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Poverty Estimates in India: Some Key Issues

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FOREWORD

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ABSTRACT

The paper provides an overview of the methodologies used by the Indian Planning Commission in the past 30 years. Using the Planning Commission poverty line, the paper computes poverty and inequality indices from the large sample surveys of NSS consumer expenditure data and demonstrates that the intertemporal changes in the poverty ratio has been more influenced by the changes in per capita consumption rather than class distribution. Interpersonal inequality in the consumption distribution, measured by the Lorenz ratio, remained fairly stable for a pretty long period, but showed signs of decline recently. The paper dwells on the quality of data on private consumption obtained from the National Sample Surveys on household consumer expenditure vis-à-vis the private consumption expenditure in the National Accounts Statistics, particularly the recent changes in the method of data collection in the former. The paper also discusses the importance of nonincome indicators such as infant mortality rate and school enrolment in the assessment of living standards.

I. INTRODUCTION

The well-being of its people has been the prime concern of the Government of India since 1947. A number of policies have been formulated to help those sections of the population who have been left behind in the overall growth process to catch up with the rest of the people. However, till the mid-1970s, the approach had essentially been that the growth process will take care of reducing poverty. But this did not happen significantly. Therefore, the late 1970s and early 1980s witnessed a sea change in the strategy for poverty alleviation. The government decided to attack poverty directly rather than depend on general growth alone. This gave birth to the concept of "growth with redistribution"—the use of special schemes for the direct generation of income for the poor along with the promotion of general growth—to achieve a faster reduction in poverty.

Keeping the objective of eradicating poverty in mind as well as the goal of promoting the general welfare, the Statistical Organization of India, since its inception in 1950, led by the National Sample Survey Organization (NSSO), has kept up the work of collecting various kinds of statistical information for the use of policymakers, program implementers, and other people involved in the eradication of poverty and the improvement of general welfare in the country.

This paper gives an analytical description of the poverty database in India. Section II discusses the data sources used for the estimation of poverty and its various dimensions. It focuses on household surveys and household consumer expenditure surveys, highlighting the periodicity, sample size, scope, and purpose of these surveys.

Section III discusses the evolution of the poverty line over time, beginning with the definition put forward by the Planning Commission first in 1962 by a Working Group and then in 1979 by a Task Force. It then reports on the methodology presently used by the Planning Commission based on the recommendations of the Expert Group. This section also describes broad trends in poverty ratios estimated with the use of poverty lines based on the Expert Group methodology and NSSO data on household consumer expenditure. The section outlines the poverty situation from the national to the subnational level, the various states.

Section IV provides consumption expenditure data to provide the empirical basis of poverty estimates. The section also shows the distribution of consumption expenditures.

Section V discusses special data issues, focusing, first, on the changes in the recall periods of the consumer expenditure surveys and, second, on the divergence between estimates of consumption expenditures derived from household surveys and those based on the national income accounts. As pointed out in this section, which estimates of consumption expenditures one considers in computing poverty can have important implications for poverty estimates.

Section VI discusses nonincome indicators such as infant mortality rate and school enrolment in the assessment of the level of living. It brings in indicators at the state level.

The paper concludes with a few remarks on the continuing challenge of poverty alleviation in India.

II. DATA SOURCES

A. Household Surveys

Among developing countries, India probably has one of the soundest databases for addressing socioeconomic issues. All the Ministries publish yearbooks that contain information on the performance of the programs and schemes they implement. A large amount of data is generated as a by-product of their administration. Besides this, the NSSO regularly conducts surveys covering important socioeconomic aspects of life in rural and urban areas. These data are available at national and state levels. Some of them are also available at the substate level.

The NSSO covers a wide range of subjects. These can be classified under four categories: household surveys on socioeconomic subjects; surveys on landholding, livestock, and agriculture; establishment and enterprise surveys; and village surveys. Of these surveys, the most relevant for poverty analysis is the survey on household consumer expenditure.

Through household surveys, data is collected on population, births, deaths, migration, fertility, family planning, morbidity, disability, employment and unemployment, household consumer expenditure, housing condition, and utilization of public services in health, education, etc.—just about all the statistical information required in poverty analysis.

B. Consumer Expenditure Surveys

Surveys on household consumer expenditure yield data for the estimation of the incidence of poverty and the assessment of levels of living at national and subnational levels. Consumer expenditure data are deemed more appropriate for analysis of levels of living and poverty than those on income, for a number of reasons. For example, current income may be subject to large fluctuations due to seasonal factors, especially in economies with large rural and informal sectors. Since households may be able to access credit markets or household savings and thereby smooth their consumptions to some degree, consumption expenditures may be able to provide a better basis for determining a household's actual standard of living. Moreover, income in kind is often valued at producer's prices rather than purchaser's prices, resulting in the underestimation of people's actual level of well-being.

Since its beginning in 1950 and until its 28th round (1973-1974), the NSSO has collected data on consumer expenditure every year. After the 26th round of the survey (1971-1972), the Governing Council of NSSO decided to undertake the surveys on consumer expenditure and employment–unemployment together from a large sample once in five years. Accordingly, quinquennial surveys on consumer expenditure and employment–unemployment have been conducted in the 27th (1972-1973), 32nd (1977-1978), 38th (1983), 43rd (1987-1988), 50th (1993-1994), and 55th (1999-2000) rounds of NSS.

In a later decision, from its 42nd Round, 1986-1987, the NSSO reintroduced the collection of consumer expenditure data annually though on a reduced scale. This was done in order to maintain continuity in the consumer expenditure data, which seemed essential for monitoring intertemporal changes in the levels of living. These thin surveys were spread over a period ranging from six months to one year and generated data that have been useful in the estimation of levels of well-being.

The data collected referred to more than 300 items comprising cereals, vegetables, fruits, pulses, milk and milk products, edible oil, meat, egg and fish, sugar, salt, spices, beverages, pan, tobacco, and intoxicants in a very detailed manner. Data on clothing, fuel and light, footwear, medical expenses, education, entertainment, goods for personal care, sundry articles, durable goods, conveyance, and other miscellaneous goods and services is also collected.

In household consumer expenditure surveys, the data collected pertained to households in the rural and urban areas of almost all the states and union territories (UTs). The number of households surveyed in the large surveys is shown in Table 1:

| YEAR | RURAL | URBAN | TOTAL |
|-----------|-------|-------|--------|
| 1973-1974 | 15467 | 7881 | 23348 |
| 1977-1978 | 99766 | 58162 | 157928 |
| 1983 | 79692 | 43410 | 123102 |
| 1987-1988 | 79432 | 45358 | 124790 |
| 1993-1994 | 69206 | 46148 | 115354 |
| 1999-2000 | 71385 | 48924 | 120309 |
| | | | |

 Table 1

 Number of Sample Households Surveyed in Various Rounds

The average size of households for each of the large sample surveys is given in Table 2. The average size of both rural and urban households declined slightly over the 1973-2000 period.

| YEAR | RURAL | URBAN |
|-----------|-------|-------|
| 1973-1974 | 5.31 | 4.81 |
| 1977-1978 | 5.22 | 4.89 |
| 1983 | 5.20 | 4.81 |
| 1987-1988 | 5.08 | 4.71 |
| 1993-1994 | 4.90 | 4.46 |
| 1999-2000 | 5.04 | 4.53 |

TABLE 2 Average Household Size

III. POVERTY INDICATORS

A. Methodology

The estimation of poverty in India is based on two critical components. First, information on the consumption expenditures and its distribution across households is provided by the NSS consumption expenditure surveys. Second, these expenditures by households are evaluated with reference to a given poverty line. Households with consumption expenditures below the poverty line are deemed poor. The remaining are the nonpoor.

1. Poverty Lines

The first step in estimating poverty is to define and quantify a poverty line. The idea of poverty line was first mooted by the Indian Labour Conference in 1957. The poverty line in India was quantified for the first time in 1962 by a Working Group of the Planning Commission in terms of a minimum requirement (food and nonfood) of individuals for healthy living. The money value of the minimum requirement was set as per capita consumption expenditure of Rs.20 per month at 1960-1961 prices and was termed as the poverty line.

The Task Force on Projection of Minimum Needs and Effective Consumption Demand constituted by the Planning Commission in 1979 defined the poverty line as per capita consumption expenditure level, which meets the average per capita daily calorie requirement of 2400 kcal per capita per day in rural areas and 2100 kcal per capita per day in urban areas along with a minimum of nonfood expenditure. It used the age-sex-activity specific calorie allowances recommended by the Nutrition Expert Group (1968) to estimate the average daily per capita requirement for rural and urban areas using the age-sex-occupational structure of their respective population.

The Task Force used the 28th Round (1973-1974) National Sample Survey (NSS) data on household consumption both in quantitative and value terms in order to compute the monetary equivalent of these calorie norms. Based on the observed consumer behavior in 1973-1974 it was estimated that, on average, consumer expenditure of Rs. 49.09 per capita per month meets the calorie requirement of 2400 kcal per capita per day in rural areas, and Rs. 56.64 per capita per month with an intake of 2100 kcal per capita per day in urban areas. These poverty lines expressed in terms of per capita consumption expenditure conform to a consumption basket, which satisfies the above calorie norm and meets a minimum of nonfood requirements, such as clothing, shelter, transport, etc. Thus, the concept of poverty line used here was partly normative and partly behavioral.

The poverty lines for later years were estimated by updating the 1973-1974 poverty line initially by the Wholesale Price Index (WPI). The use of WPI became controversial as it comprised a range of items (about half of its weight) that are not meant for private consumption at all. Besides, consumers buy goods at retail and not at wholesale prices. The Study Group on Estimation of Poverty Line, constituted by the Planning Commission during the Seventh Five Year Plan (1985-1990), recommended use of private consumption deflator of the CSO to update the 1973-1974 poverty lines for later years.

The same poverty line defined at national level (separately for rural and urban areas) was used in all the States/Union Territories (UTs).

The Task Force's methodology for quantifying poverty lines was regarded by some as inappropriate and even inadequate in giving a representative picture of the incidence of poverty in India. The main points of the criticism, insofar as the poverty line was concerned, included:¹

¹ The Task Force had also recommended an adjustment of consumption expenditures derived from the NSS surveys by using information on private consumption from the National Income Accounts. This procedure of adjusting expenditures also came under criticism. See Section IV below.

- (i) choice of deflators to represent price changes in the poverty line;
- (ii) application of the same poverty line in all the states, which imply the absence of price differentials across the states;
- (iii) use of a fixed consumption basket over time; and
- (iv) uniform consumption basket for all the states.

The Planning Commission in September 1989 constituted the Expert Group on Estimation of Proportion and Number of Poor to examine the methodology used for estimation of poverty and "re-define the poverty line, if necessary."²

The Expert Group did not find it necessary to redefine the poverty line. It accepted the Task Force poverty lines, which were available in rural and urban areas at the national level. However, given interstate variation in prices, the Expert Group disaggregated these national level poverty lines of the Task Force into state-specific poverty lines using state-specific price indices and interstate price differential. The important points of departure between the Expert Group and the Task Force methodology insofar as the poverty line was concerned were:

- (i) The Expert Group used state-specific poverty lines against a national poverty line for rural and urban areas.
- (ii) The Expert Group suggested use of state-specific cost of living indices for estimating and updating the poverty line separately for rural and urban areas. The Task Force estimates were based on one national index, which is same for all the states and also for rural and urban areas. The Expert Group methodology used state-specific Consumer Price Index of Agricultural Labourers (CPIAL) for estimating and updating the rural poverty line and the simple average of the Consumer Price Index of Industrial Workers (CPIIW) and Consumer Price Index of Urban Non-manual Employees (CPIUNM) for estimating and updating the urban poverty line.

It should be noted that the Planning Commission decided to modify slightly the Expert Group method for poverty estimation in the urban areas. It uses only the Consumer Price Index of Industrial Workers (CPIIW) for estimating and updating the urban poverty lines.

The estimation of poverty lines by the Expert Group method as used in the Planning Commission is as follows:

2. Rural Poverty Lines

The Expert Group disaggregated the national rural poverty line of Task Force (which is monthly per capita consumer expenditure of Rs. 49.09 in 1973-1974) into state-specific poverty lines using indices of interstate price differential measured by Fisher's Index. These state-specific poverty lines of 1973-1974 are updated for later years using state-specific price indices especially constructed by averaging the Consumer Price Index of Agricultural Labourers (CPIAL) of (a) food, (b) fuel and light, (c) clothing and footwear, and (d) miscellaneous items with their respective weights in the consumption basket of the poor in 1973-1974 at the national level.

² The Expert Group submitted its Report in July 1993. The Government has adopted the Expert Group methodology for poverty estimation since March 1997 as the basis for computing the official estimates of poverty in India.

3. Urban Poverty Lines

The Expert Group disaggregated the national urban poverty line of the Task Force (which is monthly per capita consumer expenditure of Rs. 56.64 in 1973-1974) into state-specific poverty lines using indices of interstate price differential measured by Fisher's Index. These state-specific poverty lines of 1973-1974 are updated for later years using especially constructed state-specific price indices by averaging the Consumer Price Index (CPI) of Industrial Workers, of (a) food; (b) fuel and light; (c) housing; (d) clothing, bedding, and footwear; and (e) miscellaneous with their respective weights in the consumption basket of the poor at national level in 1973-1974.

The commodity composition of the basket of the persons around the poverty line in 1973-1974 at national level in rural and urban areas is as follows:

| COMMODITY GROUP | RURAL | URBAN | |
|------------------------|--------------|-------|--|
| Food Fuol and light | 81.3 | 74.6 | |
| Housing | | 2.5 | |
| Clothing and footwear | 3.7 | 2.9 | |
| All Commodities | 8.9 100.0 | 13.3 | |
| | | | |

 TABLE 3

 Commodity Composition of Poverty Basket (percent)

4. National Poverty Lines

The Expert Group has estimated state-specific poverty lines. It does not specifically estimate the national level poverty lines. The national poverty lines are worked out from the national level expenditure distribution obtained from the NSS data on consumer expenditure and the national level poverty ratio. The national level poverty ratio, on the other hand, is estimated as a weighted average of state-wise poverty ratios. Hence, the estimate of national level poverty line in the Expert Group method is implicit. These are given in Table 4.

| YEAR | RURAL | URBAN | URBAN-RURAL DIFFERENTIAL (%) |
|-----------|--------|--------|---------------------------------|
| 1973-1974 | 49.63 | 56.76 | 14.4 |
| 1977-1978 | 56.84 | 70.33 | 23.7 |
| 1983 | 89.50 | 115.65 | 33.7 |
| 1987-1988 | 115.20 | 162.16 | 40.8 |
| 1993-1994 | 205.84 | 281.35 | 36.7 |
| 1999-2000 | 327.56 | 454.11 | 38.6 |

 Table 4

 Poverty Line (Rs. monthly per capita)

The implicit price rise of the consumption basket of the poor at national level as obtained from the state-specific price indices, are given below.

| YEAR | RURAL (CPIAL) | URBAN (CPIIW) |
|-----------|---------------|---------------|
| 1072 107/ | 100.0 | 100.0 |
| 19/3-19/4 | 100.0 | 100.0 |
| 1977-1978 | 114.5 | 123.9 |
| 1983 | 180.3 | 203.8 |
| 1987-1988 | 232.1 | 285.7 |
| 1993-1994 | 414.7 | 495.7 |
| 1999-2000 | 660.0 | 800.1 |
| | | |

TABLE 5 Price Indices of the Poor

5. The Poverty Ratio

With the poverty lines quantified, the Expert Group estimated the percentage of people whose consumption expenditures fell below the poverty line, also known as the poverty ratio, in rural and urban areas for the same years. The national level poverty ratios and their annual average rate of decline are given in Table 6.

| | RURAL | | URBA | N | COMBINED | |
|-----------|-------|---------|-------|---------|----------|---------|
| YEAR | RATIO | DECLINE | RATIO | DECLINE | RATIO | DECLINE |
| | | | | | | |
| 1973-1974 | 56.4 | | 49.0 | | 54.9 | |
| 1977-1978 | 53.1 | 1.5 | 45.2 | 2.0 | 51.3 | 1.7 |
| 1983 | 45.7 | 2.1 | 40.8 | 1.8 | 44.5 | 2.1 |
| 1987-1988 | 39.1 | 2.6 | 38.2 | 1.8 | 38.9 | 2.4 |
| 1993-1994 | 37.3 | 2.1 | 32.4 | 2.1 | 36.0 | 2.1 |
| 1999-2000 | 27.1 | 2.8 | 23.6 | 2.8 | 26.1 | 2.8 |

 TABLE 6

 POVERTY RATIO (HEAD COUNT RATIO; PERCENT)

Note: The rates of decline are annual averages over 1973-1974. Source: Planning Commission

Between 1973-1974 and 1993-1994, the poverty ratio fell by about one percentage point annually. The absolute decline of the poverty ratio during this period was greater in rural (19.1 percentage points) than in urban areas (16.6 percentage points), while the rate of decline remained the same (2.1 percent per year) for both areas. The rate of decline was much faster during the



period from 1993-1994 to 1999-2000—more than five percent per year in both rural and urban areas. Since 1973-1974, the differential in the urban-rural poverty ratio has remained unchanged at 15 percent.³

B. Subnational Indicators

Table 7 and 8 show the poverty lines and poverty ratios at the state level estimated from the large surveys of NSS using Expert Group methodology. Estimates of the actual number of poor people are shown in Table 9.

³ As noted earlier, the NSSO has carried out consumption expenditure surveys in nonquinquennial round years since 1986-1987. In principle, these surveys should provide information to estimate poverty every year and not just the quinquennial round. However, in practice this is not done. The Expert Group specifically stated that the large sample surveys of consumption expenditure carried out by the NSSO once in approximately five years, which yield state-level estimates of mean per capita total consumption expenditure and the size distribution of the population around the mean, should be the basic source of information for estimating the poverty ratio. It also stated that national level poverty be viewed as an average of state-level poverty. The availability of reliable state-specific consumer expenditure distribution is necessary to compute state-wise poverty. The thin sample data of consumer expenditure is inadequate to provide reliable estimates at the state level. This is the main reason for not using the thin sample data on consumer expenditure for poverty estimation.

| | | | RURAL | | | URBAN | |
|-------|----------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| S.No. | STATES | 1983-1984 | 1993-1994 | 1999-2000 | 1983-1984 | 1993-1994 | 1999-2000 |
| | | | | | | | |
| 1. | Andhra Pradesh | 72.66 | 163.02 | 262.94 | 106.43 | 278.14 | 457.40 |
| 2. | Assam | 98.32 | 232.05 | 365.43 | 97.51 | 212.42 | 343.99 |
| 3. | Bihar | 97.48 | 212.16 | 333.07 | 111.80 | 238.49 | 379.78 |
| 4. | Goa | 88.24 | 194.94 | 318.63 | 126.47 | 328.56 | 539.71 |
| 5. | Gujarat | 83.29 | 202.11 | 318.94 | 123.22 | 297.22 | 474.41 |
| 6. | Haryana | 88.57 | 233.79 | 362.81 | 103.48 | 258.23 | 420.20 |
| 7. | Himachal Pradesh | 88.57 | 233.79 | 367.45 | 102.26 | 253.61 | 420.20 |
| 8. | Jammu & Kashmir | 91.75 | _ | 367.45 | 99.62 | _ | 420.20 |
| 9. | Karnataka | 83.31 | 186.63 | 309.59 | 120.19 | 302.89 | 511.44 |
| 10. | Kerala | 99.35 | 243.84 | 374.79 | 122.64 | 280.54 | 477.06 |
| 11. | Madhya Pradesh | 83.59 | 193.10 | 311.34 | 122.82 | 317.16 | 481.65 |
| 12. | Maharashtra | 88.24 | 194.94 | 318.63 | 126.47 | 328.56 | 539.71 |
| 13. | Orissa | 106.28 | 194.03 | 323.92 | 124.81 | 298.22 | 473.12 |
| 14. | Punjab | 88.57 | 233.79 | 362.68 | 101.03 | 253.61 | 388.15 |
| 15. | Rajasthan | 80.24 | 215.89 | 344.03 | 113.55 | 280.85 | 465.92 |
| 16. | Tamil Nadu | 96.15 | 196.53 | 307.64 | 120.30 | 296.63 | 475.60 |
| 17. | Uttar Pradesh | 83.85 | 213.01 | 336.88 | 110.23 | 258.65 | 416.29 |
| 18. | West Bengal | 105.55 | 220.74 | 350.17 | 105.91 | 247.53 | 409.22 |
| 19. | Dadra & Nagar Haveli | 88.24 | 194.94 | 318.63 | 126.47 | 328.56 | 539.71 |
| 20. | Delhi | 88.57 | 233.79 | 362.68 | 123.29 | 309.48 | 505.45 |
| | All India | 89.50 | 205.84 | 327.56 | 115.65 | 281.35 | 454.11 |

 Table 7

 Poverty Lines for Major States (Rs. monthly per capita)

Note: The poverty line(implicit) at all-India level is worked out from the expenditure class-wise distribution of persons and the poverty ratio at all-India level. The poverty ratio at all-India level is obtained as the weighted average of the state-wise poverty ratio.

Source: Planning Commission.

| | | | RURAL | | | URBAN | |
|-----|------------------------|-------|-----------|-----------|-------|-----------|-----------|
| | STATES | 1983 | 1993-1994 | 1999-2000 | 1983 | 1993-1994 | 1999-2000 |
| | | | | | | | |
| 1. | Andhra Pradesh | 26.53 | 15.92 | 11.05 | 36.30 | 38.33 | 26.63 |
| 2. | Arunachal Pradesh | 42.60 | 45.01 | 40.04 | 21.73 | 7.73 | 7.47 |
| 3. | Assam | 42.60 | 45.01 | 40.04 | 21.73 | 7.73 | 7.47 |
| 4. | Bihar | 64.37 | 58.21 | 44.30 | 47.33 | 34.50 | 32.91 |
| 5. | Goa | 14.81 | 5.34 | 1.35 | 27.00 | 27.03 | 7.52 |
| 6. | Gujarat | 29.80 | 22.18 | 13.17 | 39.14 | 27.89 | 15.59 |
| 7. | Haryana | 20.56 | 28.02 | 8.27 | 24.15 | 16.38 | 9.99 |
| 8. | Himachal Pradesh | 17.00 | 30.34 | 7.94 | 9.43 | 9.18 | 4.63 |
| 9. | Jammu and Kashmir | 26.04 | 30.34 | 3.97 | 17.76 | 9.18 | 1.98 |
| 10. | Karnataka | 36.33 | 29.88 | 17.38 | 42.82 | 40.14 | 25.25 |
| 11. | Kerala | 39.03 | 25.76 | 9.38 | 45.68 | 24.55 | 20.27 |
| 12. | Madhya Pradesh | 48.90 | 40.64 | 37.06 | 53.06 | 48.38 | 38.44 |
| 13. | Maharashtra | 45.23 | 37.93 | 23.72 | 40.26 | 35.15 | 26.81 |
| 14. | Manipur | 42.60 | 45.01 | 40.04 | 21.73 | 7.73 | 7.47 |
| 15. | Meghalaya | 42.60 | 45.01 | 40.04 | 21.73 | 7.73 | 7.47 |
| 16. | Mizoram | 42.60 | 45.01 | 40.04 | 21.73 | 7.73 | 7.47 |
| 17. | Nagaland | 42.60 | 45.01 | 40.04 | 21.73 | 7.73 | 7.47 |
| 18. | Orissa | 67.53 | 49.72 | 48.01 | 49.15 | 41.64 | 42.83 |
| 19. | Punjab | 13.20 | 11.95 | 6.35 | 23.79 | 11.35 | 5.75 |
| 20. | Rajasthan | 33.50 | 26.46 | 13.74 | 37.94 | 30.49 | 19.85 |
| 21. | Sikkim | 42.60 | 45.01 | 40.04 | 21.73 | 7.73 | 7.47 |
| 22. | Tamil Nadu | 53.99 | 32.48 | 20.55 | 46.96 | 39.77 | 22.11 |
| 23. | Tripura | 42.60 | 45.01 | 40.04 | 21.73 | 7.73 | 7.47 |
| 24. | Uttar Pradesh | 46.45 | 42.28 | 31.22 | 49.82 | 35.39 | 30.89 |
| 25. | West Bengal | 63.05 | 40.80 | 31.85 | 32.32 | 22.41 | 14.86 |
| 26. | A and N Island | 53.99 | 32.48 | 20.55 | 46.96 | 39.77 | 22.11 |
| 27. | Chandigarh | 23.79 | 11.35 | 5.75 | 23.79 | 11.35 | 5.75 |
| 28. | Dadra and Nagar Haveli | 14.81 | 51.95 | 17.57 | 27.00 | 39.93 | 13.52 |
| 29. | Daman and Diu | N.A | 5.34 | 1.35 | N.A | 27.03 | 7.52 |
| 30. | Delhi | 7.66 | 1.90 | 0.40 | 27.89 | 16.03 | 9.42 |
| 31. | Lakshadweep | 39.03 | 25.76 | 9.38 | 45.68 | 24.55 | 20.27 |
| 32. | Pondicherry | 53.99 | 32.48 | 20.55 | 46.96 | 39.77 | 22.11 |
| | All India | 45.65 | 37.27 | 27.09 | 40.79 | 32.36 | 23.62 |

TABLE 8POVERTY RATIOS (PERCENT)

Notes:

1. Poverty Ratio of Assam is used for Sikkim, Arunachal Pradesh, Meghalaya, Mizoram, Manipur, Nagaland, and Tripura.

2. Poverty Ratio of Tamil Nadu is used for Pondicherry and A and N Island.

3. Poverty Ratio of Kerala is used for Lakshdweep.

4. Poverty Ratio of Goa is used for Daman and Diu.

5. Urban Poverty Ratio of Punjab used for both rural and urban poverty of Chandigarh.

6. Poverty Line of Maharashtra and expenditure distribution of Goa is used to estimate poverty ratio of Goa.

7. Poverty Line of Maharashtra and expenditure distribution of Dadra & Nagar Haveli is used to estimate poverty ratio of Dadra and Nagar Haveli.

8. Poverty Ratio of Himachal Pradesh is used for Jammu & Kashmir in 1993-1994.

Source: Planning Commission.

| | | RURAL | | | | URBAN | |
|------|------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| S.No | o. STATES/U.Ts | 1983-1984 | 1993-1994 | 1999-2000 | 1983-1984 | 1993-1994 | 1999-2000 |
| 1 | Andhra Pradoch | 11 /3 | 7 05 | 5 81 | 5.03 | 7 45 | 6.00 |
| 2 | Arunachal Pradosh | 0.27 | 0.36 | 0.38 | 0.01 | 0.01 | 0.03 |
| 2. | Arcam | 7 34 | 0.50 | 0.30 | 0.01 | 0.01 | 0.02 |
| 4 | Rihar | 41 77 | 45.09 | 37.65 | 4 43 | 4 25 | 4 91 |
| 5 | 602 | 0.12 | 45.05 | 0.01 | 0.10 | 0.15 | 0.06 |
| 6 | Guiarat | 7 29 | 6.22 | 3 98 | 4 50 | 4 30 | 2 81 |
| 7 | Harvana | 2 20 | 3 66 | 1 19 | 0.76 | 0.73 | 0.54 |
| 8 | Himachal Pradesh | 0.71 | 1.54 | 0.48 | 0.03 | 0.05 | 0.03 |
| 9. | Jammu and Kashmir | 1.31 | 1.90 | 0.30 | 0.25 | 0.19 | 0.05 |
| 10. | Karnataka | 10.05 | 9.60 | 5.99 | 4.93 | 6.05 | 4.45 |
| 11. | Kerala | 8.16 | 5.59 | 2.09 | 2.52 | 2.05 | 2.01 |
| 12. | Madhva Pradesh | 21.55 | 21.62 | 21.73 | 6.25 | 8.23 | 8.12 |
| 13. | Maharashtra | 19.37 | 19.33 | 12.51 | 9.72 | 11.19 | 10.29 |
| 14. | Manipur | 0.48 | 0.63 | 0.65 | 0.08 | 0.05 | 0.07 |
| 15. | Meghalava | 0.50 | 0.71 | 0.79 | 0.06 | 0.03 | 0.03 |
| 16. | Mizoram | 0.16 | 0.16 | 0.14 | 0.04 | 0.03 | 0.05 |
| 17. | Nagaland | 0.32 | 0.48 | 0.52 | 0.03 | 0.02 | 0.03 |
| 18. | Orissa | 16.46 | 14.09 | 14.37 | 1.67 | 1.97 | 2.54 |
| 19. | Punjab | 1.67 | 1.77 | 1.02 | 1.19 | 0.74 | 0.43 |
| 20. | Rajasthan | 9.67 | 9.47 | 5.50 | 3.01 | 3.38 | 2.68 |
| 21. | Sikkim | 0.12 | 0.18 | 0.20 | 0.01 | 0.003 | 0.01 |
| 22. | Tamil Nadu | 18.16 | 12.17 | 8.05 | 7.85 | 8.04 | 5.00 |
| 23. | Tripura | 0.83 | 1.14 | 1.25 | 0.06 | 0.04 | 0.05 |
| 24. | Uttar Pradesh | 44.80 | 49.62 | 41.20 | 10.87 | 10.83 | 11.79 |
| 25. | West Bengal | 26.86 | 20.99 | 18.01 | 5.01 | 4.47 | 3.34 |
| 26. | Andaman and Nicobar | 0.08 | 0.07 | 0.06 | 0.03 | 0.03 | 0.02 |
| 27. | Chandigarh | 0.01 | 0.01 | 0.01 | 0.11 | 0.07 | 0.04 |
| 28. | Dadra and Nagar Haveli | 0.02 | 0.07 | 0.03 | 0.002 | 0.01 | 0.003 |
| 29. | Daman and Diu | _ | 0.003 | .001 | _ | 0.02 | 0.01 |
| 30. | Delhi | 0.04 | 0.02 | 0.01 | 1.80 | 1.53 | 1.14 |
| 31. | Lakshadweep | 0.01 | 0.01 | 0.003 | 0.01 | 0.01 | 0.01 |
| 32. | Pondicherry | 0.16 | 0.09 | 0.06 | 0.17 | 0.24 | 0.18 |
| | All India | 251.96 | 244.03 | 193.24 | 70.94 | 76.34 | 67.01 |

TABLE 9 Number of Poor (million)

Source: Planning Commission.

The share of southern states of Andhra Pradesh, Karnataka, Kerala, and Tamil Nadu in total number of poor decreased from 18 percent in 1993-1994 to 15 percent in 1999-2000 while their share of the population remained at 23 percent of total population. In comparison, the share of the states of Bihar, Orissa, Madhya Pradesh, Uttar Pradesh, and West Bengal in the total number of poor rose from 57 percent in 1993-1994 to 63 percent in 1999-2000 as against their share of 46 percent to total population in both years.

IV. CONSUMPTION EXPENDITURE

A. Per Capita Consumption Expenditure

The NSSO collects and compiles household consumer expenditure data for all the states and UTs of the country separately for rural and urban areas. Per capita consumption is treated as the prime indicator of level of living in a developing economy. The use of consumption data for such purposes is extensive in India partly because of absence of income data and partly because of regular availability of consumption data from government agencies at the subnational level.

| YEAR | RURAL | URBAN | URBAN-RURAL DIFFERENTIAL |
|-----------|-------|-------|-----------------------------|
| 1973-1974 | 53.0 | 70.8 | 1.334 |
| 1977-1978 | 68.9 | 96.2 | 1.396 |
| 1983 | 112.5 | 164.0 | 1.458 |
| 1987-1988 | 158.1 | 250.6 | 1.585 |
| 1993-1994 | 281.4 | 458.0 | 1.628 |
| 1999-2000 | 486.2 | 855.0 | 1.759 |

 TABLE 10

 Average Monthly Per Capita Expenditure (Rs. per month at current prices)

Source: Reports of household consumer expenditure surveys conducted by NSSO.

Table 10 displays per capita consumption expenditures as derived from the NSSO data on consumer expenditures. There has been a steady increase in the average per capita consumption expenditure during the past three decades in both rural and urban areas. The rate of increase in per capita expenditure, at current prices, in urban areas is higher than in rural areas between 1973-1974 and 1999-2000. As a result, the urban-rural differential in per capita consumption has increased from 1.334 in 1973-1974 to 1.759 in 1999-2000.

Per capita consumption expenditure separately for the poor and nonpoor of the population are given in Table 11.

| | RUR | AL | UR | URBAN | | |
|---|--|---|---|--|--|--|
| YEAR | POOR | NONPOOR | POOR | NONPOOR | | |
| 1973-1974 1977-1978 1983 1987-1988 1993-1994 1999-2000 | 35.10 39.80 65.00 88.30 159.20 265.80 | 76.30 101.10 152.40 203.10 353.60 567.40 | 41.00 50.00 85.70 120.00 212.80 361.00 | 97.00 134.60 218.00 331.40 575.40 1007.30 | | |

| | TABLE 11 | |
|---------|---------------------------|--------|
| Average | MONTHLY PER CAPITA EXPEN | DITURE |
| (Rs. | PER MONTH AT CURRENT PRIC | es) |

Source: Estimated from the household consumer expenditure data of the NSS, various Rounds.

As a result of the reduction in inequality in the distribution of interpersonal consumption, the per capita consumption expenditure of the poor in rural areas increased faster than that of the nonpoor. The ratio of per capita consumption expenditure of poor to nonpoor increased from 0.39 in 1977-1978 to 0.47 in 1999-2000 in the rural areas. In the urban areas, however, the same declined marginally from 0.37 to 0.36 during the same period.

B. Distribution of Expenditure

However, the increase in per capita expenditure alone is not enough to reduce poverty. The distribution of per capita expenditure across the income classes is equally important. The incidence of poverty is positively associated with the Lorenz ratio, which is a measure of inequality in the distribution of consumption expenditure. The Lorenz ratio estimated separately for rural and urban areas for the six NSS years are given in Table 12.

| YEAR | RURAL | URBAN |
|-----------|--------|--------|
| 1973-1974 | 0.2758 | 0.3013 |
| 1977-1978 | 0.3386 | 0.3448 |
| 1983 | 0.2976 | 0.3303 |
| 1987-1988 | 0.2983 | 0.3537 |
| 1993-1994 | 0.2819 | 0.3400 |
| 1999-2000 | 0.2595 | 0.3417 |
| | | |

TABLE 12 LORENZ RATIO (GINI COEFFICIENT)

There are opposing trends in the distribution of expenditure per capita between rural and urban areas. While the distribution improved in the rural areas, with the Lorenz ratio falling from 0.2758 in 1973-1974 to 0.2595 in 1999-2000, it worsened in the urban areas, with the Lorenz ratio rising from 0.3013 in 1973-1974 to 0.3417 in 1999-2000.

The poverty gap ratio is another measure derived from the consumption distribution. The poverty gap is closely linked to the depth of poverty, which measures how far below the poverty line the consumption levels of the poor are. More specifically, the poverty gap measures the consumption expenditure shortfall of the poor relative to the poverty line. It therefore tells us the resources required to bring all the poor to the poverty line.

The poverty gap ratios estimated separately for rural and urban areas are given in Table 13. The picture that emerges from this data is brighter than that based on the Lorenz ratio as it shows an improvement in poverty eradication in both rural and urban areas. As the table shows, 16.56 percent of the total consumption in the rural areas in 1973-1974 was needed to bring the poor to the poverty line whereas this was down to 5.11 percent in 1999-2000. The trend was the same in the urban areas where 13.64 percent of the total consumption was needed to bring the poor to the poverty line in 1973-1974 and only 4.84 percent in 1999-2000.

| YEAR | RURAL | URBAN |
|-----------|-------|-------|
| 1973-1974 | 16.56 | 13.64 |
| 1977-1978 | 15.73 | 13.13 |
| 1983 | 12.32 | 10.61 |
| 1987-1988 | 9.11 | 9.94 |
| 1993-1994 | 8.45 | 7.88 |
| 1999-2000 | 5.11 | 4.84 |

TABLE 13 Poverty Gap Ratio (percent)

Source: Estimated from the household consumer expenditure data of the NSSO, various Rounds.

The movement of the decile-wise share of consumption during the past three decades (1973-1974 to 1999-2000) can be used to assess the change in the level of living of the poor vis-à-vis the nonpoor. Tables 14 and 15 give the estimates of the consumption shares of different deciles of the population for the rural and urban areas from 1973-1974 to 1999-2000.

There has been a slight improvement and a clear deterioration in the standing of the poor relative to the nonpoor in the rural and urban areas, respectively, over time. In the rural areas, the share of the top 30 percent of the population to the bottom 30 percent was 3 times in 1973-1974; this was slightly down to 2.9 times in 1999-2000. This improvement also shows the position of the poor in the sharing of consumption expenditure. The share of the bottom 30 percent in 1999-2000. The trends were in the opposite direction in the urban areas. While the share of the top 30 percent of the population was 3.5 times the share of the bottom 30 percent in 1973-1974, it was up to 4.4 times in 1999-2000. The position of the poor in the sharing of consumption share of the bottom 30 percent in 1973-1974, it was up to 4.4 times in 1999-2000. The position of the poor in the sharing of consumption share of the bottom 30 percent was 15.1 percent in 1973-1974, it was down to 13.4 percent in 1999-2000.

| DECILES | 1973-1974 | 1977-1978 | 1983 | 1987-1988 | 1993-1994 | 1999-2000 |
|------------------|-----------|-----------|-------|-----------|-----------|-----------|
| 1 st | 4.02 | 3.50 | 3.79 | 4.00 | 4.13 | 4.43 |
| 2 nd | 5.52 | 4.96 | 5.23 | 5.32 | 5.51 | 5.72 |
| 3 rd | 6.46 | 5.98 | 6.22 | 6.24 | 6.31 | 6.58 |
| 4 th | 7.23 | 6.56 | 6.88 | 6.94 | 7.16 | 7.40 |
| 5 th | 8.17 | 7.62 | 8.03 | 7.75 | 7.98 | 8.18 |
| 6 th | 9.15 | 8.36 | 9.07 | 8.77 | 8.89 | 9.14 |
| 7 th | 10.38 | 9.58 | 9.92 | 9.84 | 10.06 | 10.20 |
| 8 th | 11.98 | 11.19 | 11.71 | 11.63 | 11.56 | 11.65 |
| 9 th | 14.21 | 13.55 | 14.62 | 14.23 | 14.06 | 14.09 |
| 10 th | 22.88 | 28.70 | 24.52 | 25.28 | 24.34 | 22.59 |

TABLE 14
DECILE-WISE SHARE OF CONSUMPTION EXPENDITURE—RURAL

TABLE 15 DECILE-WISE SHARE OF CONSUMPTION EXPENDITURE—URBAN

| DECILES | 1973-1974 | 1977-1978 | 1983 | 1987-1988 | 1993-1994 | 1999-2000 |
|------------------|-----------|-----------|-------|-----------|-----------|-----------|
| 1 st | 3.90 | 3.29 | 3.49 | 3.39 | 3.37 | 3.39 |
| 2 nd | 5.27 | 4.65 | 4.77 | 4.60 | 4.65 | 4.56 |
| 3 rd | 5.90 | 5.57 | 5.64 | 5.39 | 5.54 | 5.44 |
| 4 th | 7.03 | 6.37 | 6.81 | 6.14 | 6.33 | 6.30 |
| 5 th | 7.68 | 7.26 | 7.24 | 7.14 | 7.31 | 7.26 |
| 6 th | 9.21 | 8.53 | 8.37 | 8.28 | 8.37 | 8.42 |
| 7 th | 9.33 | 9.43 | 10.39 | 9.60 | 9.77 | 9.85 |
| 8 th | 12.35 | 12.52 | 11.49 | 11.60 | 11.82 | 11.84 |
| 9 th | 14.21 | 14.15 | 14.96 | 15.13 | 15.18 | 15.05 |
| 10 th | 25.21 | 28.23 | 26.82 | 28.73 | 27.66 | 27.88 |

Source: Reports of household consumer expenditure surveys conducted by NSSO.

The per capita consumption compiled for the states for 1983, 1993-1994, and 1999-2000 is given in Table 16. Per capita consumption not only differs between states but also between areas. Among major states, the per capita consumption in rural areas in 1999-2000 is highest in Kerala, followed by Punjab, Haryana, and Himachal Pradesh; and least in Orissa, Bihar, and Madhya Pradesh. In urban areas in 1999-2000, the per capita consumption is highest in Himachal Pradesh followed by Maharashtra and Tamil Nadu, and least in Bihar and Orissa. The disparity in per capita consumption between urban and rural areas is widest in Maharashtra, Assam, West Bengal, and Tamil Nadu.

| S.No STATES/UTs | | RURAL | | | URBAN | | |
|-----------------|------------------------|--------|-----------|-----------|--------|-----------|-----------|
| | | 1983 | 1993-1994 | 1999-2000 | 1983 | 1993-1994 | 1999-2000 |
| | | | | | | | |
| 1. | Andhra Pradesh | 115.58 | 288.70 | 453.61 | 159.55 | 408.60 | 773.52 |
| 2. | Arunachal Pradesh | N.A | 316.85 | 648.00 | N.A | 494.12 | 762.66 |
| 3. | Assam | 113.03 | 258.10 | 426.13 | 160.48 | 458.60 | 814.12 |
| 4. | Bihar | 93.76 | 218.30 | 385.10 | 139.58 | 353.00 | 601.90 |
| 5. | Goa | 169.12 | 487.24 | 868.77 | 222.91 | 519.33 | 1155.50 |
| 6. | Gujarat | 119.25 | 303.30 | 551.33 | 164.06 | 454.20 | 891.68 |
| 7. | Haryana | 149.14 | 385.00 | 714.38 | 183.97 | 473.90 | 912.08 |
| 8. | Himachal Pradesh | 150.05 | 350.63 | 684.53 | 257.09 | 746.93 | 1243.30 |
| 9. | Jammu and Kashmir | 128.11 | 363.31 | 677.60 | 155.19 | 541.58 | 952.84 |
| 10. | Karnataka | 118.12 | 269.40 | 499.78 | 168.11 | 423.10 | 910.99 |
| 11. | Kerala | 145.24 | 390.40 | 765.71 | 178.31 | 493.80 | 932.62 |
| 12. | Madhya Pradesh | 101.78 | 252.00 | 401.50 | 148.39 | 408.10 | 693.56 |
| 13. | Maharashtra | 110.98 | 272.70 | 496.77 | 187.56 | 529.80 | 973.33 |
| 14. | Manipur | 131.45 | 299.57 | 537.80 | 138.20 | 319.55 | 707.77 |
| 15. | Meghalaya | N.A | 356.98 | 563.45 | N.A | 530.55 | 972.18 |
| 16. | Mizoram | 119.81 | 389.55 | 721.84 | 192.31 | 549.51 | 1056.60 |
| 17. | Nagaland | N.A | 441.46 | 941.31 | 196.43 | 510.01 | 1242.40 |
| 18. | Orissa | 97.48 | 219.80 | 373.17 | 151.35 | 402.50 | 618.49 |
| 19. | Punjab | 170.30 | 433.00 | 742.82 | 184.38 | 510.70 | 898.82 |
| 20. | Rajasthan | 127.52 | 322.40 | 548.88 | 159.96 | 424.70 | 795.81 |
| 21. | Sikkim | N.A | 298.72 | 531.77 | 222.81 | 518.44 | 905.69 |
| 22. | Tamil Nadu | 112.19 | 293.60 | 514.07 | 164.15 | 438.30 | 971.63 |
| 23. | Tripura | N.A | 343.93 | 528.41 | N.A | 489.94 | 876.60 |
| 24. | Uttar Pradesh | 104.25 | 273.80 | 466.63 | 137.84 | 389.00 | 690.33 |
| 25. | West Bengal | 104.60 | 278.80 | 454.80 | 169.94 | 474.20 | 866.59 |
| 26. | A & N Island | 156.75 | 495.89 | 780.21 | 240.79 | 907.19 | 1114.30 |
| 27. | Chandigarh | 199.41 | 463.04 | 989.19 | 289.55 | 1028.00 | 1435.60 |
| 28. | Dadra and Nagar Haveli | 93.33 | 234.29 | 561.18 | N.A | 441.86 | 1207.40 |
| 29. | Daman and Diu | N.A | 452.48 | 901.48 | N.A | 474.98 | 979.43 |
| 30. | Delhi | 208.81 | 605.22 | 917.21 | 230.43 | 794.95 | 1383.60 |
| 31. | Lakshadweep | N.A | 526.32 | 876.19 | N.A | 507.63 | 1018.20 |
| 32. | Pondicherry | 96.02 | 347.95 | 597.63 | 160.34 | 419.84 | 784.27 |
| | All India | 112.31 | 281.40 | 486.16 | 165.80 | 458.00 | 854.92 |

 TABLE 16

 Monthly Average Per Capita Consumption Expenditure (Rs.)

Source: Reports of household consumer expenditure surveys conducted by NSSO.

V. QUALITY OF DATA

Two developments impinge on the quality of data on poverty in India. The first relates to the changes in recall periods introduced by the NSSO in its 51st to 54th Rounds of the Consumer Expenditure Survey. As a result of these changes, the reliability of some data is put in doubt and planners find themselves in a dilemma in the use of the collected data for making meaningful poverty comparisons. The second and definitely more serious development pertains to the source of the consumption expenditure data. The data generated by NSSO consumer expenditure surveys that constitute the principal basis of current poverty estimates diverge from equivalent estimates derived from the National Accounts Statistics (NAS) and the divergence seems to increase over time. The conciliation of these diverging figures is currently the subject of serious study.

A. Changes in Recall Period

The consumer expenditure survey conducted by NSSO in 1999-2000 was a much-awaited survey from the point of view of assessing the impact of economic reforms on the incidence of poverty. The NSSO in its attempt to experiment on the choice of appropriate recall period in the consumer expenditure surveys made some changes in the method of data collection. Starting with the 51st Round (July 1944 to June 1995) and proceeding to the 52nd (July 1995 to June 1996), 53rd (January to December 1977), and 54th Rounds (January to June 1998) of the survey, the NSSO divided the entire sample of households into two equal groups. In one group, the data, in conformity with past practice, were collected with a uniform recall period of 30 days for all the items. For the other group of households, the recall period for different items was chosen as follows:

- (i) 7-day for food, pan, tobacco, and intoxicants
- (ii) 30-day for fuel and light, miscellaneous goods and services, and medical (noninstitutional)
- (iii) 365-day for educational, medical (institutional), clothing, footwear, and durable goods

Thus, in this experiment the data on 30-day recall period and 7/30/365-day recall periods were collected from two different sets of households by two different investigators independent of each other.

The experiment with recall period was extended to the large sample survey of the 55th Round *albeit* under an altered format. Instead of administering the 7-day and 30-day recall for food expenditure to the *different* groups of households as in the 51st to 54th Round, the NSSO in the 55th Round collected the consumption expenditure data from the same households in the following manner:

- (i) By collecting data on consumption of food items (including pan, tobacco, and intoxicants) using two different recall periods of 7-day and 30-day from the *same* households.
- (ii) By collecting consumption expenditure data in respect of selected nonfood items, such as clothing, footwear, medical (institutional), and durable goods using 365-day recall period.

(iii) In case of the remaining nonfood items, by collecting the consumption expenditure data using 30-day recall period.

In the process two changes took place:

- (i) Monthly per capita consumption expenditure for clothing, footwear, medical (institutional), and durable goods in the 55th Round was based on 365-day recall period whereas it was based on 30-days in earlier large-scale surveys.
- (ii) The data on food expenditure collection based on two different recall periods from the same households in the 55th Round resulted in a mix-up of responses to the recall periods and thus affected the comparability of this data set with the earlier ones.

The consumption expenditure data estimated from the two groups of households in the 51st to 54th Rounds and also from the same households in the 55th Round are as follows (Tables 17a and 17b):

| PERIOD/NSS ROUND | 30-DAY | 30-DAY | 7-DAY | 7-DAY |
|--|--------|--------|--------|--------|
| | RURAL | URBAN | RURAL | URBAN |
| July 1994 to June 1995 (NSS 51 st Round) | 309.43 | 508.07 | 353.77 | 601.49 |
| July 1995 to June 1996 (NSS 52 nd Round) | 344.29 | 599.26 | 404.67 | 678.25 |
| January 1997 to December 1997 (NSS 53 rd Round) | 395.01 | 645.44 | 445.28 | 736.06 |
| January 1998 to June 1998 (NSS 54 th Round) | 382.07 | 684.27 | 451.11 | 774.94 |
| July 1999 to June 2000 (NSS 55 th Round) | 486.07 | 854.96 | 505.20 | 878.74 |

 Table 17a

 Average Monthly Per Capita Consumption Expenditure (Rs.)

TABLE 17B INCREASE IN PER CAPITA CONSUMPTION EXPENDITURE (7-day over 30-day, percent)

| PERIOD/NSS ROUND | RURAL | URBAN |
|--|-------|-------|
| July 1994 to June 1995 (NSS 51 st Round) | 14.3 | 18.4 |
| July 1995 to June 1996 (NSS 52 nd Round) | 17.5 | 13.2 |
| January 1997 to December 1997 (NSS 53 rd Round) | 12.7 | 14.0 |
| January 1998 to June 1998 (NSS 54 th Round) | 18.1 | 13.3 |
| July 1999 to June 2000 (NSS 55 th Round) | 3.9 | 2.8 |

The above tables show two things. First, the consumption expenditure collected from the 7day recall period in the 51st to 54th Rounds is 13 to 18 percent higher than that obtained from the 30-day recall period whereas this difference in the 55th Round is only 3 to 4 percent. The pattern observed in the differences of consumption expenditure due to change in the recall period during the 51st to 54th Round is missing in the 55th Round and perhaps can be attributed to the mixup of responses to the recall periods. Second, since monthly expenditures are found to be higher when lower recall periods are used, the introduction of a 7-day recall period for some components of consumption in the latest large-scale round may weaken the comparability of consumption estimates across Round 55 and the earlier large-scale rounds. These changes have left the planners in a dilemma about the use of this data for making meaningful poverty comparisons.

B. The Sources of Data

There are two sources of consumption expenditure data in India: the NSSO surveys and National Accounts Statistics (NAS). The poverty estimates reported in Section III are based on consumption expenditures from the NSSO following the recommendations of the Expert Group on Estimation of Proportion and Number of Poor set up by the Planning Commission.⁴ Alternative estimates of poverty may be derived by taking into account consumption expenditure data obtained from the NAS. Since there may be serious differences between the two sets of poverty estimates (stemming from differences in measured consumption expenditures), this section delves into some of the details surrounding this issue.

In India, the private final consumption expenditure (PFCE) is generated from two sources. First, as a part of the NAS, the Central Statistical Organisation (CSO) compiles annually the estimates of private consumption. Second, the Household Consumer Expenditure Surveys (HCES) of the NSSO yields the estimates of private consumption. The former is available as a macro estimate and a scalar for the nation as a whole while the latter estimates are available separately for different states (provinces) in rural and urban areas, which can be aggregated to a national estimate. The estimates of private consumption from these two sources are different, primarily as these are derived from different approaches. The difference between the two has created serious problems for planning for development in India, particularly when poverty is used as a parameter in the planning exercises. This necessitates a look at the difference, its nature, and its pattern over time.

⁴ The recommendations of the Expert Group regarding the construction of the poverty line (see Section III) and the exclusive reliance on NSS data for consumption expenditures were accepted by the Government in 1997. In terms of the consumption expenditure data, this meant discontinuance of the earlier procedure of adjusting NSS consumption expenditures (upward), which had been proposed by the Task Force on Projection of Minimum Needs and Effective Consumption Demand constituted by the Planning Commission in 1979, so as to ensure consistency with NAS consumption expenditures.

The discrepancy between the two estimates for the latest two rounds of NSSO is given in Table 18.

| EXPENDITURE ITEMS | 1993-1994 NAS VS. NSS | 1993-1994 COMPOSITION OF AGGREGATE DIFFERENCE | 1999-2000 NAS VS. NSS | 1999-2000 COMPOSITION OF AGGREGATE DIFFERENCE |
|------------------------------|--------------------------|--|--------------------------|--|
| Cereals Substitutes, Pulses | 6.95 | 2.74 | 23.63 | 6.71 |
| Milk and Products | 36.33 | 5.67 | 76.01 | 8.67 |
| Edible Oil | 48.04 | 3.44 | 9.65 | 1.35 |
| Meat, Egg, and Fish | 82.31 | 4.48 | 108.23 | 4.59 |
| Vegetables, Fruits | 144.55 | 18.56 | 172.60 | 17.49 |
| Sugar and Beverages | 0.71 | 0.09 | 13.35 | 1.25 |
| Salt and Spices | 42.04 | 1.66 | 102.66 | 3.58 |
| Pan, Tobacco, and Intoxicant | 49.66 | 2.32 | 150.76 | 4.87 |
| Fuel and Light | -14.95 | -1.72 | -14.98 | -1.49 |
| Clothing | 69.96 | 5.81 | 9.12 | 0.78 |
| Footwear | 27.76 | 0.40 | -1.24 | - 0.02 |
| Miscellaneous Goods | | | | |
| & Services (including rent) | 155.58 | 53.28 | 156.39 | 50.12 |
| Durables | 68.23 | 3.26 | 53.05 | 2.10 |
| Total | 61.70 | 100.00 | 76.46 | 100.00 |

Table 18 Percentage Difference between NAS-Estimates of PFCE and NSS-Based Estimates of Household Consumer Expenditure by Broad Items (percent)

The difference in the two estimates of consumption expenditure also increased in the 1990s, from 61.7 percent in 1993-1994 to 76.5 percent in 1999-2000 at 1993-1994 base. This difference is not uniform across the commodities.

The nature and pattern of the difference can briefly be explored to have an inkling of the dimension of the problem. The consumption of fruits and vegetables and miscellaneous goods and services including rent, account for about 70 percent of the total discrepancy. Therefore, proper care to ensure comparability of the estimates for these items will virtually solve the problem.

The CSO revises its base year of calculations periodically, generally once every 10 years, incorporating more recent and representative benchmark estimates of productivity and workforce for estimation of macroeconomic aggregates. This revision results in a different series of estimates of PFCE among other macroeconomic aggregates. The year for which the benchmark estimates are used is referred to as the base year. This exercise is usually taken up a few years after the base year. The PFCE from the NAS is available for three survey years at 1970-1971 base, for five survey years at 1980-1981 base and available for all the six survey years for which the Planning Commission has estimated poverty, at 1993-1994 base. To have an idea of the dimension of the problem, the discrepancy between the two estimates calculated using the private final consumption expenditure of CSO available at three different base years, 1970-1971, 1980-1981, and 1993-1994 is given in Table 19.

| SURVEY PERIOD | 1970-1971 BASE | 1980-1981 BASE | 1993-1994 BASE |
|---------------|----------------|----------------|----------------|
| 1973-1974 | 6.2 | 15.3 | 38.7 |
| 1977-1978 | 7.9 | 18.3 | 42.3 |
| 1983 | 22.2 | 33.3 | 58.1 |
| 1987-1988 | _ | 28.7 | 49.4 |
| 1993-1994 | _ | 40.2 | 61.6 |
| 1999-2000 | _ | — | 76.4 |
| | | | |

 TABLE 19

 Excess of NAS estimate over NSS estimate (percent)

Sources: Estimated from the household consumer expenditure data of the NSS, various Rounds; and private consumption of the CSO published in *National Accounts Statistics*, 1986, 1998, and 2001.

The excess of NAS estimate over NSSO estimate has increased from 6 to 39 percent for 1973-1974 because of change in base year from 1970-1971 to 1993-1994. For the survey year 1993-1994, the discrepancy has increased from 40 to 62 percent with a change of base from 1980-1981 to 1993-1994. The difference in two estimates, which was 39 percent in 1973-1974, has become as high as 76 percent in 1999-2000 at 1993-1994 as base. It has almost doubled and has obviously widened over time.

1. How the Two Estimates are Generated

The NSSO estimates consumption expenditure by conducting a survey of households. The consumption expenditure is directly collected from the selected households by canvassing a well-designed schedule of inquiry covering almost every item of household consumption. But the surveys conducted for this purpose, called Household Consumption Expenditure Surveys (HCES), cover only the households and not the consumption expenditure of private nonprofit institutions serving households (NPISHs).

The household consumer expenditure surveys by NSSO provide in published reports the estimates of monthly per capita total consumer expenditure (PCTE) for broad items of expenditure. These are available separately for the rural and urban population for all-India and separately for the states and UTs. The monthly PCTE estimates are multiplied by the appropriate factor to derive the annual per capita expenditure. This is then multiplied by the projected population of relevant year for rural and urban areas to get the total annual consumption expenditure in rural and urban areas, respectively. Rural and urban consumer expenditure are added to get NSS-based estimates of aggregate annual household consumer expenditure.

In contrast, CSO's estimate of private final consumption expenditure is derived following what is called the "commodity flow" approach. This approach consists of obtaining the quantum and value of different commodities flowing finally into the consumption process of the households and the private nonprofit institutions serving households (NPISH), from the quantum and value of the commodities produced and available during the accounting year, which is generally a financial year, extending from beginning of April of one calendar year to end of March of the next. For the commodities obtained from agriculture (excluding animal husbandry), however, the output of the agricultural year is taken as such to represent the production of the accounting year. In this approach, intermediate consumption (the part used up in the process of further production), change in stocks, and exports net of imports are netted out from the value of the total output of a commodity or a commodity group to arrive at the estimate of its *net availability* in the domestic economy. An amount is also discounted for the wastage of agricultural produce.

Having thus arrived at the estimate of *net availability*, the part used for capital formation and that used by the general government administration for current consumption are deducted from it to arrive at the commoditywise estimates of the value of *private final consumption expenditure* (PFCE) at current market prices. Hence *private final consumption expenditure* is derived as a residual in the national accounting system.

2. Comparability of the Two Estimates

The way they are generated, these two data sets are not strictly comparable. Apart from the differences in the coverage and reference time frames that are apparent, comparability of the two sets of estimates is constrained by the differences in the concepts and methods of estimation inherent in the very approaches employed by the two agencies. The differences in the concepts and method of estimation of these two estimates are given below:

- (i) NAS estimate of private financial consumption expenditure includes, in addition to consumer expenditure by households, the current consumption expenditure by nongovernment private nonprofit institutions such as NGOs and universities; and the homeless and the institutional population like the inhabitants of orphanages, prisons, and hospitals. The NSS estimates relate to consumption expenditure of the households alone.
- (ii) The NAS estimates of final consumption expenditure are worked out from the production data of various goods and services, which are compiled primarily for estimation of gross domestic product for the current (financial: April-March) accounting year. Since the data on agricultural production used for national accounting pertain to agricultural (July–June) year, the NAS estimates of consumption expenditure on agricultural produce essentially represent the consumption out of the current agricultural year's production rather than the actual consumption during the financial year, notwithstanding the adjustments made for production flow into nonconsumption uses in the commodity-flow approach. For the HCES, on the other hand, the NSSO usually uses an agricultural year as the survey period, and thus the NSS estimates represent the actual consumption during the agricultural year. But since the production and consumption of goods, particularly of agricultural produce, are events usually separated in time by considerable gaps, whatever is produced during the agricultural year is not necessarily consumed during the same period, nor is the current year's consumption drawn entirely from the current year's production. For reasons such as these, the NAS estimates are strictly not comparable with the NSS estimates.
- (iii) The two agencies use different classification schemes for grouping commodities and services, namely, (a) expenditure on purchase and repairs of transport equipment is classified under durables in the NSS estimate while it is included in the transport group in the NAS estimates of PFCE; and (b) expenditure on cooked food given to the domestic

servants is included in the food group in the NSS. In the NAS, all the payments made to the domestic servant are taken as expenses incurred for consumption of personal services.

- (iv) The NAS estimate of rent includes all imputed rentals of owner-occupied dwellings whereas the NSS estimate is only the rent on dwellings actually paid.
- (v) The NAS estimate of private consumption of foodgrain depends on data on output, seed, feed, wastage, imports and exports, changes in stock, government final consumption, and intermediate consumption. The basic data on output, based on crop estimation, are available from the Directorate of Economics and Statistics, Ministry of Agriculture. The seed and feed ratios used are based on current cost of cultivation studies. The wastage ratios for most of the commodities are based on estimates available from the Directorate of Market Intelligence (DMI). The estimated wastage ratios used at present pertains to 1968-1969. The main source of annual data on intermediate consumption for a number of commodities is also DMI. Data on imports and exports are available on a regular basis from the Director General of Commercial Intelligence and Statistics (DGCI&S), and estimates of government consumption expenditure are based on the rates obtained from the latest input-output tables. The accuracy of estimate of private consumption of food compiled in NAS depends on the accuracy of all the abovementioned components. The wastage ratios used are 30 years old. The NSS estimate is the actual consumption expenditure on food during the period.
- (vi) The NAS estimate of fruits and vegetables include fruit products such as pickles, sauce, jam, and jelly. NSS usually puts these in the miscellaneous food products.
- (vii) In the NAS estimate of milk and milk products, milk products are overestimated because a part of the volume of milk assumed to be used for butter and *lassi* production may be used as intermediate consumption in enterprises producing other commodities like sweetmeat, tea and coffee, and hotel and restaurant services, consumption of which are estimated separately in the NAS.
- (viii) For deriving the NAS estimate of edible oil, varying ratios of intermediate consumption are used for the different edible oils, but for vanaspati (hydrogenated oil) no adjustment is made for its use in other industries. This appears to be an important reason for the difference between the estimates of vanaspati consumption, since it is used extensively in commercial establishments like halwais, hotels, and restaurants.
- (ix) For meat, egg and fish, the reason for the discrepancy may be that the intermediate consumption for most of the items of this group is taken as nil in the NAS. This appears to be the main reason for the wide divergence between the two sets of estimates, particularly for eggs and chicken, since a large volume of these is actually used as input in the food processing industries, hotels, and restaurants.
- (x) For hotels and restaurants, the NAS estimate for hotel and restaurant is obtained from the estimate of gross value added (GVA), which is based on the results of Enterprise Survey on hotel and restaurants. For estimating private consumption for this item, first, an estimate of output of hotel and restaurants is derived from the estimate of GVA. Out of the estimate of output, 33 percent is assumed to form part of private consumption. Thus, the NAS estimate obviously includes the accommodation charges

in addition to the value of food served by the hotels and restaurants. Moreover, hotels and restaurants not only serve meals to the consumers but also a variety of other food items like tea, snacks, and beverages. The NSSO, on the other hand, does not provide any estimate of consumption for this item-group as such. Instead it provides separate estimates of value of "cooked meals", snacks, beverages, and "other processed food" purchased by the households. But, the entire value of the snacks, beverages, and "other processed food" consumed by the households cannot be attributed to the restaurants. Thus the comparison here is restricted to the NAS estimate for "hotels and restaurants" and the NSS estimate of purchased "cooked meals", bearing in mind that comparability of these two estimates is severely constrained by the difference in coverage.

- (xi) The NAS estimate of furniture, furnishings, appliances and services includes the notional element of nonlife insurance services, while the residual category "miscellaneous goods and services" includes the notional element of Financial Intermediation Services Indirectly Measured (FISIM) embodied in the banking and insurance services. Inclusion of these notional components in the NAS estimate of private consumption is in adherence to the standards set by the internationally accepted system of national accounts. These notional components are not taken into account in the NSS estimate.
- (xii) For NAS estimates on nonfood consumption, varying approaches are adopted for different item-groups. The estimates for the manufactured goods are obtained by the commodity flow approach, while those for fuel and services are derived by varying other approaches.
- (xiii) The NSS estimate of consumption expenditure on fuel and light has always been higher than that of the NAS. In the 1993-1994 series, the NAS estimate of firewood production is derived from the NSS estimate of household fuel wood consumption by deducting from it the value of agricultural waste (since it is included in the agricultural production as by-products) and adding the estimated value of firewood used in the funerals. Clearly, the NAS bases its estimate on the presumption that agricultural wastes are included and the firewood used for funerals are excluded from the NSS estimate, although it is not clear that such is the position on the basis of the instructions issued to the field staff.
- (xiv) The other items having large shares in the difference between the estimates of "fuel and light" are electricity, kerosene, and liquefied petroleum gas (LPG). For all these items, the NSS estimates of quantity consumed are substantially higher than the NAS estimates. Differences between the estimates of values of consumption are more pronounced for the items "electricity" and LPG, the implicit prices in the NSS estimates being higher than the price at which the NAS estimates of quantity consumed are evaluated. The NAS estimates of quantity and value of private electricity consumption are based on the data on electricity sold to domestic consumers and average electricity rates available from the Central Electricity Authority. For LPG and kerosene, the data on quantity and retail prices are taken from *Indian Petroleum and Petrochemicals Statistics* by the Ministry of Petroleum and Natural Gas. The prices used for evaluating the consumption in NAS are obtained from the official sources and thus represent the prices set by the regulatory authorities, rather than the prices actually paid by the consumers. The prices implicit in the NSS estimates of quantity and value of electricity

and LPG, on the other hand, are expected to be closer estimates of average prices actually paid by the customers, which vary not only between States but also from one area to another.

3. Impact of the Discrepancy on Poverty Estimates

The whole debate on the discrepancy issue started when the Planning Commission, using the Task Force Methodology, estimated incidence of poverty from consumption expenditure distribution of NSS after scaling it up to the level of consumption expenditure of NAS. As long as the difference was around 5 percent, it did not bother the academicians. But, with the change in base of the NAS series and over time, this discrepancy rose and caused alarm. Computing poverty from the expenditure distribution of NSS after scaling it by a high proportion led to the criticism of the methodology of estimation of poverty.

What would have been the scenario of incidence of poverty had the Task Force methodology for estimation of poverty been used by the Planning Commission? Table 20 provides an answer.

| SURVEY PERIOD | UNADJUSTED DISTRIBUTION | ADJUSTED DISTRIBUTION (1970-1971 BASE) | ADJUSTED DISTRIBUTION (1980-1981 BASE) | ADJUSTED DISTRIBUTION (1993-1994 BASE) |
|------------------|----------------------------|--|--|--|
| 1973-1974 | 54.88 | 50.04 | 43.62 | 28.32 |
| 1977-1978 | 51.32 | 44.98 | 37.82 | 24.28 |
| 1983 | 44.48 | 28.65 | 22.70 | 13.30 |
| 1987-1988 | 38.86 | — | 19.33 | 11.43 |
| 1993-1994 | 35.97 | — | 12.51 | 6.89 |
| 1999-2000 | 26.10 | — | — | 4.34 |

TABLE 20Incidence of Poverty Estimated fromUnadjusted and Adjusted Distribution (percent)

Source: Estimated from the household consumer expenditure data of the NSS, various Rounds.

The unadjusted distribution yields the poverty ratio as 54.88 percent in 1973-1974 and 26.10 percent in 1999-2000, a decline of 29 percentage points. In contrast, the NSS consumption distribution adjusted to the CSO consumption expenditure yields a poverty ratio of 28.32 percent in 1973-1974 and 4.34 percent in 1999-2000, marking a decline of 24 percentage points during this period. However, it is the level of poverty that causes concern. It is virtually nonexistent if the CSO consumption is the "correct" estimate of consumption expenditure.

Drastically different pictures emerging from these two estimates of private consumption expenditure has led to the debate on the correctness and reliability of either or both these estimates. Detailed analysis of each and every component forming part of these two estimates can only help to bring them closer but are unlikely to entirely close the gap. A number of studies have been conducted, centering on the coverage and measurement procedure of these estimates. Ways and means have been suggested to make them comparable. However, there is a third dimension, which relates to the issue of prices. Use of different prices and price indices in evaluating quantities of commodities to obtain the value of consumption expenditure for these estimates is an area that needs to be explored in some detail. Perhaps a major part of the problem lies here. If such is the case, then thought will have to be given as to which of the consumption estimates should be changed. The answer is not obvious, since the two measures of consumption are driven by different considerations, and mindless adjustments can lead to violation of the very purpose of the measures. In such cases a possible alternative is that the poverty line itself can undergo a change.

VI. NONINCOME INDICATORS

A. Education

The availability of education, health care, housing, water, sanitation, and employment are the basic needs for a civilized living. An educated and healthy person can contribute more effectively to the growth of the nation. To meet this objective, the government formulated the National Policy on Education in 1986, which provides a broad policy framework for total eradication of illiteracy and a commitment to make primary education free and compulsory up to fifth grade. Several schemes were launched by the government to meet the needs of not only the educationally disadvantaged but also for the overall strengthening of the social infrastructure for education. All this has helped to achieve the Gross Enrolment Ratio for primary school children of 92.14 percent in 1998-1999. However, GER for the upper primary stage (grades VI-VIII) is still low at 58 percent. The proportion of girls enrolled both at primary and upper primary levels continues to be lower than the gross enrolment of boys (see Table 21).

The Gross Enrolment Ratio for primary school children is high in Assam, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, and Tamil Nadu in 1998-1999. It is substantially low in Uttar Pradesh and Bihar. and quite surprisingly, relatively lower in Kerala. At the upper primary level, Kerala, as might be expected, exhibits the highest enrolment, followed by Tamil Nadu and Maharashtra. Again, Bihar, Uttar Pradesh, Orissa, and Andhra Pradesh show low GER for upper primary level. The gross enrolment ratio in primary and upper primary in major states of India is given in Table 22.

B. Health

India, the second most populous country in the world, has no more than 2.5 percent of global land but is the home of 1/6th of the world's population. The prevailing rates of high maternal mortality, infant mortality and childhood morbidity, low life expectancy, and high fertility and associated high morbidity have been a source of concern for public health professionals right from the pre-independence period. The Bhore Committee Report (1946), which laid the foundation for health service planning in India, gave high priority to provision of maternal and child health services and improving their nutritional and health status. As early as 1951 it was recognized that population stabilization is an essential prerequisite for the sustainability of the development process so that the benefits of economic development result in enhancement of the well-being of the people and improvement in the quality of life. India became the first country in the world to formulate a National

| | PRIMARY (AGE 6-11 YEARS) | | | UPPER PRI | MARY (AGE 11 | I-14 YEARS) |
|-----------|--------------------------|--------|-------|-----------|--------------|-------------|
| YEAR | MALE | FEMALE | TOTAL | MALE | FEMALE | Total |
| 1970-1971 | 92.6 | 59.1 | 76.4 | 46.5 | 20.8 | 34.2 |
| 1975-1976 | 95.7 | 62.0 | 79.3 | 47.0 | 23.8 | 35.6 |
| 1980-1981 | 95.8 | 64.1 | 80.5 | 54.3 | 28.6 | 41.9 |
| 1982-1983 | 103.0 | 69.7 | 86.8 | 58.3 | 31.8 | 45.5 |
| 1983-1984 | 106.9 | 72.6 | 90.2 | 60.6 | 33.2 | 47.3 |
| 1984-1985 | 110.3 | 76.0 | 93.6 | 61.3 | 34.1 | 48.1 |
| 1985-1986 | 111.1 | 79.2 | 95.6 | 61.8 | 35.3 | 49.0 |
| 1986-1987 | 111.8 | 79.2 | 96.0 | 66.5 | 39.0 | 53.1 |
| 1987-1988 | 113.1 | 81.6 | 97.9 | 68.9 | 40.6 | 55.1 |
| 1988-1989 | 115.7 | 82.5 | 99.6 | 70.8 | 42.3 | 57.0 |
| 1989-1990 | 109.7 | 81.3 | 95.9 | 72.0 | 42.2 | 57.4 |
| 1990-1991 | 113.9 | 85.5 | 100.1 | 76.6 | 47.0 | 62.1 |
| 1991-1992 | 112.8 | 86.9 | 100.2 | 75.1 | 49.6 | 62.8 |
| 1992-1993 | 118.1 | 92.7 | 105.7 | 80.5 | 53.8 | 67.5 |
| 1993-1994 | 115.3 | 92.9 | 104.5 | 79.3 | 55.2 | 67.7 |
| 1994-1995 | 114.8 | 92.6 | 104.0 | 79.0 | 55.0 | 67.2 |
| 1995-1996 | 114.5 | 93.3 | 104.3 | 79.5 | 55.0 | 67.6 |
| 1996-1997 | 98.7 | 81.9 | 90.6 | 70.9 | 52.8 | 62.4 |
| 1997-1998 | 97.5 | 81.2 | 89.7 | 66.5 | 49.5 | 58.5 |
| 1998-1999 | 100.9 | 82.8 | 92.1 | 65.3 | 49.1 | 57.6 |

 TABLE 21

 GROSS ENROLMENT AS PERCENTAGE TO THE TOTAL POPULATION BY AGE AND SEX (PERCENT)

Source: Ministry of Human Resource Development, Department of Education.

| | | ΤΑ | BLE 22 | | | | |
|-------|-----------|------------------|---------|-----|-------|---------|-----|
| Gross | ENROLMENT | R atio in | CLASSES | I-V | AND | VI-VIII | FOR |
| | Major St | TATES*, 1 | 998-19 | 99 | (PERC | ent) | |

| | PRIMARY (I-V) | | UPPER P | I) | | |
|---|---|--|--|--|--|--|
| STATES/UTs | BOYS | GIRLS | TOTAL | BOYS | GIRLS | TOTAL |
| Andhra Pradesh Assam Bihar Gujarat Haryana Karnataka Kerala Madhya Pradesh Maharashtra Orissa Punjab Rajasthan | 99.20 118.78 93.20 122.92 82.25 111.35 88.69 119.58 114.38 109.53 81.33 125.52 | 94.50 100.16 61.51 100.70 84.05 104.38 87.00 96.46 111.01 79.82 84.16 75.68 | 96.89 109.63 78.02 112.22 83.09 107.90 87.86 108.35 112.74 94.91 82.66 101.82 | 50.86 69.41 42.43 72.06 67.17 70.94 97.15 75.03 89.28 64.79 67.29 78.57 | 40.93 52.42 23.13 58.00 61.09 61.06 93.24 48.09 83.29 37.43 65.02 33.60 | 46.03 61.12 33.55 65.39 64.37 66.08 95.22 62.25 86.40 51.31 66.22 57.56 |
| Uttar Pradesh West Bengal | 75.97 100.06 | 49.31 87.01 | 63.35 93.66 | 48.88 56.99 | 26.41 43.60 | 38.57 50.50 |
| All India | 100.86 | 82.85 | 92.14 | 65.27 | 49.08 | 57.58 |

*Major States include states with population of 10 million and above as per 1991 Census. Source : Ministry of Human Resource Development. Family Planning Programme in 1952, with the objective of reducing birth rate to the extent necessary to stabilize the population at a level consistent with requirement of national economy. Thus, the key elements of health care to women and children have been the focus of India's health services right from the time of India's independence.

The technological advances and improved quality and coverage of health care resulted in a rapid fall in crude death rate (CDR) from 14.9 in 1971 to 9.0 in 1998 (Table 23). In contrast, the reduction in crude birth rate (CBR) has been less steep, declining from 36.9 in 1971 to 26.4 in 1998. As a result, the annual exponential population growth rate has been over 2 percent during this period. The infant mortality rate, which is viewed as one of the important indicators of health, has improved from 129 in 1971 to 72 in 1998, but this is not yet a satisfactory level.

| YEARS | TOTAL | RURAL | URBAN | YEARS | TOTAL | RURAL | URBAN | |
|-------|-------|-------|-------|-------|-------|-------|-------|--|
| 1971 | 129 | 138 | 82 | 1985 | 97 | 107 | 59 | |
| 1972 | 139 | 150 | 85 | 1986 | 96 | 105 | 62 | |
| 1973 | 134 | 143 | 89 | 1987 | 95 | 104 | 61 | |
| 1974 | 126 | 136 | 74 | 1988 | 94 | 102 | 62 | |
| 1975 | 140 | 151 | 84 | 1989 | 91 | 98 | 58 | |
| 1976 | 129 | 139 | 80 | 1990 | 80 | 86 | 50 | |
| 1977 | 130 | 140 | 81 | 1991 | 80 | 87 | 53 | |
| 1978 | 127 | 137 | 74 | 1992 | 79 | 85 | 53 | |
| 1979 | 120 | 130 | 72 | 1993 | 74 | 82 | 45 | |
| 1980 | 114 | 124 | 65 | 1994 | 74 | 80 | 52 | |
| 1981 | 110 | 119 | 62 | 1995 | 74 | 80 | 48 | |
| 1982 | 105 | 114 | 65 | 1996 | 72 | 77 | 46 | |
| 1983 | 105 | 114 | 66 | 1997 | 71 | 77 | 45 | |
| 1984 | 104 | 113 | 66 | 1998 | 72 | 77 | 45 | |
| | | | | | | | | |

 TABLE 23

 Year-Wise Infant Mortality Rate

Source: Office of the Registrar General, India (Sample Registration system).

Low level of income indicators are accompanied by low level of health indicators. The infant mortality rate in Orissa is 98, Madhya Pradesh is 97, and Uttar Pradesh is 85 per thousand for 1998. Incidentally the infant mortality rate in Bihar is 67, which is higher than the national average of 72. In spite of the uniform national norms of family welfare, there are substantial differences in fertility and mortality between states. At one end of the spectrum is Kerala with mortality and fertility rates nearly similar to those in some developed countries. At the other end, Uttar Pradesh, Bihar, Madhya Pradesh, Rajasthan, and Orissa have high infant mortality and fertility rates. Statewise infant mortality rates are given in Table 24.

| STATES/UTs | TOTAL | RURAL | URBAN |
|----------------------|-------|-------|-------|
| Andhra Pradesh | 66 | 75 | 38 |
| Arunachal Pradesh | 44 | 46 | 10 |
| Assam | 78 | 82 | 36 |
| Bihar | 67 | 68 | 51 |
| Goa | 23 | 25 | 22 |
| Gujarat | 64 | 71 | 46 |
| Haryana | 69 | 72 | 58 |
| Himachal Pradesh | 64 | 66 | 39 |
| Jammu & Kashmir | 45 | 46 | 44 |
| Karnataka | 58 | 70 | 25 |
| Kerala | 16 | 15 | 17 |
| Madhya Pradesh | 97 | 103 | 56 |
| Maharashtra | 49 | 58 | 32 |
| Manipur | 25 | 22 | 26 |
| Meghalaya | 52 | 54 | 36 |
| Mizoram | 23 | 26 | 18 |
| Nagaland | N.A | N.A | 16 |
| Orissa | 98 | 101 | 66 |
| Punjab | 54 | 58 | 40 |
| Rajasthan | 83 | 87 | 60 |
| Sikkim | 52 | 52 | 44 |
| Tamil Nadu | 53 | 58 | 40 |
| Tripura | 49 | 50 | 39 |
| Uttar Pradesh | 85 | 89 | 65 |
| West Bengal | 53 | 56 | 41 |
| A & N Island | 30 | 37 | 09 |
| Chandigarh | 32 | 44 | 30 |
| Dadra & Nagar Haveli | 61 | 65 | 07 |
| Daman & Diu | 51 | 43 | 59 |
| Delhi | 36 | 36 | 36 |
| Lakshadweep | 30 | 22 | 38 |
| Pondicherry | 21 | 31 | 14 |
| All India | 72 | 77 | 45 |

 Table 24
 State-Wise Infant Mortality Rate, 1998 (per thousand population)

Source: Office of the Registrar General, India (Sample Registration system).

VII. CONCLUDING REMARKS

Alleviation of poverty remains a major challenge before the nation. There may be disputes over the average level or the extent of reduction in the average level of poverty. But there is no denying that poverty has come down over the last three decades. There has been a steady decline in the poverty ratio, i.e., the number of poor expressed as a percentage of the total population. But, this decline until 1993-1994 was not adequate enough to effect a reduction in the number of poor due to increase in the population. The reduction has taken place between 1993-1994 and 1999-2000 when the number of poor declined by 60 million. Also, the efforts of the government have not made uniform impact across the regions. There are still some pockets in the country that need more attention and greater focus for the alleviation of poverty. The strategy needs to be complimented with a focus on provision of basic services for improving the quality of life of the people.

Alongside the average level of poverty, some of the important socioeconomic indicators such as literacy, education, and health have shown considerable improvement. As a result of the efforts intensified under the National Literacy Mission, the literacy rate has shown a much sharper increase during the 1990s compared to earlier decades. The health indicators have shown improvement, but India still lags behind many developing countries.

The progress in poverty reduction and improvement in the socioeconomic indicators in India has been marked by extreme regional inequalities. The performance in this regard varies widely across the states and evidences suggest a variation of equal if not greater intensity between the regions within particular states. Also, within a state, the performance level of the indicators of level of living and quality of life measured in terms of the indicators of poverty and deprivation and socio-economic indicators varies. There are some states that have performed well in reducing the incidence of poverty but not so well in improving the quality of life in terms of education and health.

There is a north-south divide in the performance of poverty reduction. The four southern states, viz., Andhra Pradesh, Karnataka, Kerala, and Tamil Nadu have performed well whereas the performance is poor in some of the central (Uttar Pradesh, Madhya Pradesh) and eastern states (Bihar and Orissa). Unfortunately, in the current century more than 40 percent of the population of India will be residing in Uttar Pradesh, Madhya Pradesh, Bihar, and Orissa. The performance of these states both in respect to poverty alleviation and socioeconomic development needs to be decisively strengthened.

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