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# **POVERTY IN INDIA: CONCEPTS, MEASUREMENT AND STATUS**

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Growth is not the sole objective of economic policy. It is necessary to ensure that the benefits of growth accrue to all sections of the society. Eradication of poverty is thus an important objective. Human beings need a certain minimum consumption of food and non-food items to survive. However the perception regarding what constitutes poverty varies over time and across countries. Nevertheless there is need for a measure of poverty. Only then, it will be possible to evaluate how the economy is performing in terms of providing a certain minimum standard of living to all its citizens. Measurement of Poverty has, therefore, important policy implications.

A definition of poverty in terms of subsistence level has had wide acceptance as it seems to be in accordance with common sense which describes poverty as lack of the income needed to acquire the minimum necessities of life. Poverty is an extremely complex phenomenon, which manifests itself in a range of overlapping and interwoven economic, political and social deprivations. These include lack of assets, low income levels, hunger, poor health, insecurity, physical and psychological hardship, social exclusion, degradation and discrimination, and political powerlessness and disarticulation.

Two basic approaches to the concept of poverty were found in economic literature, namely, absolute poverty and relative poverty. The concept of absolute poverty is based on absolute norms for living (measured in terms of consumption expenditure) laid down according: to specified minimum standard and all such individuals or groups whose consumption expenditure is found to be below this standard are classified as poor. This

concept is directly related to the minimum level of consumption. Under the relative concept of poverty, a family (or an individual) is deemed to be poor if its level of income or consumption expenditure falls below a predetermined level. Then the income distribution of the population in different fractile groups is estimated and a comparison is made between the level of living of people in the bottom layer and the top layers of the population to assess the relative standard of poverty. The concept of relative poverty has received little attention. The concept of relative poverty is more suitable for developed countries while the absolute concept is relevant for the developing countries.

In addition, the concept of poverty has two connotations, namely, individualized poverty and collective poverty. The concept of individualized poverty is concerned with those poor individuals who are not able to incur even the minimum expenditure on most essential items viz., food, clothing and housing and collective poverty refers to social systems.

The Planning Commission is the nodal agency in the Government of India for estimation of poverty. It estimates the incidence of poverty at the national and state level separately in rural and urban areas since the Sixth Five Year Plan on the basis of the recommendations of the Task Force (1979) on projections of minimum needs and effective consumption demand. These estimates have been revised as per the methodology recommended by the Expert Group on Estimation of Proportion and Number of Poor chaired by Prof. D.T. Lakdawala, Dr.Tendulkar, and Dr.C. Rangarajan etc. The incidence of poverty is measured by the poverty ratio, which is the ratio of number of poor to the total population expressed as percentage. It is also known as head-count ratio. The poverty ratio is measured from an exogenously determined poverty line quantified in terms of per capita consumption expenditure over a month and the class distribution of persons obtained from the large sample survey of consumer expenditure data of the National Sample Survey Office (NSSO).

Studies on poverty in India began with the pioneering work of Dadabhai Naoroji in the later part of the 19th century. Naoroji had traced out the mass poverty to the British colonial rule which drained out systematically economic amounts of wealth through unequal trade interest and dividend salaries and pensions In 1930's and 40s.

The first specific and scientific attempt to identify the poor and to measure the extent of poverty was made by an expert committee constituted by the Government of India in July 1962. It has put the nationally desirable minimum level of consumer expenditure at Rs. 20 per capita per month according to 1960-61 prices.

In 1971, Dandekar and Rath introduced the calories concept explicitly they considered the energy requirement of 2250 calories as the basic need per day per person According to them this minimum level of consumption would require an expenditure of Rs.20/- per head per month for rural areas and Rs. 22.50/- for urban areas according to 1960-61 prices. Dantwala, 1973 stated that there cannot be a single universal norm of poverty. The brief description about development in methodology and measurement of poverty ratio at national and state level is highlighted below.

### **Working Group (1962)**

The Planning Commission constituted a Working Group in 1962 to find out a desirable minimum level of living for the population. The Working Group recommended that the national minimum consumption expenditure for a household of five persons (four adult consumption units) should be not less than Rs.100 per month or Rs.20 per capita per month in terms of 1960-61 prices. For urban areas, this figure was Rs.125 per month or Rs.25 per capita per month to cover the higher prices there. The poverty line excluded expenditure on health and education, both of which, it was assumed, were to be provided by the State. The Working Group (1962) appeared to have taken into account the recommendation of balanced

diet made by the Nutrition Advisory Group of the Indian Council of Medical Research (ICMR) in 1958. This poverty line was widely used in the 1960s and 1970s to estimate the poverty ratio at national and state level.

### **Task Force 1979: Alagh**

The Planning Commission in July 1977 constituted the Task Force on “Projections of Minimum Needs and Effective Consumption Demand” under the Chairmanship of Dr. Y. K. Alagh. The Task Force submitted its report in January 1979. The average calorie requirements were estimated, separately for the all-India rural and urban areas as a population-weighted average of the age-gender-activity specific calorie allowances recommended by the Nutrition Expert Group (1968) by reference to the 1971 population Census. The estimated calorie norm was 2400 kcal per capita per day in rural areas and 2100 kcal per capita per day in urban areas. To work out the monetary equivalent of these norms, 28th Round (1973-74) NSS data relating to household consumption both in quantitative and value terms were used. Based on the observed consumer behaviour in 1973-74 it was estimated that, on an average, consumer expenditure (food and non-food) of Rs.49.09 per capita per month was associated with a calorie intake of 2400 per capita per day in rural areas and Rs.56.64 per capita per month with a calorie intake of 2100 per day in urban areas. This Monthly Per Capita Expenditure (MPCE) was termed as poverty line. The poverty lines for later years were estimated by updating the poverty lines of the year 1973-74 for price changes.

### **Expert Group 1993: Lakdawala**

The Planning Commission, in September 1989, constituted the Expert Group on Estimation of Proportion and Number of Poor to "look into the methodology for estimation of poverty and to re-define the poverty line, if necessary". The Expert Group submitted its

Report in July 1993. The Government accepted the Expert Group methodology in March 1997 as the basis for computing the official estimates of poverty in India.

The Expert Group (Lakdawala) did not redefine the poverty line. It retained the one defined by the Task Force (Alagh) which was at national level in rural and urban areas. It disaggregated these national poverty lines into state-specific poverty lines in order to reflect the inter-state price differentials.

The national rural poverty line of Task Force (Alagh) was disaggregated into state-specific poverty lines using inter-state price differentials measured by Fisher's Index. These state-specific poverty lines of base year (1973-74) were updated for subsequent years using state-specific price indices especially constructed by taking weighted average of the commodity group-wise Consumer Price Index of Agricultural Labourers (CPIAL) of (a) food (b) fuel and light, (c) clothing and footwear and (d) miscellaneous with their respective weights in the national consumption basket of the poor in 1973-74. Two factors largely distinguish the Expert Group (Lakdawala) methodology of poverty estimation from those of the Task Force (Alagh). First, the Expert Group (Lakdawala) method uses state-specific poverty lines as against national poverty line for estimation of poverty in the state; it thereby captures the cost of living in the states more accurately (as compared to the Task Force method). Second, the Expert Group (Lakdawala) uses the state-wise consumption distribution of the NSS without any adjustment to the NAS consumption. This is a major departure from the Task Force method, which did this adjustment on a *pro-rata* basis.

In March 1997, the Government adopted the Expert Group (Lakdawala) methodology for poverty estimation as the basis for computing the official estimates of poverty and using this methodology the Planning Commission estimated the poverty ratios in rural and urban areas of different States/UTs for the year 1973-74 (NSS 28th Round consumer expenditure data, which was used to estimate the poverty line by the Task Force), and for the years 1977-

78, 1983, 1987-88 and 1993-94 for which the large sample survey consumer expenditure data were then available from the 32nd, 38th, 43rd and 50th Rounds of the NSS. Subsequently, using the same methodology the Planning Commission estimated the poverty ratios at the national and states level for the years 1999-2000 and 2004-05, using the NSS large sample survey consumer expenditure data of 55th and 61st Rounds respectively.

The official estimate of poverty was derived by the Planning Commission using the Expert Group (Lakdawala) methodology until January 2011. The poverty ratio (i.e., the percentage of people living below the poverty line) and the number of poor for different years at the national level estimated from the Expert Group (Lakdawala) method are given in Table 01

### **Expert Group (Tendulkar)**

The Expert Group under the chairmanship of Suresh D. Tendulkar was constituted by the Planning Commission in December 2005. It was mandated to: (a) examine the issues relating to the comparability of the NSS 50th (1993-94), NSS 55th (1999-2000) and NSS 61st (2004-05) Round consumer expenditure data and suggest methodologies for deriving such comparability with past and future survey data; (b) review alternative conceptualizations of poverty, and associated technical aspects of procedures of measurement and data base for empirical estimation including procedures for updating over time and across states, and (c) recommend any changes in the existing procedures of official estimates of poverty. The Expert Group (Tendulkar) submitted its recommendations to the Planning Commission in November 2009. In its report, the Tendulkar committee (Planning Commission 2009) noted three deficiencies of the Lakdawala poverty lines.

First, the poverty line baskets remained tied to consumption patterns observed in 1973-74. But more than three decades later, these baskets had shifted, even for the poor. Second, the consumer price index for agricultural workers understated the true price increase.

This meant that over time, the upward adjustment in the rural poverty lines was less than necessary so that the estimated poverty ratios understated rural poverty. Finally, the assumption that health and education would be largely provided by the government, underlying Lakdawala lines, did not hold any longer. Private expenditures on these services had risen considerably, even for the poor. This change was not adequately reflected in the Lakdawala poverty lines

The Expert Group (Tendulkar) did not construct a poverty line. It adopted the officially measured urban poverty line of 2004-05 based on Expert Group (Lakdawala) methodology and converted this poverty line (which is URP-consumption based) into MRP-consumption.

The national urban poverty ratio in 2004-05 as per the Expert Group (Tendulkar) methodology is identical to the one estimated by the Expert Group (Lakdawala) methodology, which is 25.7 percent. The shift from MPCE estimates on URP (that underlay the poverty ratio with the Lakdawala methodology) to those on MRP in the Expert Group (Tendulkar) methodology significantly raised the all-India Urban poverty line level of MPCE from 538.60 to Rs 578.80.

The Planning Commission released estimates of poverty for 1993-94 and 2004-05 derived from the Expert Group (Tendulkar) method In January 2011. Subsequently, based on the same methodology, the poverty ratio for 2009-10 and 2011-12 were derived by the Planning Commission in March 2012 and July 2013 respectively. The estimate of poverty ratio and number of poor at the national level for the years 1993-94, 2004-05, 2009-10 and 2011-12 derived from the Expert Group (Tendulkar) methodology are given in **Table 2**. The rate of decline in poverty ratio during different period is given in **Table3**.

The poverty lines defined by the Tendulkar Committee did not reflect the changing times and aspirations of the people. The high rate of increase in per capita income and



consumption in the first decade of this century and the consequential changes in the structure of the economy as well as in people's perspectives on poverty was viewed as requiring a fresh look at the poverty line and its composition. This provides the backdrop to the setting up of the Expert Group (Rangarajan).

As a first step towards defining the food component of the poverty line basket, the Expert Group (Rangarajan) has recomputed the average requirements of calories, proteins and fats, per- capita per-day at the all- India level for 2011-12, separately for the rural and the urban populations. This has been done by reference to the 2010 ICMR norms differentiated by age, gender and activity-status.

The average calorie requirement works out to 2155 kcal per capita per day in rural areas and 2090 kcal per capita per day in urban areas. It is readily seen that for rural India, these revised calorie norms for 2011-12 are substantially lower than those derived by the Task Force (Alagh). In the case of urban areas, however, due to a more pronounced shift in the age-distribution towards adults with higher calorie requirements, the revised calorie norm for the urban population is only marginally lower than those derived by the Task Force (Alagh).

The Monthly Per-capita Consumption Expenditure (MPCE) of Rs 972 in rural areas and Rs 1407 in urban areas constitute the new poverty lines at the all- India level as per the recommendation of the Expert Group (Rangarajan). They translate to a monthly per household expenditure of Rs 4860 / in Rural India and of Rs 7035/ for urban India— assuming a family of 5-members in each case.

The existing Official Planning Commission poverty lines for 2011-12 , based on Expert Group (Tendulkar) methodology and derived from the Mixed Recall Period (MRP) consumption distribution of the NSSO , are Rs 816/ and Rs 1000/ per capita per month, for, respectively, the all- India Rural and Urban populations. The Expert Group (Rangarajan)

poverty lines, based on consumption estimates on MMRP are, thus 19 percent higher for Rural India and 41 percent higher for Urban India. Because of the differences in the underlying recall periods, only a part of the total difference (Rs 156 for rural India & Rs 407 in urban India) between the current official poverty lines and those proposed by the Expert Group (Rangarajan) is real.

The poverty lines in 2011-12 at the national level are expressed as monthly per capita consumption expenditure of Rs. 972 in rural areas and Rs. 1407 in urban areas, both at 2011-12 prices. These poverty lines are estimated from the MMRP (Modified Mixed Recall Period) consumption expenditure distribution of NSS 68th Round. These national level poverty lines are disaggregated into state-specific poverty lines in order to reflect the inter-state price differential. The method of constructing the state-wise poverty lines from the national level poverty line in 2011-12 is broadly similar to that outlined by the Expert Group (Tendulkar). The state-specific poverty lines in rural and urban areas derived in this manner for the year 2011-12 is given in **Table 5**.

The state-specific poverty ratios in rural and urban areas for the year 2011-12 are calculated from the state-specific poverty lines (in rural and urban areas for the year 2011-12 as estimated above) and the state-specific distribution of persons by expenditure groups MMRP obtained from the NSS 68th Round (2011-12) large sample survey on household consumer expenditure of the National Sample Survey Office (NSSO). The national poverty ratio is computed as an average (population weighted) of state-wise poverty ratios. The state-specific poverty ratio and number of poor estimated using the Expert Group (Rangarajan) method for the year 2011-12 is given in **Table 5**.

Based on the analysis presented in the Report, monthly per capita consumption expenditure of Rs. 972 in rural areas and Rs. 1407 in urban areas is treated as the poverty line at the all India level. This implies a monthly consumption expenditure of Rs. 4860 in rural

areas or Rs. 7035 in urban areas for a family of five at 2011-12 prices. This has to be seen in the context of public expenditure that is being incurred in areas like education, health and food security. The actual 'well-being' of the household will be higher than what is indicated by the poverty line. Based on the methodology outlined in the Report, the poverty ratio at all India level for 2011-12 comes to 29.5%. Working backwards this methodology gives the estimate for 2009-2010 at 38.2%. This is in contrast to 21.9% as estimated by Tendulkar methodology for 2011-12 and 29.8% for 2009-10.

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Table 01: Poverty Ratio and Number of Poor: Expert Group (Lakdawala) Method

Year	Poverty Ratio (%)			Number of Poor (million)		
	Rural	Urban	Total	Rural	Urban	Total
1973-74	56.4	49.0	54.9	261.3	60.0	321.3
1977-78	53.1	45.2	51.3	264.3	64.6	328.9
1983	45.7	40.8	44.5	252.0	70.9	322.9
1987-88	39.1	38.2	38.9	231.9	75.2	307.1
1993-94	37.3	32.4	36.0	244.0	76.3	320.3
2004-05	28.3	25.7	27.5	220.9	80.8	301.7

Table 2: Percentage and Number of Poor Estimated from Expert Group (Tendulkar)

Methodology

Year	Poverty Ratio (%)			Number of Poor (million)		
	Rural	Urban	Total	Rural	Urban	Total
1993-94	50.1	31.8	45.3	328.6	74.5	403.7
2004-05	41.8	25.7	37.2	326.3	80.8	407.1
2009-10	33.8	20.9	29.8	278.2	76.5	354.7
2011-12	25.7	13.7	21.9	216.7	53.1	269.8

Table 3: Decline in Poverty Ratio Estimated from Expert Group (Tendulkar) Methodology

(%age points per year)

Period	Rural	Urban	Total
1993-94 to 2004-05	0.75	0.55	0.74
2004-05 to 2011-12	2.32	1.69	2.18
1993-94 to 2011-12	1.36	1.01	1.30

Table 4 : Consumption expenditure of PLB in Rural Areas and Urban Areas-2011-12

(MPCE in Rs.) Items

Item	Rural		Urban	
	Sixth fractile (25-35%)	Median class (45-50%)	fourth fractile (15-20%)	Median class (45-50%)
Food	554	678	656	977
Four essential food items	102	141	181	407
Other non-food items	277	347	344	571
Total MPCE	933	1166	1181	1955
MPCE-Poverty Line	972		1407	

Table 5: State-wise Poverty Line in Rural and Urban areas for 2011-12 -based on Proposed Methodology (Rs. per capita, per month)

Sr.No	States/UTs	Poverty Line	
		Rural	Urban
1	Andhra Pradesh	1031.74	1370.84
2	Arunachal Pradesh	1151.01	1482.94
3	Assam	1006.66	1420.12
4	Bihar	971.28	1229.30
5	Chhattisgarh	911.80	1229.72
6	Delhi	1492.46	1538.09
7	Goa	1200.60	1470.07
8	Gujarat	1102.83	1507.06
9	Haryana	1127.82	1528.31
10	Himachal Pradesh	1066.60	1411.59
11	Jammu & Kashmir	1044.48	1403.25
12	Jharkhand	904.02	1272.06
13	Karnataka	975.43	1373.28
14	Kerala	1054.03	1353.68
15	Madhya Pradesh	941.70	1340.28
16	Maharashtra	1078.34	1560.38
17	Manipur	1185.19	1561.77
18	Meghalaya	1110.67	1524.37
19	Mizoram	1231.03	1703.93
20	Nagaland	1229.83	1615.78
21	Orissa	876.42	1205.37
22	Punjab	1127.48	1479.27
23	Rajasthan	1035.97	1406.15
24	Sikkim	1126.25	1542.67
25	Tamil Nadu	1081.94	1380.36
26	Tripura	935.52	1376.55
27	Uttar Pradesh	889.82	1329.55
28	Uttarakhand	1014.95	1408.12
29	West Bengal	934.10	1372.68
30	Puducherry	1130.10	1382.31
31	Andaman & Nicobar Islands#	1314.98	1797.69
32	Chandigarh	1303.17	1481.21
33	Dadra & Nagar Haveli#	1008.39	1540.81
34	Daman & Diu	1200.60	1434.93
35	Lakshadweep	1327.77	1458.69
	All India	972	1407



Table 6: Poverty Ratio and Number of Poor in 2011-12 based on Proposed Methodology

Sr. No.	States/UTs	RURAL		Urban		Total	
		% age of Persons	No. of Persons (lakhs)	% age of Persons	No. of Persons (lakhs)	% age of Persons	No. of Persons (lakhs)
1	Andhra Pradesh	12.7	71.5	15.6	45.7	13.7	117.3
2	Arunachal Pradesh	39.3	4.3	30.9	1.0	37.4	5.3
3	Assam	42.0	114.1	34.2	15.4	40.9	129.5
4	Bihar	40.1	376.8	50.8	61.4	41.3	438.1
5	Chhattisgarh	49.2	97.9	43.7	26.9	47.9	124.8
6	Delhi	11.9	0.5	15.7	26.3	15.6	26.7
7	Goa	1.4	0.1	9.1	0.8	6.3	0.9
8	Gujarat	31.4	109.8	22.2	58.9	27.4	168.8
9	Haryana	11.0	18.4	15.3	14.0	12.5	32.4
10	Himachal Pradesh	11.1	6.9	8.8	0.6	10.9	7.5
11	Jammu & Kashmir	12.6	11.7	21.6	7.6	15.1	19.3
12	Jharkhand	45.9	117.0	31.3	25.5	42.4	142.5
13	Karnataka	19.8	74.8	25.1	60.9	21.9	135.7
14	Kerala	7.3	12.3	15.3	26.0	11.3	38.3
15	Madhya Pradesh	45.2	241.4	42.1	86.3	44.3	327.8
16	Maharashtra	22.5	139.9	17.0	88.4	20.0	228.3
17	Manipur	34.9	6.7	73.4	6.3	46.7	12.9
18	Meghalaya	26.3	6.4	16.7	1.0	24.4	7.4
19	Mizoram	33.7	1.8	21.5	1.2	27.4	3.1
20	Nagaland	6.1	0.8	32.1	1.9	14.0	2.8
21	Orissa	47.8	169.0	36.3	26.0	45.9	195.0
22	Punjab	7.4	12.9	17.6	18.7	11.3	31.6
23	Rajasthan	21.4	112.0	22.5	39.5	21.7	151.5
24	Sikkim	20.0	0.9	11.7	0.2	17.8	1.1
25	Tamil Nadu	24.3	91.1	20.3	72.8	22.4	163.9
26	Tripura	22.5	6.1	31.3	3.2	24.9	9.3
27	Uttar Pradesh	38.1	600.9	45.7	208.2	39.8	809.1
28	Uttarakhand	12.6	8.9	29.5	9.4	17.8	18.4
29	West Bengal	30.1	188.6	29.0	86.8	29.7	275.4
30	Puducherry	5.9	0.2	8.6	0.7	7.7	1.0
31	Andaman & Nicobar Islands	6.6	0.2	4.9	0.1	6.0	0.2
32	Chandigarh	12.0	0.0	21.5	2.3	21.3	2.3
33	Dadra & Nagar Haveli	55.2	1.0	15.3	0.3	35.6	1.3
34	Daman & Diu	0.0	0.0	17.6	0.4	13.7	0.4
35	Lakshadweep	0.6	0.0	7.9	0.0	6.5	0.0
	All India	30.9	2605.2	26.4	1024.7	29.5	3629.9