture is that the inequality of income is much higher among non-poor households than the poor households, and this applies irrespective of caste and the place of residence. The Gini co-efficient for the rural poor is only 0.16 whereas the same for the non-poor is more than double (0.39). The inequality of poor households is more or less same for all social groups but in the case of non-poor households, the inequality is high for all the social groups as compared to the poor households. It is very high among other caste households as compared to SCs, STs and OBCs.

#### (c) Household Occupation Groups (Major Source of Income)

Here we have categorized households by the principal occupation. It is, of course, possible for a household to have members with occupation codes that cover more than one category. The principal occupation of the household is the occupational category that accounts for the major source of the household's income. All the major sources<sup>10</sup> of household income were captured in the NSHIE study. However, for the sake of analysis, we have clubbed all the sources of income into five categories. Agricultural and casual labour has been clubbed into one category and has been termed as 'Labour'. Similarly, sources like rental income, pension, social insurance, etc. have been clubbed into one category and termed as 'Others'. Table 13 shows the distribution of the households and income among the five occupational groups for the poor and non-poor households in both rural and urban areas.

It is usually believed that the casual labour households would be poor. It is found that a majority (62 per cent) of such households were indeed poor in 2004-05. Among all the poor households, about 59 per cent of the households were labour households followed by the self-employed in agriculture households, which accounted for 27 per cent of the total. Alternately, if a household is classified in the 'regular salary/wages' group, its chances of being non-poor are very high (92.1 per cent, that is, 100-7.9).

It may be a fact that the contribution of the labour occupation households in the total household income would be lower as compared to their share in the population. The data also suggest that 20 per cent of the poor labour households in the country contribute only 7 per cent of the total household income. On the contrary, only 17 per cent of the non-poor salary earner households contribute about 31 per cent of the total household income. It should be noted that the non-poor labour households constitute about 13 per cent of the total number of households in the country, but they contribute only 8.6 per cent of the total household income.

Table 13

## Distribution of Households and Income across Occupation Groups

Major Source of Income	Distribution of Households			Distribution of Income		
	Poor	Non-poor	Total	Poor	Non-poor	Total
<b>RURAL</b>						
Regular salary/wages	0.8	9.4	10.2	0.4	19.9	20.3
Self-employment in non-agriculture	2.0	9.2	11.2	1.0	13.6	14.6
Labour	22.9	13.5	36.3	9.2	10.8	20.0
Self-employment in agriculture	12.8	27.3	40.1	6.0	36.1	42.1
Others	0.4	1.8	2.2	0.1	2.8	2.9
<b>Total</b>	<b>38.8</b>	<b>61.2</b>	<b>100.0</b>	<b>16.8</b>	<b>83.2</b>	<b>100.0</b>
<b>URBAN</b>						
Regular salary/wages	3.1	34.7	37.8	1.1	44.1	45.2
Self-employment in non-agriculture	5.4	25.4	30.8	2.0	36.1	38.1
Labour	13.3	10.2	23.5	3.8	5.9	9.7
Self-employment in agriculture	0.6	2.1	2.7	0.2	2.4	2.6
Others	0.7	4.4	5.1	0.2	4.2	4.4
<b>Total</b>	<b>23.1</b>	<b>76.9</b>	<b>100.0</b>	<b>7.3</b>	<b>92.7</b>	<b>100.0</b>
<b>ALL-INDIA</b>						
Regular salary/wages	1.5	17.0	18.4	0.7	30.6	31.3
Self-employment in non-agriculture	3.0	14.0	17.1	1.4	23.5	24.9
Labour	20.0	12.5	32.5	6.9	8.6	15.5
Self-employment in agriculture	9.2	19.8	28.9	3.5	21.3	24.7
Others	0.5	2.6	3.1	0.2	3.4	3.6
<b>Total</b>	<b>34.2</b>	<b>65.8</b>	<b>100.0</b>	<b>12.7</b>	<b>87.3</b>	<b>100.0</b>

Source: NSHIE (2004-05).

As in the case of social group characteristics, it is found that the inequality of income is much higher among the non-poor households than the poor households, and this applies irrespective of the occupation groups and place of residence. The Gini co-efficient was as high as 0.42 for the non-poor self-employed in agriculture households as compared to the other households. It should be noted that the inequality in income was less in the case of both the poor and the non-poor labour households as compared to their counterparts in both the rural and urban areas. Again, the inequality in the income of the poor households was more or less the same for all the occupation groups, but in the case of the non-poor households, the inequality was high for all the occupation groups except the labour households.

Table 14

## Distribution of Households and Income within Occupation Groups

Major Source of Income	Poor			Non-poor		
	Distribution of Poor Households (%)	Distribution of Income (%)	Gini Ratio (Based on PCI)	Distribution of Non-poor Households (%)	Distribution of Income (%)	Gini Ratio (Based on PCI)
<b>RURAL</b>						
Regular Salary/wages	2.0	2.6	0.13	15.4	23.9	0.32
Self-employment in non-agriculture	5.2	6.1	0.15	15.0	16.3	0.34
Labour	58.9	54.7	0.16	22.0	13.0	0.23
Self-employment in agriculture	32.9	35.7	0.16	44.6	43.4	0.34
Others	1.0	0.9	0.19	3.0	3.3	0.34
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>0.16</b>	<b>100.0</b>	<b>100.0</b>	<b>0.35</b>
<b>URBAN</b>						
Regular salary/wages	13.3	14.8	0.15	45.2	47.6	0.33
Self-employment in non-agriculture	23.4	26.8	0.17	33.0	38.9	0.43
Labour	57.5	52.4	0.14	13.3	6.3	0.20
Self-employment in agriculture	2.7	2.8	0.17	2.7	2.6	0.33
Others	3.1	3.2	0.17	5.8	4.5	0.34
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>0.16</b>	<b>100.0</b>	<b>100.0</b>	<b>0.38</b>
<b>ALL-INDIA</b>						
Regular salary/wages	4.3	5.7	0.17	25.8	35.0	0.33
Self-employment in non-agriculture	8.9	11.4	0.19	21.3	26.9	0.42
Labour	58.6	54.1	0.18	19.0	9.9	0.24
Self-employment in agriculture	26.8	27.3	0.16	30.0	24.4	0.35
Others	1.4	1.5	0.20	4.0	3.9	0.35
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>0.18</b>	<b>100.0</b>	<b>100.0</b>	<b>0.39</b>

Source: NSHIE (2004-05).

It is not surprising that the regular salary/wage earners mostly belong to the formal sector, and are protected by labour laws, and laws that safeguard minimum wages and union activities. Casual labourers, on the other hand, are mostly found in the informal sector and usually have no skills, as they are mostly migrants from the agricultural sector. Informal work thus leaves people without adequate social protection and traps them in unproductive and unstable jobs, thereby leading to serious consequences for both the individual and society. In addition, most of those who work informally are insufficiently protected against the various



risks to which they are exposed like illness or health problems, unsafe working conditions, and possible loss of earnings. This is particularly important for the poor, whose labour is by far their most significant asset.

Lack of social protection in the face of health and occupational risks, and lack of protection of labour rights put many informal workers at higher risks of poverty than they would otherwise be and might substantially increase poverty levels. Certain groups such as young people and women require specific attention, as they might be over-represented among the informally employed. Women seem to be disproportionately involved in the most vulnerable forms of informal employment. In this context, policies should thus try to unlock these people from their low productivity activities, enable them to become more productive and provide them with opportunities to climb the social ladder. The specific steps that may be taken in this regard include the implementation of active labour market policies such as imparting of training and effective skill development programmes, which may open the doors to the formal sector for them. Another observation is that informal employment is mainly a consequence of insufficient job creation in the formal economy. Hence, there is a need for a general push to create more employment opportunities within the formal sector.

(d) Level of Education Groups: In this analysis, we have used five types of education groups, namely 'Illiterate', 'Up to the primary level', 'Middle level+ Matriculate', 'Higher secondary level', and 'Graduate and above'. Table 15 shows the distribution of the households and income among the six educational groups for the poor and non-poor households in both rural and urban areas. Here, we are concerned only with the level of education of the chief earner of the households. Thus, by 'illiterate households', we mean those households whose chief earners are illiterate.

Among the poor households, 34 per cent were illiterate in 2004-05. Among the non-poor, on the other hand, only 14 per cent had illiterate chief earners of the households. The proportions of poor households as a percentage of the total number of households are 57 per cent, 46 per cent, 31 per cent, 16 per cent and 7 per cent, respectively, for the illiterate, up to the primary level, middle level plus matriculate, higher secondary level, and graduate and above categories. This implies that the probability of a household being poor is higher if the chief earner of the household is illiterate or less educated. The analysis shows that illiterate chief earner households, including both the poor and non-poor ones, contribute much less in the total household income as compared to their population size. On the contrary, the households

whose chief earners have had a minimum education up to the middle level contribute much higher than their population size.

**Table 15**

**Distribution of Households and Income across Level of Education**

Education Level of the Chief Earner	Distribution of Households			Distribution of Income		
	Poor	Non-poor	Total	Poor	Non-poor	Total
<b>RURAL</b>						
Illiterate	14.8	11.2	26.0	6.1	11.6	17.7
Up to the primary level	10.3	12.3	22.5	4.4	13.8	18.1
Up to the matriculate level	11.7	24.7	36.4	5.3	31.6	36.9
Higher secondary level	1.5	6.5	8.1	0.7	11.0	11.7
Graduate and above	0.5	6.5	7.0	0.3	15.2	15.5
<b>Total</b>	<b>38.8</b>	<b>61.2</b>	<b>100.0</b>	<b>16.8</b>	<b>83.2</b>	<b>100.0</b>
<b>URBAN</b>						
Illiterate	4.4	3.6	7.9	1.3	2.8	4.1
Up to the primary level	5.4	6.0	11.5	1.8	5.2	7.0
Up to the matriculate level	9.7	26.7	36.3	3.1	26.1	29.2
Higher secondary level	1.9	13.2	15.0	0.6	14.7	15.3
Graduate and above	1.8	27.4	29.2	0.6	43.9	44.4
<b>Total</b>	<b>23.1</b>	<b>76.9</b>	<b>100.0</b>	<b>7.3</b>	<b>92.7</b>	<b>100.0</b>
<b>ALL-INDIA</b>						
Illiterate	11.7	8.9	20.6	4.0	7.7	11.7
Up to the primary level	8.8	10.4	19.2	3.2	10.0	13.2
Up to the matriculate level	11.1	25.3	36.4	4.3	29.2	33.5
Higher secondary level	1.6	8.5	10.1	0.7	12.6	13.3
Graduate and above	0.9	12.7	13.7	0.4	27.8	28.2
<b>Total</b>	<b>34.2</b>	<b>65.8</b>	<b>100.0</b>	<b>12.7</b>	<b>87.3</b>	<b>100.0</b>

Source: NSHIE (2004-05).

It has been found that the inequality in income for the poor households in all the education categories is much lower than that of the non-poor households. The Gini ratios of non-poor households in all the education categories suggest that the inequality in income increases as the level of education increases and this is seen to happening both the rural and urban areas.

Table 16

## Distribution of Households and Income within the Level of Education

Education Level of the Chief Earner	Poor			Non- Poor		
	Distribution of Poor Households (%)	Distribution of Income (%)	Gini Ratio (Based on PCI)	Distribution of Non-poor Households (%)	Distribution of Income (%)	Gini Ratio (Based on PCI)
<b>RURAL</b>						
Illiterate	38.2	36.5	0.17	18.2	13.9	0.29
Up to the primary level	26.5	26.1	0.16	20.1	16.5	0.31
Up to the matriculate level	30.1	31.6	0.16	40.4	38.0	0.33
Higher secondary level	3.9	4.3	0.14	10.7	13.2	0.33
Graduate and above	1.4	1.6	0.14	10.6	18.3	0.34
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>0.16</b>	<b>100.0</b>	<b>100.0</b>	<b>0.35</b>
<b>URBAN</b>						
Illiterate	18.9	18.1	0.16	4.6	3.0	0.28
Up to the primary level	23.5	23.8	0.15	7.9	5.6	0.31
Up to the matriculate level	41.8	41.8	0.15	34.7	28.2	0.33
Higher secondary level	8.2	8.4	0.17	17.1	15.9	0.34
Graduate and above	7.6	7.8	0.20	35.7	47.3	0.38
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>0.16</b>	<b>100.0</b>	<b>100.0</b>	<b>0.38</b>
<b>ALL-INDIA</b>						
Illiterate	34.2	31.8	0.18	13.5	8.8	0.30
Up to the primary level	25.9	25.5	0.18	15.8	11.4	0.32
Up to the matriculate level	32.4	34.2	0.17	38.4	33.4	0.35
Higher secondary level	4.8	5.4	0.18	12.9	14.5	0.35
Graduate and above	2.7	3.2	0.20	19.4	31.9	0.37
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>0.18</b>	<b>100.0</b>	<b>100.0</b>	<b>0.39</b>

Source: NSHIE (2004-05).

The chief earners of more than one-fifth of the total households (20.6 per cent) in the country have been found to be illiterate, and in rural India, this figure is more than one-fourth, that is, 26 per cent. The analysis of disaggregated data allows policy-makers to have a clearer vision of the situation and to propose targeted actionable measures on education to tackle the vicious circle of poverty and illiteracy. For example, the relationship between poverty and illiteracy can be determined as the impact of one (poverty) over the increase or decrease in the intensity of the other (illiteracy).

## **Degree of Deprivation**

There has been a lot of debate and discussion on the poverty line/ratio that should be used for the measurement of the degree of deprivation and to pinpoint the whereabouts of the poor people. In this paper, we have considered five poverty ratios, 21.8 per cent by the Planning Commission (MRP)<sup>11</sup>, 27.5 per cent by the Planning Commission (URP)<sup>12</sup>, 78 per cent by the NCEUS (Arjun Sengupta)<sup>13</sup>, 42 per cent by the World Bank, and 37.2 per cent by Suresh Tendulkar, and we have then applied these ratios on the per capita income data of NCAER's NSHIE to estimate the socio-economic characteristics of the poor household. The households were arranged in the ascending order of monthly per capita income along with the associated multipliers for each household. Then, by using a predetermined poverty ratio, we identified the poor households (below the poverty line). This has been done for one reason. We are interested in testing the sensitivity of the poverty measures to the different poverty ratios.

The data presented in Table 17 facilitates an understanding of the structure of poverty measured by different poverty ratios. It has been found that the poor households spend about 61 per cent on food out of their total expenditure, irrespective of whether the poverty ratio of the Planning Commission, the World Bank and Tendulkar is applied, whereas if the the NCEUS poverty ratio is applied, the corresponding figure is around 56 per cent. It should be noted that the expenditure on healthcare is almost the same (around 5 per cent of the total expenditure) for all the poor, irrespective of the poverty ratio applied for identifying them. In case of the expenditure on education, it has been found that the poor households spend 5.7 per cent of the total expenditure as measured by the poverty ratios estimated by the Planning Commission, World Bank and Tendulkar, whereas the poor classified by the poverty ratio given by the NCEUS spend a little more on education (6.2 per cent).

It is very surprising to note that the percentage share of illiterate chief earners in the total number of households increases with a decrease in poverty ratio. For example, it is lowest (25.4 per cent) when the NCEUS's poverty ratio is applied and the highest (39.1 per cent) when the Planning Commission's MRP poverty ratio is applied. On the other hand, the percentage share of the graduate chief earners in the total number of households decreases with a fall in the poverty ratios. Again, as expected, the main occupation (in terms of the major source of income) of a majority of the poor households is 'labour' in all the poverty ratios except in the case of the NCEUS, wherein it is only 41 per cent. On application of the

NCEUS poverty ratio, it has been found that the major source of income of 10 per cent poor household is salary while for the others; the corresponding figure is around 2-3 per cent.

Out of the 78 per cent poor, as recognized by the NCEUS, about one-fourth own a two-wheeler and another one-fourth own a colour television (CTV). Also, 41 per cent of them possess pressure cookers and 8 per cent own refrigerators. This data makes it difficult to draw a line between the poor and the non-poor. Again, in accordance with the World Bank's figures, more than 12 per cent of the poor own two-wheelers, 10 per cent own a CTV, more than 2 per cent have a refrigerator, and around 25 per cent of the poor have been found to own a pressure cooker. It is interesting to note that though the World Bank and Suresh Tendulkar present different poverty ratios, the estimates of ownership of two-wheelers, CTVs, pressure cooker and refrigerator are more or less the same for both the ratios. On the other hand, the Planning Commission MRP and URP poverty ratios suggest that the poor households own much fewer assets as compared to the estimates given by the NCEUS, Tendulkar and the World Bank.

These analyses suggest that one needs to assess the socio-economic characteristics of the households to identify the real poor rather than simply drawing a line between the poor and the non-poor on the basis of income and expenditure. These estimates enable policy-makers to assess poverty conditions, to allocate resources for poverty reduction, and to monitor progress against a clear benchmark.

**Table 17**

**Calculation of Degree of Deprivation Using Various Deprivation Ratios**

	Planning Commission		NCEUS (Arjun Sengupta)	World Bank	Suresh Tendulkar
	MRP	URP			
<b>Deprivation Ratio</b>	21.8	27.5	78.0	42.0	37.2
Per capita income (Rs./annum)	3,496	3,816	7,439	4,626	4,357
Per capita expenditure (Rs./annum)	3,822	3,992	6,098	4,513	4,333
Household expenditure on (as % of PCE)					
Food	61.6	61.3	56.1	60.6	61.0
Education	5.7	5.7	6.2	5.7	5.7
Health	4.6	4.6	4.6	4.5	4.5
<b>% Share in Total Households</b>					
Illiterate chief earner	39.1	38.3	25.4	33.3	34.9
Graduates chief earner	1.9	2.0	6.1	2.3	2.2
<b>% Share in Total Households</b>					
Salary as major source of income	2.3	2.4	10.1	3.5	3.1
Labour as major source of income	62.2	61.5	41.4	55.9	58.3
<b>% of Households Own</b>					
Pressure cooker	17.5	19.7	40.4	25.3	23.7
Two-wheeler	8.0	8.8	24.6	12.4	11.1
CTV	6.9	7.5	24.5	10.1	9.1
Refrigerator	1.8	1.8	7.9	2.2	2.0

Source: NSHIE (2004-05).

## 5. Concluding Remarks

This research paper highlights the levels of headcount ratio (HCR) and the Gini ratio in India by using household income data collected by NCAER for the financial year 2004-05. These ratios have been compared with the incidence of poverty and the level of inequality estimated in the 61<sup>st</sup> Round of the NSS–CES data. NSHIE is a nation-wide survey, covering about 97 per cent of the population. Some of the basic socio-religious and demographic characteristics obtained from the NSHIE data are comparable to those of the NSS–CES data.

The estimation of poverty incidence from the two data sources (MIMAP and NSHIE) puts the share of the poor population in India at about 21 per cent. Our calculations also suggest that despite an impressive increase in the per capita income over the period 1994-95 and 2004-05, the rate of decrease in the HCR has slowed down. While the debate on the

incidence of poverty is mired in methodological issues that range from the survey coverage of the NSS–CES to specification of the poverty norm, the evidence from the NSHIE on poverty and inequality shows that one of the important reasons for the deceleration of the rate of poverty decline appears to be the existence of a high level of inequality, which is comparable to the inequality levels prevalent in the developed countries. The worrisome feature of inequality is that it has increased significantly during the last decade (12.9 per cent in rural areas and 14.9 per cent in urban areas).

The Gini coefficient calculated from the NCAER income data suggests not only that inequality is increasing but that inequality levels in the rural areas are disconcertingly close to those in urban areas, and are rising almost at the same rates. The inequality level in India is now comparable to the rates prevailing in several developed and middle-income countries, such as China, Hong Kong, Singapore, and USA. The contemporary debate about the vulnerability of the population, which NCEUS report puts at close to 77 per cent, appears to be overstating the vulnerability. Our calculations from NSHIE suggest that the vulnerable proportion of the population is significantly lower than the NCEUS report figures, more so in the urban areas. Using a cut-off point of something like twice the official poverty line appears somewhat arbitrary as it does not take into account several economies of scale in household consumption.

The comparable results from NSHIE on a variety of indicators reported in this paper are encouraging in the sense that it is possible to collect household income data in Indian conditions. The relevance of income-based measures of inequality discussed in this paper highlights the vast gap that exists between income and expenditure inequality. It is high time that efforts are intensified in strengthening the income surveys. While official data collection agencies like NSSO have been mandated to collect household welfare indicators to monitor the progress in access to consumption of the basic necessities,<sup>14</sup> the collection of household income data is useful for identifying the inequalities which exist in various forms in a multi-religious and multi-cultural country like India.

Finally, till now, there have been three BPL censuses, conducted in 1992, 1997 and 2002, respectively. As the pilot for the 2011 BPL census gets underway soon, it is instructive to dwell on research based on other reliable sources to enhance the process used to pick the multi-dimensionality of poverty in India—rural, urban, regional, etc.—as it will have a strong

bearing on the political economy of the country while governments, both at the Centre and the states, go about implementing their inclusive development mandate.

This paper makes an attempt is to study multi-dimensionality of poverty in India with the hope that it would lead to a nuanced and better informed debate on the BPL population, which has a bearing on the government's subsidies directed at the vulnerable sections of Indian society.

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## NOTES

<sup>1</sup>The major sources reviewed include Situation Assessment Survey of Farmers (NSSO); Integrated Household Survey (NSSO); Employment and Unemployment Survey (NSS); All-India Rural Household: Survey on Saving, Income and Investment (NCAER 1962); Survey on Urban Income and Saving (NCAER 1962); Market Information Survey of Households (1985-2001, NCAER); Micro-impact of Macro and Adjustment Policies (MIMAP, NCAER); Rural Economic and Demographic Survey (NCAER); Expert Group on Household Income Statistics, Canberra Manual; Household Income and Expenditure Statistics (ILO); Chinese Household Income Project (1995); and Household Income and Expenditure Survey (Sri Lanka), among others.

<sup>2</sup> We have used the term roughly as NCAER income data corresponds to the financial year 2004-05 whereas the NSSO CES data were collected for the agricultural year 2004-05.

<sup>3</sup> The Expert Group on Household Income Statistics (Canberra City Group of UN Statistical Commission): Over 70 experts from 26 national organizations and 7 international organizations were involved in the work of the Canberra Group with the objective of enhancing the national household income statistics by developing



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standards on conceptual and practical issues related to the production of income distribution statistics. It carried out a meta-survey (survey about surveys) of 106 income components that are actually collected in 30 household income surveys in 25 countries from all continents.

<sup>4</sup> Details about concepts, definitions and the survey methodology used in the survey are given in Annexure I (page 75) of the report “How India Earns, Spends and Saves”, by Rajesh Shukla (2007), MNYL and NCAER, Delhi. The full report is also available on [www.ncaer.org](http://www.ncaer.org).

<sup>5</sup> Income bands (Annual household income in Rs. at 1998-99 prices): Low =Up to Rs. 35,000; Lower Middle = Rs. 35,001 to Rs. 70,000; Middle = Rs. 70,001 to Rs. 105,000; Upper Middle = Rs. 105,001 to Rs. 140,000; and High = Above Rs. 140,000.

<sup>6</sup> Landless—no land; Marginal—0.1–2acres; Small—2–4 acres; Medium—4–10 acres; Large—over 10 acres.

<sup>7</sup> The Gini coefficient, which is the most commonly used measure of inequality lies between 0 and 1. The higher its value, the greater is the inequality.

<sup>8</sup> The MIMAP study is for the period July 1994–June 1995 (agriculture year). Hence, it is not strictly comparable with NSHIE data.

<sup>9</sup> In a cross-country comparison of income-based Gini, UNDP (2006) reports that the Gini coefficient for the United States is 0.408. Similarly, other countries like Hong Kong (0.434) and Singapore (0.425) have Gini coefficients that are lower than that of India. The level of inequality at 0.447 in China is comparable to that in India even though the Indian GDP per capita is far lower than that in China.

<sup>10</sup> Major sources of income included regular salary/wages, self-employment in non-agriculture, agricultural labour, other (casual) labour, self-employment in agriculture, rental (land/accommodation), interest/remittance/dividend/royalty, pension/bonus, social insurance/assistance, and others.

<sup>11</sup> This estimate is based on the Mixed Reference Period Method (MRPM) that uses monthly consumption expenditure data for five non-food items, namely clothing, footwear, durable goods, education and institutional medical expenses, which are collected from a 365-day recall period and the consumption data for the remaining items are collected from a 30-day recall period using the NSSO 61<sup>st</sup> Round Expenditure survey. The estimate is given by the Planning Commission of the Government of India.

<sup>12</sup> This estimate is based on the Uniform Reference Period (URP) method that uses consumption expenditure data of the last 30 days from the date of survey using the NSSO 61<sup>st</sup> Round Expenditure survey data. The estimate is given by the Planning Commission of the Government of India.

<sup>13</sup> This estimate is based on the expenditure of less than Rs. 20 a day using the NSSO 61<sup>st</sup> Round Expenditure survey data. The estimate is given by the National Commission for Enterprises in the Unorganized Sector (NCEUS).

<sup>14</sup> During the 9<sup>th</sup> (May–September 1955), 14<sup>th</sup> (July 1958 to June 1959), 19<sup>th</sup> (July 1964 to June 1965) and 24<sup>th</sup> (July 1969 to June 1970) Rounds as well as a pilot survey conducted during 1983–84.