# Press Note on Poverty Estimates



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# **Planning Commission**

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### **Press Note on Poverty Estimates**

Official estimates of poverty in India have hitherto been made by the Planning Commission on the basis of the methodology that was recommended by the Lakdawala Committee (1993). The poverty lines and the corresponding poverty ratios that had emerged from this methodology for 1993-94 and 2004-05 are at **Table-1**. These estimates had shown a decline in the percentage of the population below poverty line from about 36% in 1993-94 to 27.5% in 2004-05.

### **Need to Re-examine Poverty Estimates**

There has been much discussion in recent years as to whether the poverty lines underlying these official estimates needed to be redefined. The official poverty lines presently in use are based on the per capita consumption level, which in 1973-74, was associated with a commodity bundle that yielded a specified level of calories which was then thought to be appropriate for rural and urban areas respectively. However, the original link with calories was broken over time, mainly because consumption patterns have changed since 1973-74. Some have argued that the poverty lines should be redrawn to return to a calorie based estimate, but this is not compelling since, with rising living standards and accelerated growth, a purely calorie based norm is no longer regarded as appropriate. Others pointed out that the official poverty lines for rural areas of certain States were too low and should be raised. Yet others have argued that for the purpose of determining eligibility for certain benefits, we should move away from targeting the population below a fixed poverty line, and simply designate a certain percentage of the population as the target group that is eligible for these benefits.

The establishment of an exogenously specified fixed poverty line in terms of some level of real income or consumption has several advantages, even if it is not linked explicitly to calories. It enables us to measure the extent to which growth over time has benefited the poor, i.e., reduced the number or the percentage of the population below poverty line. However, as in case of any price index, if consumption patterns are changing, the weighting diagrams used to update the poverty lines need to be revised periodically. There is also a case for periodically raising the poverty line even beyond pure inflation adjustment, in order to reflect growth of income in the economy. As an economy grows and per capita incomes rise, the poverty threshold, understood as the minimum acceptable level of living, should be raised to reflect the rising income and production levels of the society. It is well known that rich countries have much higher poverty lines than poor countries, and this also implies that as poor

countries become richer, they should redraw their poverty lines. However, when such revisions are made, the percentage of population below the poverty line is no longer comparable with the earlier estimates.

## **Appointment of Tendulkar Committee**

Recognising the need to address these issues, the Planning Commission had in December 2005 appointed a Committee to review alternate concepts of poverty and recommend changes in the existing procedures of official estimation of poverty. The Committee was chaired by Professor Suresh D. Tendulkar, then Member of the Prime Minister's Economic Advisory Council (EAC) and later Chairman of the National Statistical Commission and also Chairman, EAC. The composition and terms of reference of the Committee is attached.

The Tendulkar Committee submitted its report in November 2009. The Committee reviewed various arguments advanced in favour of redefining the poverty line and came to the conclusion that some changes are necessary. However, it has not recommended a new basis for defining poverty in terms of calories, or any other minimum basic needs norm. Instead, it has concluded that magnitude of the estimates of All-India urban poverty that emerged from the traditional methodology were broadly acceptable. To be more specific: (a) it decided to locate the poverty line bundle of goods and services in the consumption pattern observed in the 2004-05 NSS survey based on the mixed reference period; (b) it recommended that the same bundle be made available to the rural population after correcting for the rural-urban price differential.

### **Tendulkar Committee Findings**

Two basic problems with the existing poverty line identified by the Expert Group were (a) out-dated consumption patterns of 1973-74, which have changed even among the poor during the accelerated growth process; and (b) out-dated weights, as well as price base of the segment-specific price indices used in updating the 1973-74 base poverty lines.

The original poverty lines for 1973-74 were based on consumption bundles, which in 1973-74 had corresponded to specified levels of calorie consumption per capita, that were regarded as the minimum required at that time for rural and urban areas respectively. However, as the 1973-74 poverty lines were adjusted over time to reflect inflation using different inflation indices, they moved in different ways because of different rates of measured inflation in urban and rural areas. The consequence of this procedure is that the rural poverty lines for 2004-05 appeared to be too low compared to the corresponding urban poverty

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<sup>&</sup>lt;sup>1</sup> Moreover, the rural bundle gave much less weight to education and health expenditure.

lines for that year. While the All-India rural poverty line was 87% of the All-India urban poverty line in 1973-74, it had come to be only 66% in 2004-05 using the present (Lakdawala) methodology.

The Committee's detailed analysis shows that rural prices are typically lower than their urban counter-parts, and that the actual ratio in 2004-05 was around 76%. The Committee recommended that the rural poverty line should be recomputed to reflect money value in rural areas of the same basket of consumption that is associated with the existing urban poverty ratio. This realignment has been achieved by the following procedure: The Committee started with the national level urban poverty ratio yielded by the Lakdawala methodology. This poverty ratio is associated with a particular level of per capita household consumption expenditure. The consumption basket associated with this per capita household consumption expenditure is taken as a base for computing urban and rural poverty for all States. The urban poverty line in each State is computed by valuing the consumption basket corresponding to national urban poverty line at prices prevailing in each State, taking into account price differentials between the State and the National level by using Fisher's ideal price indices based on unit prices implicit in the survey itself. The urban poverty line thus derived for each State yields a poverty ratio for urban areas in that State. The resulting state-specific urban poverty-line consumption baskets are then valued at the rural prices for each State, again based on Fisher's indices of the differences between rural and urban prices in that State. This yielded a rural poverty line for each State. Applying this rural poverty line to the rural expenditure class-wise population distribution contained in the NSS data for the State yields the State's rural poverty ratio.

The resulting estimates for rural and urban poverty lines, and the combined poverty ratio for each state, and the country as a whole, are reported in **Table-2**. It may be noted that the recalibration of the rural poverty line in effect reassesses the rural poverty line in all States, which increases the population counted below the new poverty line. At the national level, the percentage of population in rural areas below the poverty line, which had been previously assessed to be 28.3% was now reassessed to be 41.8%. While by construction, the percentage of urban population in poverty remained at 25.7%. As a result, the percentage of the total population below the new poverty line in 2004-05, which was 27.5% earlier, increases to 37.2%.

Although the Committee has not relied on calorie based norms, it has quantified the calorie implications of the new poverty line proposed by it. The Committee has stated that "It may be noted that although those near the poverty line in urban areas continue to afford the original calorie norm of 2,100 per capital per day, their actual observed calorie intake from 61<sup>st</sup> Round of NSS is 1,776 calories per capita. This actual intake is very close to the revised calorie

intake norm of 1,770 per capita per day currently recommended for India by the Food and Agriculture Organisation (FAO). Actual observed calorie intake of those near the new poverty line in rural areas (1999 calories per capita) is higher than the FAO norm".

### **Impact of Estimates of Poverty**

It is important to emphasise that while the higher estimate of rural poverty using the Tendulkar Committee methodology means more people in rural areas are below the new poverty line, it does not mean that rural poverty has increased compared to what it was a decade earlier. To see what the Tendulkar methodology implies for assessment of trends over time, it is necessary to compute rural poverty in 1993-94 using the new methodology. This has been done by the Tendulkar Committee itself and the results of the inter-temporal comparison are as follows:

Per cent	Existing Methodology				Tendulkar Methodology			
	<u>Rural</u>	<u>Urban</u>	Combined	·	Rural	<u>Urban</u>	Combined	
1993-94	37.3	32.4	36.0		50.1	31.8	45.3	
2004-05	28.3	25.7	27.5		41.8	25.7	37.2	

It is evident that if the percentage of the population below the poverty line in 1993-94 is computed using the new methodology, the number also goes up because the rural poverty line itself has been raised. Whether we use the new methodology or the old, it is found that decline in the percentage of population in poverty, is roughly of the same magnitude. The Tendulkar Committee has specifically noted that "even though the suggested new methodology gives a higher estimate of rural headcount ratio at the all-India level for 2004-05, the extent of poverty reduction in comparable percentage point decline between 1993-94 and 2004-05 is not different from that inferred using the old methodology."

# **Decision of the Planning Commission**

The Planning Commission has considered the report of the Tendulkar Committee, which has based itself on recent consumption patterns and uses price data that more closely reflect price differences implicit in the consumption survey used to estimate poverty. While these are clearly improvements, it makes inter-temporal comparisons difficult. Some questions may also be raised about equating rural and urban consumption baskets. The Tendulkar Committee has also not addressed the issue of growing divergence between household consumption expenditure as derived from the National Sample Surveys and as derived from the National Accounts Statistics.

However, keeping all the considerations in mind, the Planning Commission decided to accept the Tendulkar methodology for the present. One of the operational implication of this decision is that identification of beneficiaries for the schemes targeting for the BPL population would therefore be done using the new estimates for 2004-05. In the Mid-Term Appraisal (MTA) of the Eleventh Five Year Plan presented to the National Development Council in July 2010, the findings of the Tendulkar Committee were incorporated as also the decision to accept the new poverty line and estimate for 2004-05. However, in the MTA, only the all-India summary was incorporated. The state-wise details which are as per the Tendulkar Committee report are appended at **Table-2** to this release.

The new methodology will be applied to the next NSSO (large) sample survey data for 2009-10, which is likely to be released this year, using procedures recommended by the Tendulkar Committee. This will give an updated estimate of poverty using the Tendulkar methodology for that year, which can then be compared with the estimates emerging from the existing methodology.

A final view on the methodology for measuring poverty in future will be taken on the basis of the results obtained from the 2009-10 survey. At that stage the Commission will consider whether some entirely new approach to poverty measurement is needed, or whether the Tendulkar Committee methodology, with some modification could continue to be the basis of poverty estimate for some time.

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Table-1: Poverty Estimates using Lakdawala Methodology									
SI.	Name of State/UT		1993-94		2004-05				
No		Rural	Urban	Combined	Rural	Urban	Combined		
1	Andhra Pradesh	15.9	38.3	22.2	11.2	28.0	15.8		
2	Arunachal Pradesh	45.0	7.7	39.4	22.3	3.3	17.6		
3	Assam	45.0	7.7	40.9	22.3	3.3	19.7		
4	Bihar	58.2	34.5	55.0	42.1	34.6	41.4		
5	Chhattisgarh	n.a	n.a.	n.a.	40.8	41.2	40.9		
6	Delhi	1.9	16.0	14.7	6.9	15.2	14.7		
7	Goa	5.3	27.0	14.9	5.4	21.3	13.8		
8	Gujarat	22.2	27.9	24.2	19.1	13.0	16.8		
9	Haryana	28.0	16.4	25.1	13.6	15.1	14.0		
10	Himachal Pradesh	30.3	9.2	28.4	10.7	3.4	10.0		
11	J & K	30.3	9.2	25.2	4.6	7.9	5.4		
12	Jharkhand	n.a.	n.a.	n.a.	46.3	20.2	40.3		
13	Karnataka	29.9	40.1	33.2	20.8	32.6	25.0		
14	Kerala	25.8	24.6	25.4	13.2	20.2	15.0		
15	Madhya Pradesh	40.6	48.4	42.5	36.9	42.1	38.3		
16	Maharashtra	37.9	35.2	36.9	29.6	32.2	30.7		
17	Manipur	45.0	7.7	33.8	22.3	3.3	17.3		
18	Meghalaya	45.0	7.7	37.9	22.3	3.3	18.5		
19	Mizoram	45.0	7.7	25.7	22.3	3.3	12.6		
20	Nagaland	45.0	7.7	37.9	22.3	3.3	19.0		
21	Orissa	49.7	41.6	48.6	46.8	44.3	46.4		
22	Punjab	12.0	11.4	11.8	9.1	7.1	8.4		
23	Rajasthan	26.5	30.5	27.4	18.7	32.9	22.1		
24	Sikkim	45.0	7.7	41.4	22.3	3.3	20.1		
25	Tamil Nadu	32.5	39.8	35.0	22.8	22.2	22.5		
26	Tripura	45.0	7.7	39.0	22.3	3.3	18.9		
27	Uttar Pradesh	42.3	35.4	40.9	33.4	30.6	32.8		
28	Uttarakhand	n.a.	n.a.	n.a.	40.8	36.5	39.6		
29	West Bengal	40.8	22.4	35.7	28.6	14.8	24.7		
30	Puducherry	32.5	39.8	37.4	22.9	22.2	22.4		
	Total	37.3	32.4	36.0	28.3	25.7	27.5		

Table-2: Poverty Lines and Poverty Head Count Ratio for 2004-05 using Tendulkar Methodology

No.	Challe	Povertyl	ine(Rs.)	Poverty HeadcountRatio (%)			
No.	State	Rural	Urban	Rural	Urban	Total	
1	Andhra Pradesh	433.43	563.16	32.30	23.40	29.90	
2	Arunachal Pradesh	547.14	618.45	33.60	23.50	31.10	
3	Assam	478.00	600.03	36.40	21.80	34.40	
4	Bihar	433.43	526.18	55.70	43.70	54.40	
5	Chhatisgarh	398.92	513.70	55.10	28.40	49.40	
6	Delhi	541.39	642.47	15.60	12.90	13.10	
7	Goa	608.76	671.15	28.10	22.20	25.00	
8	Gujarat	501.58	659.18	39.10	20.10	31.80	
9	Haryana	529.42	626.41	24.80	22.40	24.10	
10	Himachal Pradesh	520.40	605.74	25.00	4.60	22.90	
11	Jammu & Kashmir	522.30	602.89	14.10	10.40	13.20	
12	Jharkhand	404.79	531.35	51.60	23.80	45.30	
13	Karnataka	417.84	588.06	37.50	25.90	33.40	
14	Kerala	537.31	584.70	20.20	18.40	19.70	
15	Madhya Pradesh	408.41	532.26	53.60	35.10	48.60	
16	Maharashtra	484.89	631.85	47.90	25.60	38.10	
17	Manipur	578.11	641.13	39.30	34.50	38.00	
18	Meghalaya	503.32	745.73	14.00	24.70	16.10	
19	Mizoram	639.27	699.75	23.00	7.90	15.30	
20	Nagaland	687.30	782.93	10.00	4.30	9.00	
21	Orissa	407.78	497.31	60.80	37.60	57.20	
22	Pondicherry	385.45	506.17	22.90	9.90	14.10	
23	Punjab	543.51	642.51	22.10	18.70	20.90	
24	Rajasthan	478.00	568.15	35.80	29.70	34.40	
25	Sikkim	531.50	741.68	31.80	2.90	31.10	
26	Tamil Nadu	441.69	559.77	37.50	19.70	28.90	
27	Tripura	450.49	555.79	44.50	22.50	40.60	
28	Uttar Pradesh	435.14	532.12	42.70	34.10	40.90	
29	Utarakhand	486.24	602.39	35.10	26.20	32.70	
30	West Bengal	445.38	572.51	38.20	24.40	34.30	
	All India	446.68	578.80	41.80	25.70	37.20	

### No. M-11019/10/2005-PP Planning Commission (Perspective Planning Division)

Yojana Bhavan, Sansad Marg, New Delhi, 2<sup>nd</sup> December, 2005

### **ORDER**

Subject: Expert Group to Review the Methodology for Estimation of Poverty.

It is proposed to set up a Expert Group to Review the Methodology for Estimation of Poverty.

- II. The composition of the committee will be as under:
- 1. Prof. Suresh D. Tendulkar Delhi School of Economics University of Delhi Delhi.

Chairman

Member

3. Prof. Raghav Ghaia
Faculty of Management Science
University of Delhi

Member

4. Dr. Suranjan Sengupta AE-710, Sector-1 Salt Lake Kolkata-700064

Member

- III. The terms of reference for the committee are as follows:
- 1. To examine the issues relating to the comparability of the 50<sup>th</sup>, 55<sup>th</sup> and 61<sup>st</sup> round, and to suggest methodologies for deriving such comparability with past and future surveys.
- 2. To review alternative conceptualizations of poverty, and the associated technical aspects of procedures of measurement and data base for empirical estimation including procedures for updating over time and across states.
- 3. In the light of (2), to recommend any changes in the existing procedures of official estimates of poverty.

IV. The Chairman of the Expert Group may set up sub-committees if necessary for undertaking in-depth studies.

V. The Group may co-opt and consult non-official experts/representatives of other agencies if required.

VI. The expenditure on T.A./D.A. for the Members in connection with the meetings of the committee will be borne by the parent Department/ Ministry/ Organisation. The expenditure, if any, in respect of non-official Members will be borne by the Planning Commission as per rules & regulations of T.A./D.A. applicable to Grade-I officers of Govt. of India.

VII. Secretarial Assistance will be provided to the Group by the Planning Commission.

VIII. The Technical Committee will submit an interim report by February, 2006 and its final report to the Planning Commission within a year.

R.Sridharan Joint Secretary (Admn.)

Copy to:

All members of the Expert Group.