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**FCND DISCUSSION PAPER NO. 47**

**POVERTY IN INDIA AND INDIAN STATES: AN UPDATE**

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**July 1998**

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## **ABSTRACT**

A complete and updated series on poverty measures for India is presented spanning the period 1951–1994. The series are presented at the all-India level as well as for 15 major states, and for rural and urban sectors separately. Key features of the evolution of poverty in India are described.

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## ACKNOWLEDGMENTS

This paper updates some results from a previous research project, "Poverty in India, 1951–92," which was supported by the World Bank's Research Committee under RPO 677–82. I am grateful to Zoubida Allaoua, Shaohua Chen, Ginette Mignot, and Berk Özler for various forms of help. The paper represents the author's views, which should not be attributed to IFPRI or the World Bank.

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## 1. INTRODUCTION

Long-term time-series data on poverty and distribution are hard to come by. For most developing countries, it is seldom possible to put together comparable estimates of the distribution of living standards for more than a few points in time.<sup>1</sup> One notable exception to this general dearth of time-series data on distribution is India. For India, one can assemble a time series of consumption distributions from 35 National Sample Surveys (NSS) spanning the period 1951–94. The availability of such a time series presents a unique opportunity to study the relationship between poverty and growth, a relationship that is intrinsically temporal in nature.

The NSS provide distributional data for each Indian state, and its rural and urban sectors. The data thus have a significant panel dimension to them. India is a large country and many of the Indian states are virtual countries in their own right—at least in terms of their absolute size. For instance, amongst the 15 major Indian states,<sup>2</sup> the median state had a population of about 45 million in 1991, and the state of Uttar Pradesh alone has a

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<sup>1</sup>For poverty estimates based on a recent compilation of distributional data across 67 developing countries, with 42 of them having at least two surveys since the 1980s, see Ravallion and Chen (1996). While the current coverage of countries has expanded considerably in comparison to the previous global poverty monitoring exercises (Ravallion, Datt, and van der Walle 1991; Chen, Datt, and Ravallion 1994), on average only 1.82 surveys are available per country, even amongst the 67 countries included in the recent Ravallion-Chen study.

<sup>2</sup>These are the fifteen "composite" states of Andhra Pradesh, Assam, Bihar, Gujarat, Jammu and Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab (including Haryana), Rajasthan, Tamil Nadu, Uttar Pradesh, and West Bengal. With the conversion of several Union Territories into states and the subdivision of some states into smaller states, there are currently 26 states in India.

population roughly the size of Brazil, the most populous country in Latin America (India 1993a; World Bank 1993). An analysis of the evolution of living standards across India's states should thus usefully complement the analysis of different rates of progress in improving living standards across countries.

These NSS data have already been used, together with other related data from various Indian statistical agencies, to study the evolution and determinants of living standards and poverty in India.<sup>3</sup> The detailed research results are available in a series of papers,<sup>4</sup> and in an overall summary of the key findings (Ravallion and Datt 1996b).

This paper is primarily an update of previous research, incorporating 50<sup>th</sup>-round NSS estimates for 1993–94. The paper, however, does not seek to update all the results. The purpose here is more modest: to present the complete time series on poverty and distributional measures for India up to 1993–94, and to update key results on the decomposition of changes in poverty. The poverty series are presented not only at the (rural and urban) all-India level, but also for the rural and urban sectors of 15 major states. The state-level series are presented here for the first time. At the all-India level, the paper updates both the sectoral decomposition of changes in poverty as well the decomposition of these changes into growth and redistribution components. Some data and measurement

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<sup>3</sup>This is the research project on "Poverty in India, 1951–92," supported by the World Bank's Research Committee under RPO 677–82.

<sup>4</sup>These papers include Ravallion and Datt (1995, 1996a), Datt and Ravallion (1996, 1997), and Datt (1997). We have also assembled a database on poverty and growth in India that is documented in Özler, Datt, and Ravallion 1996.



issues are briefly discussed first. Then the series is presented in Section 3. Section 4 discusses the updated decompositions and is followed by a brief conclusion.

## 2. DATA AND MEASUREMENT

This section gives a brief overview of the data and key measurement issues. A more detailed discussion can be found in Özler, Datt, and Ravallion (1996) and Datt (1997).

The primary sources for data are the tabulations from successive rounds of the National Sample Survey on consumer expenditure during the period 1951 to 1993–94. Using per capita consumption expenditure as the individual welfare metric, a time series of poverty measures and other distributional indexes is constructed. Though the paper alludes briefly to simulated poverty measures capturing "pure" distributional effects, the primary focus is on measures of *absolute* poverty, which means that the poverty line is kept fixed in real terms (or in terms of the standard of living it commands) over the entire (spatial and temporal) domain of poverty measurement. In this paper three different measures of poverty that capture its *incidence*, *depth* and *severity* are constructed. The three measures are the head-count index (H), the poverty gap index (PG), and the squared poverty gap index (SPG).<sup>5</sup> H indicates the incidence of poverty, and is given by the proportion of the population below the poverty line. PG measures the depth of poverty—it is the average poverty gap as a proportion of the poverty line, where the average poverty gap itself is the

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<sup>5</sup>All of these measures belong to the general class of poverty measures introduced by Foster, Greer, and Thorbecke (1984).

mean consumption deficit below the poverty line, counting a zero deficit for the nonpoor, with the mean formed over the whole population). SPG is the average of the squared poverty gap as a proportion of the poverty line, where the poverty gap is as defined as for the PG index. SPG is sensitive to distribution of inequality amongst the poor, and can be interpreted as a measure of the severity of poverty.<sup>6</sup>

The rural and urban poverty lines used here are those defined by the Planning Commission (India 1979). These lines were defined at the per capita monthly expenditure levels of Rs 49 for rural areas and Rs 57 for urban areas (rounded to the nearest rupee) at October 1973-June 1974 all-India prices. They corresponded to a norm of per capita intake of 2,400 calories per day in rural areas and 2,100 calories per day in urban areas. The Planning Commission followed the "food-energy method" in deriving the rural and urban lines, which corresponded to the levels of per capita total expenditure at which the caloric norms were typically attained in the rural and urban sectors. An independent estimate of the urban-rural cost of living differential for 1973–74 (see Bhattacharya, Choudhury, and Joshi 1980) also confirmed the intersectoral cost of living differential of about 16 percent implicit in the Planning Commission poverty lines (see Datt 1997 for further discussion).

The nominal consumption distributions for each survey period were converted to constant prices using spatial (cross-state) price indexes anchored to the consumption

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<sup>6</sup>See Ravallion (1994) for further discussion of the properties of these poverty measures.

pattern of households near the poverty line, and temporal consumer price indexes for urban and rural sectors anchored to the consumption patterns of low-income workers.<sup>7</sup>

### 3. PROGRESS IN POVERTY REDUCTION SINCE THE 1950s

#### THE ALL-INDIA SERIES

Table 1 gives the all-India series of the three poverty measures for each of the 35 survey rounds spanning the period 1951 to 1993–94. Figure 1 plots the estimates of the incidence of absolute poverty. The pattern of change is very similar for measures of the depth and severity of poverty. The following are some key features of the evolution of poverty in India that emerge from this series.

- The estimates show that in 1993–94 every third person in India lived in conditions of absolute poverty, and the average poor person's standard of living fell about 25 percent short of the poverty line (of Rs 49 per capita per month at October 1973-June 1974 all-India rural prices).

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<sup>7</sup>A substantial effort was invested into the construction of a consistent set of price indexes across states and survey periods, using monthly data on consumer prices indexes from the Labour Bureau (disaggregated to the center level for the urban index). The primary deflators were the Consumer Price Index for Industrial Workers (CPIIW) for the urban sector, and the *adjusted* all-India Consumer Price Index for Agricultural Labourers (CPIAL) for the rural sector. The CPIAL was adjusted for the price of firewood, which has been held constant in the official CPIAL series since 1960–61. The nominal state-level distributions were further normalized for inter-state cost of living differentials estimated separately for urban and rural areas. For further details on the construction of the price indexes, see Özler, Datt, and Ravallion 1996, Datt 1997, and Datt and Ravallion 1997.

**Table 1 Poverty in India, 1951-94**

| NSS<br>round  | Survey period           | Head-count index |       |          | Poverty gap index |        |          | Squared poverty gap index |       |          |
|---|-------------------------|------------------|-------|----------|-------------------|--------|----------|---------------------------|-------|----------|
|   |                         | Rural            | Urban | National | Rural             | Urban  | National | Rural                     | Urban | National |
| 3   | August 51-November 52   | 47.37            | 35.46 | 45.31    | 16.050            | 11.141 | 15.199   | 7.531                     | 4.824 | 7.062    |
| 4   | April 52-September 52   | 43.87            | 36.71 | 42.63    | 14.637            | 10.914 | 13.990   | 6.705                     | 4.408 | 6.306    |
| 5   | December 52-March 53    | 48.21            | 40.14 | 46.80    | 16.290            | 13.246 | 15.760   | 7.562                     | 5.955 | 7.282    |
| 6   | May 53-September 53     | 54.13            | 42.77 | 52.15    | 19.030            | 13.831 | 18.123   | 9.118                     | 6.286 | 8.624    |
| 7   | October 53-March 54     | 61.29            | 49.92 | 59.30    | 21.946            | 17.238 | 21.123   | 10.263                    | 7.739 | 9.822    |
| 8   | July 54-March 55        | 64.24            | 46.19 | 61.07    | 25.041            | 15.763 | 23.413   | 12.503                    | 7.024 | 11.542   |
| 9   | May 55-November 55      | 51.83            | 43.92 | 50.44    | 18.443            | 14.648 | 17.775   | 8.804                     | 6.398 | 8.381    |
| 10  | December 55-May 56      | 48.34            | 43.15 | 47.43    | 15.646            | 13.342 | 15.240   | 6.710                     | 5.411 | 6.481    |
| 11  | August 56-February 57   | 58.86            | 51.45 | 57.55    | 19.449            | 18.162 | 19.221   | 8.496                     | 8.509 | 8.498    |
| 12  | March 57-August 57      | 62.11            | 48.88 | 59.77    | 21.685            | 16.308 | 20.732   | 10.005                    | 7.246 | 9.516    |
| 13  | September 57-May 58     | 55.16            | 47.75 | 53.84    | 19.011            | 15.950 | 18.467   | 8.778                     | 6.997 | 8.462    |
| 14  | July 58-June 59         | 53.26            | 44.76 | 51.75    | 17.736            | 13.748 | 17.025   | 7.882                     | 5.871 | 7.524    |
| 15  | July 59-June 60         | 50.89            | 49.17 | 50.58    | 15.289            | 15.829 | 15.386   | 6.129                     | 6.749 | 6.240    |
| 16  | July 60-August 61       | 45.40            | 44.65 | 45.27    | 13.601            | 13.842 | 13.644   | 5.532                     | 5.828 | 5.585    |
| 17  | September 61-July 62    | 47.20            | 43.55 | 46.54    | 13.601            | 13.789 | 13.635   | 5.314                     | 6.046 | 5.447    |
| 18  | February 63-January 64  | 48.53            | 44.83 | 47.85    | 13.883            | 13.291 | 13.774   | 5.486                     | 5.174 | 5.429    |
| 19  | July 64-June 65         | 53.66            | 48.78 | 52.75    | 16.083            | 15.241 | 15.926   | 6.602                     | 6.383 | 6.561    |
| 20  | July 65-June 66         | 57.60            | 52.90 | 56.71    | 17.968            | 16.821 | 17.751   | 7.603                     | 6.981 | 7.486    |
| 21  | July 66-June 67         | 64.30            | 52.24 | 62.00    | 22.010            | 16.810 | 21.018   | 10.010                    | 7.187 | 9.472    |
| 22  | July 67-June 68         | 63.67            | 52.91 | 61.60    | 21.802            | 16.930 | 20.863   | 9.852                     | 7.220 | 9.345    |
| 23  | July 68-June 69         | 59.00            | 49.29 | 57.11    | 18.956            | 15.539 | 18.291   | 8.165                     | 6.542 | 7.849    |
| 24  | July 69-June 70         | 57.61            | 47.16 | 55.56    | 18.237            | 14.316 | 17.466   | 7.729                     | 5.863 | 7.362    |
| 25  | July 70-June 71         | 54.84            | 44.98 | 52.88    | 16.545            | 13.347 | 15.910   | 6.798                     | 5.349 | 6.510    |
| 27  | October 72-September 73 | 55.36            | 45.67 | 53.37    | 17.348            | 13.459 | 16.548   | 7.328                     | 5.262 | 6.903    |
| 28  | October 73-June 74      | 55.72            | 47.96 | 54.10    | 17.175            | 13.602 | 16.430   | 7.128                     | 5.219 | 6.730    |
| 32  | July 77-June 78         | 50.60            | 40.50 | 48.36    | 15.025            | 11.687 | 14.284   | 6.057                     | 4.526 | 5.717    |
| 38  | January 83-December 83  | 45.31            | 35.65 | 43.00    | 12.649            | 9.517  | 11.901   | 4.841                     | 3.557 | 4.534    |
| 42  | July 86-June 87         | 38.81            | 34.29 | 37.69    | 10.013            | 9.100  | 9.787    | 3.700                     | 3.395 | 3.625    |
| 43  | July 87-June 88         | 39.23            | 36.20 | 38.47    | 9.275             | 9.121  | 9.237    | 2.982                     | 3.056 | 3.000    |
| 44  | July 88-June 89         | 39.06            | 36.60 | 38.44    | 9.504             | 9.537  | 9.512    | 3.291                     | 3.293 | 3.292    |
| 45  | July 89-June 90         | 34.30            | 33.40 | 34.07    | 7.799             | 8.505  | 7.979    | 2.575                     | 3.038 | 2.693    |
| 46  | July 90-June 91         | 36.43            | 32.76 | 35.49    | 8.644             | 8.509  | 8.609    | 2.926                     | 3.121 | 2.976    |
| 47  | July 91-December 91     | 37.42            | 33.23 | 36.34    | 8.288             | 8.244  | 8.277    | 2.680                     | 2.902 | 2.737    |
| 48  | January 92-December 92  | 43.47            | 33.73 | 40.93    | 10.881            | 8.824  | 10.345   | 3.810                     | 3.191 | 3.649    |
| 50  | July 93-June 94         | 36.66            | 30.51 | 35.04    | 8.387             | 7.405  | 8.128    | 2.792                     | 2.417 | 2.693    |
| Trend rate of growth during<br>1951-94 (% per year) |                         | -0.86            | -0.75 | -0.88    | -1.84             | -1.43  | -1.79    | -2.65                     | -2.05 | -2.56    |

Notes: All poverty measures are expressed as percentages. The Consumer Price Index for Agricultural Laborers was adjusted for the price of firewood. The poverty line equals Rs 49 per capita per month at October 1973 to June 1974 rural prices.

2.6 percent per year, respectively. Thus, the decline in poverty, though not spectacular in pace, spread widely below the poverty line.

- Most of the decline in poverty since about 1970 seems to have occurred by about 1986–87, with a further modest decline up to 1989–90. Poverty rates seem to have leveled off by the end of the 1980s. There was a sharp increase in rural poverty during 1992, but that appears to have been a single-year phenomenon; the poverty rates returned to their pre-1992 levels by 1993–94.
- Changes in rural poverty closely followed those at the national level, which is not surprising given that a large proportion of India's population lives in rural areas (about 74 percent even at the end of the period).<sup>8</sup> More notably, a similar pattern holds for urban poverty (Figure 1).
- The reduction in poverty since the early 1970s has been sizable; between 1969–70 and 1993–94, the national head-count index declined from about 56 to 35 percent. Yet India's progress in poverty reduction has been modest when compared to the standards set by some countries in East Asia. For example, Indonesia's head-count index was 58 percent in 1970—very close to that for India. But by 1993, the head-count index for Indonesia had fallen to 8 percent, less than one-fourth of India's head-count index in 1993–94.<sup>9</sup>

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<sup>8</sup>Author's calculations based on census data.

<sup>9</sup>The estimates for Indonesia are from the National-Socioeconomic Surveys (SUSENAS) conducted by Indonesia's Central Bureau of Statistics. The 1970 number is from World Bank (1990, Table 3.2); the 1993 number is an estimate from the 1993 SUSENAS using the same real poverty line, reported in Ravallion and Datt (1996b).

- The incidence of rural poverty was higher than that of urban poverty throughout the period. The rural PG and SPG measures stayed above the corresponding urban measures for most of the period, but appeared to converge by the end of the 1980s. In general, rural poverty declined faster than urban poverty (see bottom row of Table 1). This is also evident in the significant trend decline in the ratio of rural poverty gap indexes to urban poverty gap indexes, although the trend in the ratio of rural to urban head-count indexes, though negative, was not significant.
- Despite the faster decline in rural poverty, poverty in India remains a predominantly rural phenomenon. In 1993–94, three out of every four poor persons lived in rural areas.

### **THE STATE-LEVEL SERIES**

The detailed series on real mean consumption, poverty measures and the Gini indexes for rural and urban sectors of fifteen major states in India are presented in the Appendix. These series cover the period 1957–58 to 1993–94, though for some states the coverage is somewhat shorter due to data limitations. The 15 states together accounted for about 819 million persons or 97 percent of India's total population in 1991 (India 1993a). The estimates in the Appendix highlight several features of the evolution of regional living standards in India.

- Regional disparities in standards of living have been large. For instance, during 1993–94 the proportion of the *rural* population of the state of Bihar in absolute poverty was about 64 percent, more than two-and-a-half times higher than the proportion (25 percent) in the (combined) states of Punjab and Haryana. Some of these differences appear to have persisted historically; Punjab-Haryana was one of the richest regions even during the late 1950s. But there were also different trends across regions.
- Looking back over time, the striking—though often ignored—feature of the Indian experience has been the markedly different rates of progress across states. This is explicit in Table 2, which shows the annual (unconditional) trend rates of change in mean consumption, poverty measures, and Gini indexes across states from 1957–58 to 1993–94. For the rural sector, Kerala had the highest trend rate of decline in the head-count index at 2.4 percent per year. At the other end of the spectrum, Assam had a *negative* (though not significant) rate of decline in the incidence of poverty of about 0.5 percent per year. Apart from Kerala, the other good performers were Andhra

**Table 2 Trend annual rates of growth in mean consumption, poverty measures, and Gini indexes in Indian States, 1957/58 1993/94**

| State              | Rural                                     |                  |                   |                           |            | Urban                                     |                  |                   |                           |            |
|--------------------|---|------------------|-------------------|---------------------------|------------|---|------------------|-------------------|---------------------------|------------|
|                    | Mean consumption<br>(Rs/person/<br>month) | Head count index | Poverty gap index | Squared poverty gap index | Gini index | Mean consumption<br>(Rs/person/<br>month) | Head count index | Poverty gap index | Squared poverty gap index | Gini index |
| Andhra Pradesh     | 1.14                                      | -2.12            | -3.51             | -4.53                     | -0.21      | 0.92                                      | -1.50            | -2.11             | -2.69                     | 0.17       |
| Assam              | -0.37                                     | 0.46             | 0.38              | 0.35                      | -0.60      | 0.47                                      | -1.63            | -3.11             | -4.93                     | 0.18       |
| Bihar              | -0.03                                     | -0.02            | -0.90             | -1.62                     | -0.96      | 0.57                                      | -0.86            | -1.61             | -2.28                     | -0.14      |
| Gujarat            | 0.70                                      | -1.49            | -2.76             | -3.69                     | -0.58      | 0.75                                      | -1.28            | -2.27             | -3.07                     | -0.05      |
| Jammu and Kashmir  | 0.34                                      | -0.51            | -0.89             | -1.16                     | 0.47       | 1.32                                      | -3.40            | -3.75             | -4.13                     | 0.18       |
| Karnataka          | 0.18                                      | -0.64            | -1.15             | -1.52                     | -0.56      | 0.91                                      | -1.42            | -2.01             | -2.55                     | 0.06       |
| Kerala             | 1.63                                      | -2.41            | -4.07             | -5.24                     | -0.21      | 1.67                                      | -2.06            | -3.37             | -4.28                     | 0.30       |
| Madhya Pradesh     | 0.21                                      | -0.40            | -1.18             | -1.79                     | -0.44      | 0.45                                      | -0.87            | -1.52             | -2.02                     | -0.15      |
| Maharashtra        | 0.82                                      | -0.99            | -1.60             | -2.06                     | 0.23       | 0.20                                      | -0.46            | -0.65             | -0.79                     | -0.10      |
| Orissa             | 0.67                                      | -1.47            | -2.67             | -3.71                     | -0.35      | 0.84                                      | -0.95            | -1.79             | -2.56                     | -0.09      |
| Punjab and Haryana | 0.41                                      | -1.92            | -2.97             | -3.88                     | n.a.       | 0.83                                      | -3.06            | -4.55             | -5.82                     | n.a.       |
| Rajasthan          | 0.16                                      | -0.54            | -1.01             | -1.41                     | -0.52      | 0.65                                      | -1.42            | -2.10             | -2.82                     | -0.16      |
| Tamil Nadu         | 1.04                                      | -1.45            | -2.44             | -3.20                     | -0.03      | 0.72                                      | -1.10            | -1.53             | -1.84                     | 0.16       |
| Uttar Pradesh      | 0.33                                      | -0.70            | -1.31             | -1.85                     | -0.22      | 0.62                                      | -1.11            | -2.12             | -3.00                     | -0.40      |
| West Bengal        | 0.77                                      | -1.74            | -2.74             | -3.57                     | -0.06      | 0.44                                      | -0.56            | -0.99             | -1.45                     | 0.25       |

Notes: These are annual (unconditional) trend rates of growth estimated from regressions of log poverty measures on the midpoint of the survey period for each NSS round. All poverty measures and Gini indexes are percentages.

n.a. = Gini indices not available for the composite state of Punjab and Haryana.



Pradesh, Punjab and Haryana, West Bengal, and Gujarat. And amongst the other poor performers were the states of Bihar, Jammu and Kashmir, Karnataka, Rajasthan, and Madhya Pradesh? Generally, the states that had the highest trend rates of poverty reduction also tended to have the highest trend rates of growth in mean consumption.

- Performance is equally diverse within the urban sector. Punjab and Haryana had the highest rate of decline in urban poverty measures,<sup>10</sup> and the other good performers were Jammu and Kashmir, Kerala, Assam, and Gujarat. Maharashtra, on the other hand, had the worst record in urban poverty reduction, while the other poor performers included West Bengal, Madhya Pradesh, Tamil Nadu, and Bihar.
- Because of the different rates of progress in poverty reduction, the ranking of states in the early 1990s looks quite different than it did about 35 years ago. Tables 3 and 4 show, for rural and urban areas respectively, the poverty measures for different states averaged over the first and the last three NSS rounds available.<sup>11</sup> Table 3 shows that while Punjab and Haryana had the lowest rates of rural poverty both at the beginning (1957–60) and at the end

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<sup>10</sup>Punjab and Haryana had the highest rate of decline in the poverty gap and the squared poverty gap measures, and the second highest rate of decline in the head-count index (second to Jammu and Kashmir, although for Jammu and Kashmir the trend is based on poverty estimates available over a somewhat shorter period (1960–61 to 1990–91).

<sup>11</sup>These are weighted averages; estimates over NSS rounds are weighted by the duration of the round's survey period (mostly a year).

(1990–94) of the period of analysis, Kerala progressed from having the second-highest incidence of rural poverty to the fourth-lowest over the same period. The re-ranking is less pronounced for the urban sector (Table 4).

#### **4. PROXIMATE SOURCES OF PROGRESS IN POVERTY REDUCTION**

Was it growth in average living standards or redistribution that contributed more to the observed decline in poverty during 1951–94? Which sector contributed more to poverty reduction, and did intersectoral population shifts make a significant direct contribution to the decline in poverty? These questions are explored using two simple decompositions.

##### **GROWTH-REDISTRIBUTION DECOMPOSITION**

Poverty measures can quite generally be written as functions of mean consumption (or income) and the Lorenz curve. The growth-redistribution decomposition addresses the question: how much of a given change in poverty is due to the change in mean consumption (holding relative inequalities or the Lorenz curve constant) and how much is due to the change in relative inequalities or the Lorenz curve (holding mean consumption constant)? The former defines the *growth* component while the latter defines the *redistribution* component (Datt and Ravallion 1992).

**Table 3 Change in living standards in rural areas, 1957 60 to 1990 94**

| Average over 1957/58 to 1959/60 |                  |                   |                           |            |                 | Average over 1990/91 to 1993/94 |                  |                  |                   |                           |            |
|---------------------------------|------------------|-------------------|---------------------------|------------|-----------------|---------------------------------|------------------|------------------|-------------------|---------------------------|------------|
| Mean consumption                | Head count index | Poverty gap index | Squared poverty gap index | Gini index | State           | State                           | Mean consumption | Head count index | Poverty gap index | Squared poverty gap index | Gini index |
| 76.82                           | 31.24            | 8.376             | 3.437                     | n.a.       | Punjab-Haryana  | Punjab-Haryana                  | 83.27            | 20.64            | 4.020             | 1.179                     | n.a.       |
| 65.19                           | 37.53            | 8.318             | 2.510                     | 26.39      | Jammu & Kashmir | Jammu & Kashmir                 | 70.70            | 31.20            | 7.288             | 2.609                     | 27.87      |
| 65.45                           | 39.92            | 9.064             | 2.882                     | 28.47      | Assam           | West Bengal                     | 68.13            | 31.51            | 6.509             | 1.931                     | 25.75      |
| 66.70                           | 46.36            | 14.033            | 6.043                     | 36.47      | Rajasthan       | Kerala                          | 73.32            | 33.01            | 7.962             | 2.767                     | 30.67      |
| 60.65                           | 47.38            | 14.321            | 5.871                     | 30.94      | Uttar Pradesh   | Orissa                          | 66.32            | 34.66            | 7.432             | 2.284                     | 26.29      |
| 56.35                           | 50.33            | 13.684            | 5.110                     | 27.36      | West Bengal     | Andhra Pradesh                  | 68.34            | 35.89            | 7.695             | 2.433                     | 28.39      |
| 59.59                           | 54.08            | 17.476            | 7.384                     | 34.78      | Karnataka       | Uttar Pradesh                   | 62.57            | 41.72            | 10.656            | 3.799                     | 28.09      |
| 58.68                           | 56.68            | 19.394            | 8.516                     | 36.67      | Madhya Pradesh  | Gujarat                         | 59.27            | 41.77            | 9.635             | 3.403                     | 24.07      |
| 52.45                           | 56.77            | 18.658            | 8.119                     | 29.65      | Gujarat         | Tamil Nadu                      | 63.93            | 41.80            | 11.018            | 4.090                     | 29.39      |
| 53.89                           | 60.86            | 20.308            | 8.925                     | 29.87      | Orissa          | Rajasthan                       | 60.02            | 45.79            | 12.540            | 4.804                     | 27.98      |
| 47.64                           | 64.52            | 22.419            | 10.203                    | 29.76      | Bihar           | Karnataka                       | 57.69            | 46.88            | 12.939            | 4.985                     | 26.46      |
| 48.44                           | 65.14            | 22.867            | 10.249                    | 31.15      | Andhra Pradesh  | Assam                           | 52.63            | 49.33            | 10.799            | 3.410                     | 19.27      |
| 47.71                           | 65.93            | 21.886            | 9.503                     | 29.21      | Maharashtra     | Madhya Pradesh                  | 60.56            | 49.79            | 12.737            | 4.503                     | 30.53      |
| 46.08                           | 69.18            | 28.102            | 13.845                    | 34.66      | Kerala          | Maharashtra                     | 58.76            | 50.50            | 14.394            | 5.553                     | 30.02      |
| 44.49                           | 69.65            | 26.183            | 12.626                    | 30.95      | Tamil Nadu      | Bihar                           | 48.60            | 63.20            | 16.401            | 5.954                     | 22.36      |

Notes: Mean consumption is measured in Rs per person per day at October 1973-June 1974 all-India rural prices. All poverty measures and the Gini index are expressed in percentages. The averages are over the first three and the last three available NSS rounds for any given state, weighted by the duration of the survey period of the rounds. The states are ranked by ascending order of the head-count index.

n.a. = Gini indices not available for the composite state of Punjab and Haryana.

**Table 4 Change in living standards in urban areas, 1957 60 to 1990 94**

| Average over 1957/58 to 1959/60 |                  |                   |                           |            |                 | Average over 1990/91 to 1993/94 |                  |                  |                   |                           |            |
|---------------------------------|------------------|-------------------|---------------------------|------------|-----------------|---------------------------------|------------------|------------------|-------------------|---------------------------|------------|
| Mean consumption                | Head count index | Poverty gap index | Squared poverty gap index | Gini index | State           | State                           | Mean consumption | Head count index | Poverty gap index | Squared poverty gap index | Gini index |
| 81.61                           | 15.53            | 3.530             | 1.553                     | 22.10      | Assam           | Assam                           | 97.75            | 11.95            | 1.497             | 0.323                     | 28.94      |
| 82.32                           | 28.34            | 6.905             | 2.377                     | 32.28      | West Bengal     | Punjab-Haryana                  | 93.41            | 13.63            | 2.339             | 0.581                     | n.a.       |
| 70.42                           | 33.09            | 6.846             | 2.036                     | 28.34      | Jammu & Kashmir | Jammu & Kashmir                 | 99.36            | 14.01            | 2.702             | 0.755                     | 28.45      |
| 74.19                           | 36.51            | 9.348             | 3.208                     | n.a.       | Punjab-Haryana  | West Bengal                     | 92.80            | 23.79            | 5.107             | 1.497                     | 34.37      |
| 69.68                           | 43.47            | 13.575            | 5.646                     | 35.54      | Maharashtra     | Rajasthan                       | 75.90            | 29.50            | 6.770             | 2.149                     | 29.61      |
| 63.76                           | 45.18            | 12.423            | 5.209                     | 32.03      | Rajasthan       | Andhra Pradesh                  | 78.66            | 30.59            | 7.672             | 2.644                     | 32.50      |
| 65.36                           | 46.60            | 14.178            | 5.794                     | 34.28      | Tamil Nadu      | Kerala                          | 89.53            | 30.62            | 7.775             | 2.734                     | 37.16      |
| 66.98                           | 47.63            | 15.482            | 6.516                     | 36.99      | Madhya Pradesh  | Tamil Nadu                      | 84.14            | 31.87            | 8.289             | 3.092                     | 36.82      |
| 60.28                           | 48.03            | 15.238            | 6.575                     | 31.73      | Andhra Pradesh  | Karnataka                       | 79.13            | 34.09            | 9.301             | 3.396                     | 34.63      |
| 60.17                           | 53.19            | 17.298            | 7.431                     | 33.79      | Karnataka       | Gujarat                         | 68.27            | 37.33            | 8.947             | 3.087                     | 29.52      |
| 54.62                           | 54.21            | 18.429            | 8.120                     | 30.51      | Kerala          | Maharashtra                     | 74.18            | 37.47            | 11.182            | 4.513                     | 34.86      |
| 57.47                           | 54.84            | 18.135            | 7.843                     | 33.85      | Gujarat         | Madhya Pradesh                  | 71.80            | 38.17            | 10.274            | 3.850                     | 33.76      |
| 54.64                           | 58.05            | 24.455            | 13.330                    | 38.41      | Orissa          | Uttar Pradesh                   | 70.63            | 39.35            | 10.116            | 3.478                     | 32.75      |
| 56.81                           | 59.44            | 21.262            | 9.658                     | 37.55      | Uttar Pradesh   | Bihar                           | 67.22            | 42.39            | 11.341            | 4.042                     | 31.72      |
| 51.84                           | 60.26            | 20.468            | 8.927                     | 31.23      | Bihar           | Orissa                          | 75.06            | 43.31            | 13.097            | 5.147                     | 37.83      |

Notes: Mean consumption is measured in Rs per person per day at October 1973-June 1974 all-India urban prices. All poverty measures and the Gini index are expressed in percentages. The averages are over the first three and the last three available NSS rounds for any given state, weighted by the duration of the survey period of the rounds. The states are ranked by ascending order of the headcount index.

n.a. = Gini indices not available for the composite state of Punjab and Haryana.

The results of this decomposition for the national head-count index are depicted in Figure 2 in cumulative terms. Any point on the graph shows the *cumulative* change in the head-count index since 1951–55 and the *cumulative* contributions of the growth and redistribution components to that change.<sup>12</sup> A rising segment on the graph for total change in the poverty measure (head-count index) indicates an increase in poverty since the last round; a rising segment on the graph for a component (growth or redistribution) indicates that the component has contributed to an increase in poverty since the last round. Several points about these results should be noted.

The graph for the cumulative change in national head-count index confirms the earlier observation that it is not until the mid-1970s that we witness the beginnings of a trend decline in poverty relative to the levels observed for 1951–55. In cumulative terms, the growth in mean consumption has clearly been more important for the decline in the head-count index, accounting for nearly 87 percent of the decline by 1993–94. While redistribution was also favorable to the poor, its contribution to the overall decline in the incidence of poverty was quantitatively small (Table 5).

But that is not the end of the story. How poverty is measured matters a lot in this case. The relative contribution of the two components changes significantly for the PG and SPG indexes. Redistribution accounted for over a third of the total decline in the PG

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<sup>12</sup>See Datt (1997) for further details on how this decomposition was implemented; also see the note to Table 5. A lot of work underlies these decompositions, not the least because these are decompositions at the national level, involving the use of parameterized national Lorenz curves, which themselves are aggregated from rural and urban Lorenz curves for each NSS round using sectoral real means and population shares. See Datt and Ravallion (1992) on the derivation of aggregate Lorenz curves.

index, and more than two-fifths of the total decline in the SPG index (Table 5). Most of the favorable impact of redistribution was realized early on, however, during the early-to-mid 1960s.

Decomposition results should not be confused with causal explanations, but these results clearly belie any presumption of immiserizing growth in India over this forty-year period.

## **SECTORAL DECOMPOSITION**

Changes in national poverty can also be split into the relative contributions of (1) changes in poverty *within* rural and urban sectors, (2) changes in population shares across sectors, and (3) the co-movement between intrasectoral poverty changes and intersectoral population shifts. The key results for this decomposition are graphed in Figure 3, which plots the total change in the national head-count index since 1951–55 and the cumulative contribution of the different components to that total change.

The results show that changes in national poverty are driven largely by changes in rural poverty, which mostly reflects the large share of the rural sector in total population. The rural sector accounted for almost 80 percent of the cumulative change in the national head-count index up to 1993–94. Its contribution is even higher for the PG and SPG measures (Table 6). By contrast, the cumulative contribution of the urban sector to the decline in poverty was about 17 percent for the head-count index and about 14 percent for the PG and SPG measures. Urbanization or the rural-to-urban population shift has been a

relatively minor source of decline in national poverty rates; its cumulative contribution to the total decline in poverty measures by the end of the period was only about 2 to 4 percent. (The contribution of the covariance term was negligible and therefore not plotted in Figure 3.) The relatively low contribution of inter-sectoral population shifts reflects in part the declining differential between rural and urban poverty rates, especially over the period that saw a significant decline in national poverty.

Given the importance of the rural sector, a closer look at the relationship between growth and distributional change within the rural sector is necessary. Figure 4 plots the rural head-count index against rural real mean consumption. It also plots a simulated head-count index estimated with a constant real mean consumption over all NSS rounds. Since the mean is held constant, the simulated head-count index isolates the effects of distributional changes only. Figure 4 shows that while there is a predictable inverse relation between the actual incidence of poverty and mean consumption, distributional effects seem to be quite orthogonal to mean consumption (simulated poverty incidence is flat over the range of mean consumption). By the same token, there is no suggestion that growth in average living standards is associated with adverse distributional outcomes for the poor.

decline thereafter, though substantial, was confined to the relatively short period from the mid-1970s to the late-1980s. There are signs that the poverty rate had leveled off by the early 1990s.

In 1993–94, India's poverty continued to be a predominantly rural phenomenon, although rural poverty had declined faster than urban poverty during the past 40 years. The decline in national poverty seems to have been driven mostly by the decline in rural poverty.

Regional disparities in living standards present a mixed picture of continuity and change. While states like Punjab and Haryana and Bihar have persisted in their relative affluence and poverty, respectively, others like Kerala broke ranks from the group of poorest regions to emerge amongst the better-off regions. The uneven progress in poverty reduction across Indian states is a key stylized feature of Indian poverty during the last four decades.

The results of the decomposition of changes in poverty should lay to rest questions about the growth in average living standards trickling down to the poor. The benefits of growth to the poor were not mitigated by adverse redistribution. On the contrary, favorable redistribution made an important contribution to the decline in the depth and severity of poverty. The more serious constraint on poverty reduction seems to have been that there just was not enough growth.



## APPENDIX POVERTY AND DISTRIBUTIONAL MEASURES FOR INDIAN STATES

| NSS round                | Survey period | Rural  |                        |                         |                                    |               | Urban  |                        |                         |                                    |               |
|--------------------------|---------------|--|------------------------|-------------------------|------------------------------------|---------------|--|------------------------|-------------------------|------------------------------------|---------------|
|                          |               | Mean con-<br>sumption<br>(Rs/person/<br>month) | Head<br>count<br>index | Poverty<br>gap<br>index | Squared<br>poverty<br>gap<br>index | Gini<br>index | Mean con-<br>sumption<br>(Rs/person/<br>month) | Head<br>count<br>index | Poverty<br>gap<br>index | Squared<br>poverty<br>gap<br>index | Gini<br>index |
| <b>1: Andhra Pradesh</b> |               |  |                        |                         |                                    |               |  |                        |                         |                                    |               |
| 13                       | Sep 57-May 58 | 49.88  | 63.99                  | 22.899                  | 10.404                             | 33.04         | 59.44  | 48.52                  | 14.844                  | 6.207                              | 31.35         |
| 14                       | Jul 58-Jun 59 | 46.89  | 66.72                  | 22.791                  | 9.692                              | 28.61         | 61.39  | 45.48                  | 14.099                  | 6.275                              | 31.06         |
| 15                       | Jul 59-Jun 60 | 48.90  | 64.41                  | 22.920                  | 10.689                             | 32.28         | 59.80  | 50.22                  | 16.672                  | 7.150                              | 32.67         |
| 16                       | Jul 60-Aug 61 | 51.59  | 63.69                  | 19.571                  | 8.004                              | 31.12         | 61.28  | 50.93                  | 15.738                  | 6.470                              | 34.51         |
| 17                       | Sep 61-Jul 62 | 52.57  | 58.58                  | 20.188                  | 9.047                              | 32.19         | 56.54  | 54.78                  | 16.493                  | 6.422                              | 30.86         |
| 18                       | Feb 63-Jan 64 | 53.33  | 59.77                  | 17.720                  | 7.126                              | 30.49         | 59.87  | 52.29                  | 15.437                  | 6.008                              | 33.04         |
| 19                       | Jul 64-Jun 65 | 56.23  | 55.14                  | 16.468                  | 6.632                              | 31.34         | 59.19  | 52.56                  | 15.215                  | 5.739                              | 31.82         |
| 20                       | Jul 65-Jun 66 | 52.81  | 62.19                  | 18.735                  | 7.541                              | 31.36         | 59.38  | 50.40                  | 14.782                  | 6.111                              | 31.90         |
| 21                       | Jul 66-Jun 67 | 48.47  | 63.08                  | 20.652                  | 8.755                              | 28.11         | 57.28  | 52.83                  | 15.557                  | 6.247                              | 30.96         |
| 22                       | Jul 67-Jun 68 | 49.46  | 63.47                  | 19.373                  | 8.007                              | 28.38         | 58.61  | 52.75                  | 14.653                  | 5.785                              | 32.01         |
| 23                       | Jul 68-Jun 69 | 49.10  | 61.43                  | 19.795                  | 8.636                              | 28.26         | 61.23  | 50.85                  | 14.186                  | 5.156                              | 32.29         |
| 24                       | Jul 69-Jun 70 | 50.91  | 57.44                  | 19.244                  | 8.641                              | 29.25         | 62.70  | 47.97                  | 14.299                  | 5.800                              | 33.41         |
| 25                       | Jul 70-Jun 71 | 52.22  | 57.16                  | 16.579                  | 6.506                              | 27.30         | 62.76  | 45.79                  | 12.701                  | 4.911                              | 31.41         |
| 27                       | Oct 72-Sep 73 | 47.94  | 64.48                  | 20.308                  | 8.665                              | 27.74         | 58.50  | 49.66                  | 13.949                  | 5.309                              | 29.68         |
| 28                       | Oct 73-Jun 74 | 53.64  | 56.84                  | 17.029                  | 6.921                              | 29.52         | 58.29  | 51.02                  | 13.763                  | 4.968                              | 29.49         |
| 32                       | Jul 77-Jun 78 | 59.73  | 47.84                  | 13.606                  | 5.477                              | 30.25         | 65.75  | 43.53                  | 12.196                  | 4.879                              | 33.23         |
| 38                       | Jan 83-Dec 83 | 67.40  | 37.99                  | 9.555                   | 3.291                              | 29.72         | 71.81  | 35.63                  | 9.376                   | 3.537                              | 31.95         |
| 42                       | Jul 86-Jun 87 | 70.65  | 33.96                  | 8.775                   | 3.545                              | 30.92         | 73.29  | 38.63                  | 10.998                  | 4.209                              | 35.12         |
| 43                       | Jul 87-Jun 88 | 72.37  | 34.02                  | 7.538                   | 2.270                              | 30.50         | 74.04  | 39.98                  | 10.113                  | 3.380                              | 35.65         |
| 45                       | Jul 89-Jun 90 | 69.92  | 31.85                  | 6.844                   | 2.046                              | 27.60         | 80.92  | 31.96                  | 8.037                   | 2.738                              | 35.22         |
| 46                       | Jul 90-Jun 91 | 69.07  | 36.90                  | 7.843                   | 2.351                              | 29.46         | 78.40  | 27.91                  | 7.398                   | 2.759                              | 31.53         |
| 48                       | Jan 92-Dec 92 | 61.97  | 41.85                  | 9.422                   | 3.148                              | 26.78         | 78.12  | 33.05                  | 8.776                   | 3.141                              | 33.67         |
| 50                       | Jul 93-Jun 94 | 73.99  | 28.93                  | 5.819                   | 1.801                              | 28.92         | 79.47  | 30.82                  | 6.842                   | 2.032                              | 32.29         |
| <b>2: Assam</b>          |               |  |                        |                         |                                    |               |  |                        |                         |                                    |               |
| 13                       | Sep 57-May 58 | 65.72  | 37.32                  | 7.878                   | 2.224                              | 25.98         | 79.80  | 16.49                  | 1.875                   | 0.333                              | 25.41         |
| 14                       | Jul 58-Jun 59 | 64.76  | 38.75                  | 9.661                   | 3.332                              | 28.04         | 87.92  | 12.34                  | 1.881                   | 0.446                              | 18.92         |
| 15                       | Jul 59-Jun 60 | 65.93  | 43.05                  | 9.357                   | 2.926                              | 30.78         | 76.67  | 18.01                  | 6.419                   | 3.575                              | 22.81         |
| 16                       | Jul 60-Aug 61 | 68.06  | 32.13                  | 5.969                   | 1.524                              | 25.52         | 84.37  | 41.55                  | 5.254                   | 1.030                              | 36.82         |
| 17                       | Sep 61-Jul 62 | 58.49  | 42.73                  | 9.026                   | 2.619                              | 22.57         | 86.08  | 23.19                  | 6.159                   | 2.308                              | 32.27         |
| 18                       | Feb 63-Jan 64 | 61.82  | 36.34                  | 7.354                   | 2.143                              | 22.38         | 92.63  | 14.83                  | 1.453                   | 0.213                              | 32.41         |
| 19                       | Jul 64-Jun 65 | 58.83  | 34.99                  | 6.621                   | 1.878                              | 19.55         | 76.16  | 24.90                  | 4.124                   | 1.031                              | 27.67         |
| 20                       | Jul 65-Jun 66 | 55.13  | 44.69                  | 9.590                   | 3.103                              | 21.04         | 79.47  | 25.11                  | 4.616                   | 1.161                              | 29.52         |
| 21                       | Jul 66-Jun 67 | 50.50  | 62.07                  | 15.815                  | 5.416                              | 24.55         | 84.21  | 35.39                  | 9.229                   | 3.624                              | 41.55         |
| 22                       | Jul 67-Jun 68 | 49.51  | 55.03                  | 11.746                  | 4.037                              | 18.08         | 67.60  | 33.52                  | 7.378                   | 2.281                              | 27.11         |
| 23                       | Jul 68-Jun 69 | 46.99  | 62.77                  | 15.531                  | 5.399                              | 19.46         | 70.23  | 27.63                  | 5.102                   | 1.495                              | 25.12         |
| 24                       | Jul 69-Jun 70 | 52.44  | 49.20                  | 10.415                  | 3.184                              | 18.94         | 81.49  | 21.33                  | 4.133                   | 1.266                              | 28.57         |
| 25                       | Jul 70-Jun 71 | 51.45  | 50.65                  | 10.479                  | 3.174                              | 18.02         | 82.10  | 17.29                  | 2.692                   | 0.582                              | 25.98         |
| 27                       | Oct 72-Sep 73 | 49.13  | 58.27                  | 12.927                  | 4.101                              | 18.76         | 69.89  | 32.13                  | 6.495                   | 1.799                              | 27.08         |
| 28                       | Oct 73-Jun 74 | 49.82  | 56.00                  | 13.751                  | 4.913                              | 20.84         | 68.57  | 40.15                  | 9.078                   | 2.708                              | 30.46         |
| 32                       | Jul 77-Jun 78 | 47.43  | 64.21                  | 14.480                  | 4.685                              | 18.81         | 72.83  | 37.58                  | 8.562                   | 3.037                              | 34.51         |
| 38                       | Jan 83-Dec 83 | 54.67  | 46.20                  | 9.190                   | 2.635                              | 19.85         | 77.56  | 21.68                  | 4.663                   | 1.434                              | 26.54         |
| 42                       | Jul 86-Jun 87 | 56.30  | 44.26                  | 9.610                   | 2.972                              | 21.66         | 89.33  | 27.81                  | 6.960                   | 2.292                              | 34.41         |
| 43                       | Jul 87-Jun 88 | 58.59  | 43.01                  | 9.078                   | 2.680                              | 23.24         | 95.83  | 12.26                  | 1.554                   | 0.296                              | 28.04         |
| 45                       | Jul 89-Jun 90 | 58.86  | 41.90                  | 7.937                   | 2.144                              | 21.85         | 91.24  | 12.16                  | 1.749                   | 0.348                              | 26.33         |
| 46                       | Jul 90-Jun 91 | 56.28  | 42.40                  | 8.850                   | 2.748                              | 20.26         | 89.12  | 19.34                  | 3.448                   | 0.868                              | 28.79         |
| 48                       | Jan 92-Dec 92 | 49.05  | 56.61                  | 13.914                  | 4.770                              | 19.66         | 101.41   | 6.55                   | 0.214                   | 0.009                              | 29.05         |
| 50                       | Jul 93-Jun 94 | 52.57  | 48.99                  | 9.632                   | 2.711                              | 17.89         | 102.73   | 9.95                   | 0.828                   | 0.092                              | 28.98         |

(continued)

## APPENDIX (continued)

| NSS round         | Survey period | Rural  |                        |                         |                                    |               | Urban  |                        |                         |                                    |               |
|-------------------|---------------|--|------------------------|-------------------------|------------------------------------|---------------|--|------------------------|-------------------------|------------------------------------|---------------|
|                   |               | Mean con-<br>sumption<br>(Rs/person/<br>month) | Head<br>count<br>index | Poverty<br>gap<br>index | Squared<br>poverty<br>gap<br>index | Gini<br>index | Mean con-<br>sumption<br>(Rs/person/<br>month) | Head<br>count<br>index | Poverty<br>gap<br>index | Squared<br>poverty<br>gap<br>index | Gini<br>index |
| <b>3: Bihar</b>   |               |  |                        |                         |                                    |               |  |                        |                         |                                    |               |
| 13                | Sep 57-May 58 | 46.05  | 65.36                  | 24.723                  | 12.596                             | 31.65         | 55.24  | 60.70                  | 22.849                  | 10.627                             | 37.28         |
| 14                | Jul 58-Jun 59 | 48.04  | 66.22                  | 23.171                  | 10.393                             | 31.28         | 52.20  | 58.63                  | 18.696                  | 7.774                              | 29.65         |
| 15                | Jul 59-Jun 60 | 48.43  | 62.19                  | 19.939                  | 8.218                              | 26.83         | 48.92  | 61.56                  | 20.455                  | 8.804                              | 28.26         |
| 16                | Jul 60-Aug 61 | 71.54  | 47.34                  | 14.563                  | 5.736                              | 39.26         | 62.44  | 48.13                  | 16.018                  | 6.930                              | 33.76         |
| 17                | Sep 61-Jul 62 | 52.40  | 56.86                  | 17.039                  | 6.940                              | 28.14         | 78.23  | 46.14                  | 15.170                  | 6.678                              | 44.82         |
| 18                | Feb 63-Jan 64 | 54.15  | 54.96                  | 16.158                  | 6.508                              | 28.94         | 60.87  | 52.26                  | 15.579                  | 5.890                              | 32.92         |
| 19                | Jul 64-Jun 65 | 50.98  | 59.79                  | 18.717                  | 7.981                              | 29.13         | 56.68  | 55.03                  | 16.958                  | 6.856                              | 31.99         |
| 20                | Jul 65-Jun 66 | 47.81  | 67.51                  | 22.803                  | 10.108                             | 30.61         | 50.81  | 62.88                  | 21.696                  | 9.647                              | 32.47         |
| 21                | Jul 66-Jun 67 | 35.78  | 80.31                  | 35.481                  | 19.589                             | 31.36         | 47.62  | 67.85                  | 25.750                  | 12.422                             | 34.42         |
| 22                | Jul 67-Jun 68 | 37.68  | 77.08                  | 32.790                  | 17.401                             | 30.30         | 51.08  | 62.36                  | 22.742                  | 10.724                             | 34.33         |
| 23                | Jul 68-Jun 69 | 44.64  | 67.53                  | 23.811                  | 11.164                             | 28.15         | 57.31  | 53.15                  | 17.128                  | 7.350                              | 32.62         |
| 24                | Jul 69-Jun 70 | 46.59  | 66.02                  | 22.216                  | 9.962                              | 28.51         | 58.13  | 53.42                  | 16.733                  | 6.912                              | 32.92         |
| 25                | Jul 70-Jun 71 | 45.04  | 67.29                  | 22.677                  | 10.109                             | 26.89         | 60.31  | 52.55                  | 16.342                  | 6.786                              | 34.56         |
| 27                | Oct 72-Sep 73 | 44.98  | 69.19                  | 24.317                  | 11.202                             | 29.25         | 58.46  | 52.61                  | 16.636                  | 6.917                              | 32.79         |
| 28                | Oct 73-Jun 74 | 44.73  | 69.54                  | 23.618                  | 10.672                             | 28.02         | 51.58  | 57.35                  | 17.056                  | 6.889                              | 27.10         |
| 32                | Jul 77-Jun 78 | 46.25  | 66.21                  | 21.007                  | 8.895                              | 26.22         | 58.39  | 51.90                  | 15.651                  | 6.262                              | 31.65         |
| 38                | Jan 83-Dec 83 | 44.61  | 69.94                  | 22.477                  | 9.535                              | 26.01         | 59.19  | 50.32                  | 14.701                  | 5.680                              | 30.82         |
| 42                | Jul 86-Jun 87 | 51.75  | 56.45                  | 15.575                  | 5.719                              | 24.99         | 67.65  | 42.78                  | 12.995                  | 5.342                              | 34.15         |
| 43                | Jul 87-Jun 88 | 51.80  | 58.57                  | 15.063                  | 5.194                              | 24.91         | 59.30  | 52.94                  | 13.745                  | 4.603                              | 30.34         |
| 45                | Jul 89-Jun 90 | 49.97  | 58.57                  | 15.422                  | 5.674                              | 23.34         | 75.39  | 42.29                  | 11.458                  | 3.987                              | 37.12         |
| 46                | Jul 90-Jun 91 | 51.13  | 58.29                  | 12.292                  | 3.875                              | 18.90         | 72.55  | 41.13                  | 11.213                  | 3.974                              | 34.65         |
| 48                | Jan 92-Dec 92 | 47.22  | 67.81                  | 19.663                  | 7.665                              | 25.73         | 60.70  | 46.32                  | 13.028                  | 4.932                              | 29.58         |
| 50                | Jul 93-Jun 94 | 47.46  | 63.51                  | 17.249                  | 6.323                              | 22.45         | 68.40  | 39.72                  | 9.782                   | 3.22                               | 30.91         |
| <b>4: Gujarat</b> |               |  |                        |                         |                                    |               |  |                        |                         |                                    |               |
| 13                | Sep 57-May 58 |  |                        |                         |                                    |               |  |                        |                         |                                    |               |
| 14                | Jul 58-Jun 59 | 48.85  | 65.48                  | 23.251                  | 10.553                             | 32.32         | 57.14  | 54.24                  | 18.135                  | 7.886                              | 33.30         |
| 15                | Jul 59-Jun 60 | 55.49  | 56.02                  | 18.302                  | 7.780                              | 32.30         | 52.74  | 60.83                  | 20.522                  | 8.925                              | 32.89         |
| 16                | Jul 60-Aug 61 | 52.93  | 49.94                  | 15.027                  | 6.322                              | 25.08         | 61.82  | 50.22                  | 16.088                  | 6.879                              | 35.15         |
| 17                | Sep 61-Jul 62 | 52.52  | 57.12                  | 16.057                  | 6.059                              | 26.89         | 64.16  | 42.42                  | 12.089                  | 4.769                              | 31.20         |
| 18                | Feb 63-Jan 64 | 52.46  | 59.93                  | 18.248                  | 7.385                              | 29.99         | 64.45  | 44.92                  | 11.807                  | 4.365                              | 33.05         |
| 19                | Jul 64-Jun 65 | 48.13  | 68.82                  | 21.641                  | 8.959                              | 29.70         | 51.37  | 60.08                  | 16.596                  | 6.165                              | 26.67         |
| 20                | Jul 65-Jun 66 | 45.91  | 67.62                  | 23.079                  | 10.353                             | 28.70         | 52.65  | 58.05                  | 17.963                  | 7.368                              | 29.47         |
| 21                | Jul 66-Jun 67 | 44.48  | 69.26                  | 25.507                  | 12.049                             | 29.89         | 50.84  | 61.06                  | 18.967                  | 7.921                              | 29.31         |
| 22                | Jul 67-Jun 68 | 45.84  | 64.93                  | 23.000                  | 10.549                             | 28.35         | 52.07  | 57.49                  | 17.322                  | 6.917                              | 27.90         |
| 23                | Jul 68-Jun 69 | 50.33  | 58.24                  | 19.124                  | 8.532                              | 28.51         | 48.89  | 62.22                  | 18.279                  | 7.323                              | 26.00         |
| 24                | Jul 69-Jun 70 | 47.17  | 65.82                  | 21.262                  | 8.972                              | 27.59         | 52.17  | 58.11                  | 17.669                  | 7.143                              | 28.63         |
| 25                | Jul 70-Jun 71 | 49.53  | 61.38                  | 18.816                  | 7.673                              | 27.20         | 56.46  | 53.03                  | 13.541                  | 4.685                              | 27.63         |
| 27                | Oct 72-Sep 73 | 52.03  | 61.60                  | 19.140                  | 7.851                              | 30.79         | 51.73  | 57.69                  | 15.241                  | 5.427                              | 24.96         |
| 28                | Oct 73-Jun 74 | 50.43  | 58.07                  | 15.529                  | 5.740                              | 23.94         | 49.91  | 59.99                  | 17.095                  | 6.674                              | 25.55         |
| 32                | Jul 77-Jun 78 | 56.24  | 55.27                  | 17.717                  | 7.447                              | 32.55         | 65.04  | 45.31                  | 11.509                  | 4.020                              | 32.12         |
| 38                | Jan 83-Dec 83 | 62.58  | 39.23                  | 8.735                   | 2.721                              | 25.86         | 63.56  | 41.65                  | 9.527                   | 2.953                              | 27.73         |
| 42                | Jul 86-Jun 87 | 62.74  | 42.63                  | 12.206                  | 4.958                              | 30.59         | 62.89  | 46.10                  | 12.019                  | 4.290                              | 30.83         |
| 43                | Jul 87-Jun 88 | 59.08  | 42.93                  | 9.741                   | 3.074                              | 24.23         | 65.68  | 38.51                  | 8.813                   | 2.764                              | 28.08         |
| 45                | Jul 89-Jun 90 | 62.32  | 36.98                  | 7.813                   | 2.396                              | 23.57         | 79.27  | 37.55                  | 8.027                   | 2.397                              | 37.72         |
| 46                | Jul 90-Jun 91 | 57.51  | 43.13                  | 8.006                   | 2.148                              | 20.40         | 61.46  | 44.19                  | 11.548                  | 4.255                              | 28.59         |
| 48                | Jan 92-Dec 92 | 56.85  | 46.78                  | 13.528                  | 5.745                              | 27.81         | 69.75  | 37.14                  | 8.586                   | 2.865                              | 30.83         |
| 50                | Jul 93-Jun 94 | 63.46  | 35.39                  | 7.371                   | 2.316                              | 24            | 73.59  | 30.66                  | 6.706                   | 2.14                               | 29.13         |

(continued)

## APPENDIX (continued)

| NSS round                     | Survey period | Rural  |                        |                         |                                    |               | Urban  |                        |                         |                                    |               |
|-------------------------------|---------------|--|------------------------|-------------------------|------------------------------------|---------------|--|------------------------|-------------------------|------------------------------------|---------------|
|                               |               | Mean con-<br>sumption<br>(Rs/person/<br>month) | Head<br>count<br>index | Poverty<br>gap<br>index | Squared<br>poverty<br>gap<br>index | Gini<br>index | Mean con-<br>sumption<br>(Rs/person/<br>month) | Head<br>count<br>index | Poverty<br>gap<br>index | Squared<br>poverty<br>gap<br>index | Gini<br>index |
| <b>5: Jammu &amp; Kashmir</b> |               |  |                        |                         |                                    |               |  |                        |                         |                                    |               |
| 13                            | Sep 57-May 58 |  |                        |                         |                                    |               |  |                        |                         |                                    |               |
| 14                            | Jul 58-Jun 59 |  |                        |                         |                                    |               |  |                        |                         |                                    |               |
| 15                            | Jul 59-Jun 60 |  |                        |                         |                                    |               |  |                        |                         |                                    |               |
| 16                            | Jul 60-Aug 61 | 67.05  | 37.46                  | 8.046                   | 2.321                              | 27.60         | 68.46  | 35.91                  | 7.713                   | 2.347                              | 28.37         |
| 17                            | Sep 61-Jul 62 | 63.41  | 40.44                  | 9.152                   | 2.815                              | 26.77         | 66.64  | 34.90                  | 7.772                   | 2.402                              | 26.73         |
| 18                            | Feb 63-Jan 64 | 64.65  | 34.94                  | 7.869                   | 2.450                              | 24.63         | 76.17  | 28.13                  | 4.987                   | 1.336                              | 29.79         |
| 19                            | Jul 64-Jun 65 | 60.88  | 36.56                  | 7.009                   | 1.899                              | 21.97         | 66.62  | 36.05                  | 7.031                   | 1.991                              | 26.78         |
| 20                            | Jul 65-Jun 66 | 62.04  | 33.07                  | 7.100                   | 2.280                              | 22.62         | 60.41  | 40.09                  | 8.043                   | 2.268                              | 23.49         |
| 21                            | Jul 66-Jun 67 | 56.92  | 41.89                  | 9.589                   | 3.205                              | 21.97         | 64.05  | 40.44                  | 8.084                   | 2.273                              | 26.63         |
| 22                            | Jul 67-Jun 68 | 62.16  | 29.90                  | 6.136                   | 1.887                              | 20.49         | 71.26  | 28.06                  | 4.420                   | 1.020                              | 25.45         |
| 23                            | Jul 68-Jun 69 | 69.71  | 23.54                  | 4.693                   | 1.359                              | 22.51         | 71.74  | 25.50                  | 3.975                   | 0.898                              | 23.91         |
| 24                            | Jul 69-Jun 70 | 67.18  | 26.85                  | 5.432                   | 1.597                              | 22.74         | 69.63  | 27.47                  | 5.017                   | 1.297                              | 24.97         |
| 25                            | Jul 70-Jun 71 | 74.78  | 21.29                  | 3.993                   | 1.059                              | 23.94         | 74.08  | 26.57                  | 4.957                   | 1.282                              | 27.13         |
| 27                            | Oct 72-Sep 73 | 62.16  | 35.25                  | 7.670                   | 2.433                              | 23.66         | 71.49  | 27.50                  | 4.750                   | 1.131                              | 25.49         |
| 28                            | Oct 73-Jun 74 | 53.35  | 52.25                  | 12.882                  | 4.354                              | 23.24         | 70.38  | 24.95                  | 3.883                   | 0.841                              | 23.27         |
| 32                            | Jul 77-Jun 78 | 58.14  | 42.87                  | 8.671                   | 2.584                              | 22.46         | 77.29  | 26.88                  | 5.067                   | 1.524                              | 30.56         |
| 38                            | Jan 83-Dec 83 | 67.16  | 28.15                  | 4.753                   | 1.126                              | 22.68         | 78.28  | 17.76                  | 2.346                   | 0.428                              | 24.54         |
| 42                            | Jul 86-Jun 87 | 72.60  | 30.67                  | 5.904                   | 1.665                              | 28.13         | 84.41  | 19.18                  | 3.573                   | 0.927                              | 28.46         |
| 43                            | Jul 87-Jun 88 | 74.50  | 30.78                  | 5.830                   | 1.586                              | 29.73         | 90.45  | 15.38                  | 2.374                   | 0.567                              | 28.43         |
| 45                            | Jul 89-Jun 90 | 79.25  | 20.02                  | 2.650                   | 0.552                              | 27.56         | 101.16   | 7.86                   | 1.402                   | 0.349                              | 22.09         |
| 46                            | Jul 90-Jun 91 | 58.35  | 42.81                  | 13.383                  | 5.690                              | 26.31         | 106.46   | 18.79                  | 4.331                   | 1.349                              | 34.82         |
| 48                            | Jan 92-Dec 92 |  |                        |                         |                                    |               |  |                        |                         |                                    |               |
| 50                            | Jul 93-Jun 94 |  |                        |                         |                                    |               |  |                        |                         |                                    |               |
| <b>6: Karnataka</b>           |               |  |                        |                         |                                    |               |  |                        |                         |                                    |               |
| 13                            | Sep 57-May 58 | 65.95  | 48.80                  | 15.789                  | 7.017                              | 38.11         | 55.22  | 51.87                  | 17.727                  | 8.056                              | 30.55         |
| 14                            | Jul 58-Jun 59 | 59.49  | 53.84                  | 17.352                  | 7.174                              | 34.33         | 63.32  | 47.67                  | 15.045                  | 6.668                              | 31.01         |
| 15                            | Jul 59-Jun 60 | 54.92  | 58.27                  | 18.865                  | 7.870                              | 32.74         | 60.72  | 59.69                  | 19.229                  | 7.723                              | 38.99         |
| 16                            | Jul 60-Aug 61 | 59.19  | 47.42                  | 13.669                  | 5.237                              | 28.76         | 72.05  | 48.82                  | 14.640                  | 5.584                              | 40.70         |
| 17                            | Sep 61-Jul 62 | 69.96  | 44.58                  | 12.234                  | 4.762                              | 36.92         | 61.89  | 52.03                  | 17.207                  | 7.438                              | 36.42         |
| 18                            | Feb 63-Jan 64 | 53.70  | 57.74                  | 16.491                  | 6.332                              | 28.98         | 55.36  | 57.57                  | 19.092                  | 8.413                              | 34.08         |
| 19                            | Jul 64-Jun 65 | 48.50  | 62.89                  | 20.410                  | 8.701                              | 28.18         | 59.50  | 49.53                  | 16.003                  | 6.984                              | 32.69         |
| 20                            | Jul 65-Jun 66 | 42.36  | 72.56                  | 28.104                  | 13.870                             | 30.91         | 52.34  | 61.81                  | 20.273                  | 8.514                              | 32.15         |
| 21                            | Jul 66-Jun 67 | 44.80  | 67.61                  | 25.512                  | 12.382                             | 30.68         | 49.02  | 65.29                  | 21.558                  | 9.222                              | 30.41         |
| 22                            | Jul 67-Jun 68 | 46.73  | 66.84                  | 23.329                  | 10.666                             | 30.23         | 51.60  | 59.61                  | 20.208                  | 9.004                              | 31.35         |
| 23                            | Jul 68-Jun 69 | 46.90  | 69.73                  | 24.345                  | 11.170                             | 32.00         | 56.52  | 56.20                  | 18.436                  | 8.013                              | 34.02         |
| 24                            | Jul 69-Jun 70 | 47.92  | 64.28                  | 20.024                  | 8.181                              | 26.79         | 61.96  | 48.38                  | 14.997                  | 6.469                              | 33.82         |
| 25                            | Jul 70-Jun 71 | 51.94  | 58.00                  | 17.440                  | 7.063                              | 28.16         | 64.50  | 46.00                  | 12.981                  | 4.890                              | 32.67         |
| 27                            | Oct 72-Sep 73 | 51.89  | 56.57                  | 17.153                  | 7.222                              | 27.90         | 59.51  | 51.72                  | 15.850                  | 6.410                              | 32.83         |
| 28                            | Oct 73-Jun 74 | 50.77  | 60.97                  | 18.799                  | 7.660                              | 28.67         | 55.92  | 53.78                  | 15.882                  | 6.247                              | 29.85         |
| 32                            | Jul 77-Jun 78 | 56.22  | 54.22                  | 17.661                  | 7.725                              | 32.56         | 63.34  | 48.85                  | 15.462                  | 6.658                              | 35.61         |
| 38                            | Jan 83-Dec 83 | 61.84  | 44.68                  | 12.978                  | 5.157                              | 30.40         | 73.67  | 37.46                  | 11.071                  | 4.480                              | 34.46         |
| 42                            | Jul 86-Jun 87 | 59.24  | 46.15                  | 13.815                  | 5.618                              | 28.98         | 69.68  | 42.21                  | 13.096                  | 5.384                              | 35.07         |
| 43                            | Jul 87-Jun 88 | 62.31  | 43.49                  | 11.272                  | 4.000                              | 28.94         | 69.40  | 42.04                  | 10.990                  | 3.790                              | 33.37         |
| 45                            | Jul 89-Jun 90 | 53.63  | 54.43                  | 15.246                  | 5.720                              | 26.63         | 79.46  | 34.46                  | 9.012                   | 3.138                              | 35.22         |
| 46                            | Jul 90-Jun 91 | 58.63  | 42.73                  | 13.304                  | 5.587                              | 26.29         | 82.46  | 34.80                  | 9.613                   | 3.499                              | 36.79         |
| 48                            | Jan 92-Dec 92 | 51.93  | 56.94                  | 15.759                  | 6.023                              | 26.12         | 75.11  | 37.76                  | 10.818                  | 4.148                              | 35.22         |
| 50                            | Jul 93-Jun 94 | 62.52  | 40.97                  | 9.754                   | 3.345                              | 26.97         | 79.82  | 29.71                  | 7.472                   | 2.542                              | 31.87         |

(continued)

## APPENDIX (continued)

| NSS round                | Survey period | Rural  |                        |                         |                                    |               | Urban  |                        |                         |                                    |               |
|--------------------------|---------------|--|------------------------|-------------------------|------------------------------------|---------------|--|------------------------|-------------------------|------------------------------------|---------------|
|                          |               | Mean con-<br>sumption<br>(Rs/person/<br>month) | Head<br>count<br>index | Poverty<br>gap<br>index | Squared<br>poverty<br>gap<br>index | Gini<br>index | Mean con-<br>sumption<br>(Rs/person/<br>month) | Head<br>count<br>index | Poverty<br>gap<br>index | Squared<br>poverty<br>gap<br>index | Gini<br>index |
| <b>7: Kerala</b>         |               |  |                        |                         |                                    |               |  |                        |                         |                                    |               |
| 13                       | Sep 57-May 58 | 47.27  | 66.88                  | 26.948                  | 13.455                             | 34.96         | 60.59  | 52.60                  | 18.178                  | 8.019                              | 35.54         |
| 14                       | Jul 58-Jun 59 | 45.88  | 68.86                  | 29.125                  | 14.571                             | 35.15         | 51.49  | 56.31                  | 17.639                  | 7.220                              | 27.01         |
| 15                       | Jul 59-Jun 60 | 45.40  | 71.21                  | 27.944                  | 13.410                             | 33.95         | 53.26  | 53.31                  | 19.408                  | 9.095                              | 30.23         |
| 16                       | Jul 60-Aug 61 | 46.64  | 68.65                  | 25.655                  | 11.765                             | 32.20         | 53.60  | 61.94                  | 23.564                  | 11.075                             | 36.76         |
| 17                       | Sep 61-Jul 62 | 52.25  | 59.20                  | 21.103                  | 9.861                              | 33.02         | 56.08  | 58.36                  | 20.991                  | 9.899                              | 36.82         |
| 18                       | Feb 63-Jan 64 | 49.50  | 63.24                  | 21.070                  | 9.140                              | 30.18         | 56.91  | 57.80                  | 21.011                  | 9.886                              | 37.41         |
| 19                       | Jul 64-Jun 65 | 45.21  | 69.40                  | 27.314                  | 13.644                             | 33.57         | 52.95  | 64.71                  | 24.689                  | 11.990                             | 39.00         |
| 20                       | Jul 65-Jun 66 | 38.10  | 79.76                  | 32.929                  | 16.400                             | 29.83         | 40.33  | 80.01                  | 33.474                  | 9.999                              | 34.34         |
| 21                       | Jul 66-Jun 67 | 40.04  | 77.37                  | 30.752                  | 14.944                             | 30.13         | 52.11  | 64.69                  | 28.765                  | 15.880                             | 42.98         |
| 22                       | Jul 67-Jun 68 | 43.35  | 74.13                  | 27.803                  | 13.329                             | 31.85         | 43.75  | 74.35                  | 31.164                  | 15.968                             | 36.63         |
| 23                       | Jul 68-Jun 69 | 48.49  | 73.76                  | 30.237                  | 15.205                             | 41.38         | 46.19  | 70.95                  | 29.646                  | 15.321                             | 37.83         |
| 24                       | Jul 69-Jun 70 | 40.17  | 78.15                  | 30.913                  | 15.168                             | 30.92         | 52.45  | 66.64                  | 26.866                  | 13.513                             | 41.26         |
| 25                       | Jul 70-Jun 71 | 43.79  | 72.65                  | 28.391                  | 13.926                             | 33.04         | 55.79  | 61.03                  | 23.380                  | 11.461                             | 39.77         |
| 27                       | Oct 72-Sep 73 | 47.65  | 66.79                  | 23.487                  | 10.665                             | 31.40         | 56.31  | 60.30                  | 23.552                  | 11.518                             | 39.49         |
| 28                       | Oct 73-Jun 74 | 50.46  | 62.06                  | 21.570                  | 9.810                              | 32.02         | 53.69  | 62.72                  | 23.840                  | 11.253                             | 37.57         |
| 32                       | Jul 77-Jun 78 | 59.75  | 52.66                  | 17.898                  | 8.167                              | 35.86         | 60.08  | 56.05                  | 21.594                  | 10.719                             | 40.37         |
| 38                       | Jan 83-Dec 83 | 67.70  | 43.70                  | 11.687                  | 4.296                              | 33.88         | 72.54  | 44.72                  | 13.496                  | 5.549                              | 39.36         |
| 42                       | Jul 86-Jun 87 | 72.58  | 39.66                  | 9.996                   | 3.508                              | 34.82         | 72.67  | 48.81                  | 16.089                  | 6.881                              | 43.33         |
| 43                       | Jul 87-Jun 88 | 72.90  | 34.67                  | 8.284                   | 2.714                              | 31.70         | 78.22  | 38.02                  | 9.840                   | 3.329                              | 36.39         |
| 45                       | Jul 89-Jun 90 | 66.29  | 38.87                  | 9.582                   | 3.328                              | 27.88         | 87.99  | 30.30                  | 6.467                   | 1.880                              | 37.36         |
| 46                       | Jul 90-Jun 91 | 68.81  | 33.80                  | 8.246                   | 2.789                              | 27.24         | 94.31  | 34.77                  | 9.378                   | 3.314                              | 38.64         |
| 48                       | Jan 92-Dec 92 | 77.70  | 34.15                  | 8.635                   | 3.099                              | 34.70         | 84.97  | 34.01                  | 9.004                   | 3.238                              | 38.52         |
| 50                       | Jul 93-Jun 94 | 73.44  | 31.07                  | 7.004                   | 2.412                              | 30.07         | 89.32  | 23.07                  | 4.944                   | 1.651                              | 34.32         |
| <b>8: Madhya Pradesh</b> |               |  |                        |                         |                                    |               |  |                        |                         |                                    |               |
| 13                       | Sep 57-May 58 | 56.35  | 62.86                  | 24.000                  | 11.544                             | 41.12         | 64.49  | 45.53                  | 15.733                  | 7.196                              | 34.87         |
| 14                       | Jul 58-Jun 59 | 59.23  | 56.49                  | 18.904                  | 8.092                              | 36.66         | 68.79  | 45.57                  | 13.920                  | 5.499                              | 36.45         |
| 15                       | Jul 59-Jun 60 | 59.87  | 52.24                  | 16.427                  | 6.668                              | 33.33         | 67.04  | 51.27                  | 16.856                  | 7.023                              | 39.12         |
| 16                       | Jul 60-Aug 61 | 56.50  | 50.91                  | 15.456                  | 6.438                              | 29.59         | 62.70  | 55.58                  | 15.943                  | 5.787                              | 34.07         |
| 17                       | Sep 61-Jul 62 | 64.18  | 48.13                  | 14.006                  | 5.411                              | 34.22         | 57.27  | 49.67                  | 17.594                  | 9.019                              | 33.60         |
| 18                       | Feb 63-Jan 64 | 64.57  | 45.40                  | 13.508                  | 5.422                              | 33.51         | 60.73  | 56.29                  | 16.714                  | 6.218                              | 35.14         |
| 19                       | Jul 64-Jun 65 | 58.32  | 50.20                  | 15.056                  | 6.155                              | 30.99         | 59.50  | 53.15                  | 16.173                  | 6.390                              | 33.25         |
| 20                       | Jul 65-Jun 66 | 55.18  | 57.23                  | 17.404                  | 7.158                              | 31.77         | 53.21  | 58.15                  | 19.316                  | 8.420                              | 31.68         |
| 21                       | Jul 66-Jun 67 | 45.00  | 67.68                  | 24.305                  | 11.411                             | 29.17         | 55.98  | 58.00                  | 19.670                  | 8.586                              | 34.77         |
| 22                       | Jul 67-Jun 68 | 44.49  | 70.96                  | 27.319                  | 13.337                             | 32.60         | 50.56  | 64.31                  | 22.183                  | 9.835                              | 32.98         |
| 23                       | Jul 68-Jun 69 | 48.78  | 65.55                  | 22.975                  | 10.661                             | 32.45         | 58.97  | 54.94                  | 19.715                  | 9.356                              | 37.54         |
| 24                       | Jul 69-Jun 70 | 49.63  | 63.80                  | 22.566                  | 10.442                             | 32.67         | 58.36  | 54.12                  | 16.700                  | 6.930                              | 33.56         |
| 25                       | Jul 70-Jun 71 | 50.47  | 62.42                  | 20.991                  | 9.205                              | 31.24         | 61.29  | 51.34                  | 16.145                  | 6.797                              | 34.93         |
| 27                       | Oct 72-Sep 73 | 49.36  | 64.99                  | 21.713                  | 9.370                              | 30.99         | 61.51  | 54.35                  | 15.747                  | 6.054                              | 35.51         |
| 28                       | Oct 73-Jun 74 | 47.76  | 66.09                  | 21.852                  | 9.351                              | 29.16         | 52.62  | 56.56                  | 16.876                  | 6.663                              | 27.85         |
| 32                       | Jul 77-Jun 78 | 51.56  | 64.71                  | 21.419                  | 9.317                              | 33.52         | 61.49  | 59.75                  | 23.649                  | 11.819                             | 44.63         |
| 38                       | Jan 83-Dec 83 | 56.25  | 53.04                  | 15.363                  | 5.977                              | 29.60         | 61.00  | 48.20                  | 12.854                  | 4.566                              | 30.33         |
| 42                       | Jul 86-Jun 87 | 58.30  | 54.35                  | 14.975                  | 5.566                              | 31.64         | 65.20  | 45.19                  | 12.301                  | 4.649                              | 32.98         |
| 43                       | Jul 87-Jun 88 | 59.55  | 47.80                  | 12.393                  | 4.342                              | 28.53         | 67.91  | 43.45                  | 11.527                  | 4.022                              | 33.12         |
| 45                       | Jul 89-Jun 90 | 64.41  | 44.74                  | 11.790                  | 4.353                              | 27.39         | 72.78  | 39.27                  | 10.168                  | 3.501                              | 34.35         |
| 46                       | Jul 90-Jun 91 | 59.52  | 47.93                  | 12.834                  | 4.662                              | 29.07         | 75.48  | 40.22                  | 11.732                  | 4.647                              | 37.79         |
| 48                       | Jan 92-Dec 92 | 61.70  | 56.09                  | 13.945                  | 4.766                              | 34.55         | 69.83  | 34.45                  | 9.088                   | 3.383                              | 30.50         |
| 50                       | Jul 93-Jun 94 | 60.45  | 45.36                  | 11.431                  | 4.082                              | 27.96         | 70.08  | 39.83                  | 10.003                  | 3.519                              | 33            |

(continued)

## APPENDIX (continued)

| NSS round             | Survey period | Rural  |                        |                         |                                    |               | Urban  |                        |                         |                                    |               |
|-----------------------|---------------|--|------------------------|-------------------------|------------------------------------|---------------|--|------------------------|-------------------------|------------------------------------|---------------|
|                       |               | Mean con-<br>sumption<br>(Rs/person/<br>month) | Head<br>count<br>index | Poverty<br>gap<br>index | Squared<br>poverty<br>gap<br>index | Gini<br>index | Mean con-<br>sumption<br>(Rs/person/<br>month) | Head<br>count<br>index | Poverty<br>gap<br>index | Squared<br>poverty<br>gap<br>index | Gini<br>index |
| <b>9: Maharashtra</b> |               |  |                        |                         |                                    |               |  |                        |                         |                                    |               |
| 13                    | Sep 57-May 58 |  |                        |                         |                                    |               |  |                        |                         |                                    |               |
| 14                    | Jul 58-Jun 59 | 45.48  | 70.81                  | 24.910                  | 11.080                             | 30.28         | 70.65  | 38.89                  | 10.730                  | 4.091                              | 31.85         |
| 15                    | Jul 59-Jun 60 | 46.97  | 67.97                  | 22.686                  | 9.784                              | 29.39         | 71.49  | 46.71                  | 14.272                  | 5.754                              | 39.65         |
| 16                    | Jul 60-Aug 61 | 50.26  | 60.00                  | 18.608                  | 7.910                              | 28.14         | 67.31  | 44.61                  | 15.414                  | 6.886                              | 35.17         |
| 17                    | Sep 61-Jul 62 | 51.72  | 58.36                  | 17.583                  | 7.097                              | 28.08         | 74.19  | 40.63                  | 12.618                  | 5.316                              | 37.73         |
| 18                    | Feb 63-Jan 64 | 53.36  | 57.72                  | 17.035                  | 6.680                              | 29.16         | 70.42  | 45.29                  | 14.614                  | 6.105                              | 37.57         |
| 19                    | Jul 64-Jun 65 | 43.51  | 71.87                  | 24.727                  | 10.919                             | 27.29         | 72.82  | 45.85                  | 15.607                  | 6.848                              | 40.19         |
| 20                    | Jul 65-Jun 66 | 44.66  | 70.94                  | 23.922                  | 10.401                             | 27.90         | 70.59  | 46.63                  | 15.064                  | 6.306                              | 38.97         |
| 21                    | Jul 66-Jun 67 | 41.71  | 75.56                  | 27.495                  | 12.823                             | 28.70         | 66.53  | 46.72                  | 15.424                  | 6.734                              | 36.65         |
| 22                    | Jul 67-Jun 68 | 42.69  | 72.48                  | 24.332                  | 10.832                             | 25.84         | 62.17  | 50.23                  | 17.829                  | 8.269                              | 36.69         |
| 23                    | Jul 68-Jun 69 | 46.05  | 69.28                  | 23.345                  | 10.011                             | 28.82         | 63.42  | 49.73                  | 16.439                  | 6.994                              | 35.45         |
| 24                    | Jul 69-Jun 70 | 46.01  | 68.62                  | 22.120                  | 9.231                              | 27.19         | 71.38  | 38.62                  | 11.516                  | 4.700                              | 33.84         |
| 25                    | Jul 70-Jun 71 | 48.06  | 61.96                  | 18.584                  | 7.541                              | 25.14         | 69.79  | 43.23                  | 13.284                  | 5.405                              | 35.95         |
| 27                    | Oct 72-Sep 73 | 41.34  | 81.13                  | 30.340                  | 9.999                              | 31.52         | 66.94  | 45.59                  | 15.615                  | 7.240                              | 37.41         |
| 28                    | Oct 73-Jun 74 | 47.58  | 64.61                  | 20.317                  | 8.506                              | 26.99         | 59.95  | 51.17                  | 16.654                  | 7.132                              | 33.77         |
| 32                    | Jul 77-Jun 78 | 59.65  | 78.78                  | 21.958                  | 7.709                              | 42.84         | 70.03  | 43.51                  | 14.517                  | 6.546                              | 37.61         |
| 38                    | Jan 83-Dec 83 | 54.98  | 54.56                  | 15.789                  | 6.073                              | 28.82         | 68.41  | 41.79                  | 12.551                  | 5.133                              | 34.25         |
| 42                    | Jul 86-Jun 87 | 55.71  | 53.92                  | 16.027                  | 6.392                              | 29.98         | 70.21  | 41.21                  | 13.094                  | 5.575                              | 35.05         |
| 43                    | Jul 87-Jun 88 | 59.52  | 52.32                  | 14.023                  | 5.163                              | 31.52         | 72.30  | 38.79                  | 11.481                  | 4.542                              | 34.27         |
| 45                    | Jul 89-Jun 90 | 60.10  | 45.53                  | 11.652                  | 4.149                              | 28.25         | 77.99  | 42.72                  | 12.785                  | 4.955                              | 40.72         |
| 46                    | Jul 90-Jun 91 | 63.56  | 43.05                  | 11.951                  | 4.498                              | 30.18         | 71.33  | 38.03                  | 11.380                  | 4.631                              | 33.68         |
| 48                    | Jan 92-Dec 92 | 52.05  | 60.63                  | 18.071                  | 7.073                              | 29.23         | 74.10  | 38.15                  | 11.229                  | 4.490                              | 35.23         |
| 50                    | Jul 93-Jun 94 | 60.67  | 47.81                  | 13.16                   | 5.089                              | 30.65         | 77.10  | 36.23                  | 10.936                  | 4.419                              | 35.67         |
| <b>10: Orissa</b>     |               |  |                        |                         |                                    |               |  |                        |                         |                                    |               |
| 13                    | Sep 57-May 58 | 48.06  | 65.06                  | 23.180                  | 11.129                             | 32.15         | 55.40  | 64.07                  | 23.338                  | 10.619                             | 39.45         |
| 14                    | Jul 58-Jun 59 | 53.10  | 56.08                  | 18.967                  | 8.474                              | 30.73         | 60.21  | 46.79                  | 20.991                  | 12.646                             | 36.95         |
| 15                    | Jul 59-Jun 60 | 59.05  | 62.49                  | 19.494                  | 7.723                              | 27.30         | 48.50  | 64.79                  | 28.756                  | 16.047                             | 39.08         |
| 16                    | Jul 60-Aug 61 | 50.85  | 61.72                  | 20.129                  | 8.287                              | 29.78         | 44.18  | 69.12                  | 25.752                  | 12.081                             | 29.55         |
| 17                    | Sep 61-Jul 62 | 58.90  | 46.89                  | 13.909                  | 5.912                              | 29.54         | 68.03  | 50.81                  | 17.760                  | 8.016                              | 41.33         |
| 18                    | Feb 63-Jan 64 | 51.23  | 58.04                  | 17.954                  | 7.468                              | 27.89         | 55.89  | 54.88                  | 18.437                  | 8.258                              | 33.12         |
| 19                    | Jul 64-Jun 65 | 49.39  | 61.36                  | 18.528                  | 7.548                              | 26.83         | 53.12  | 60.07                  | 19.023                  | 7.639                              | 30.89         |
| 20                    | Jul 65-Jun 66 | 49.96  | 59.98                  | 18.280                  | 7.806                              | 27.57         | 49.69  | 64.84                  | 23.051                  | 10.676                             | 33.45         |
| 21                    | Jul 66-Jun 67 | 47.24  | 62.86                  | 19.001                  | 7.963                              | 24.93         | 51.94  | 65.47                  | 23.314                  | 10.503                             | 36.09         |
| 22                    | Jul 67-Jun 68 | 49.93  | 63.40                  | 19.980                  | 8.449                              | 29.46         | 55.11  | 59.11                  | 21.315                  | 10.125                             | 36.58         |
| 23                    | Jul 68-Jun 69 | 44.61  | 70.29                  | 24.308                  | 11.070                             | 28.73         | 55.96  | 61.90                  | 20.050                  | 8.426                              | 36.21         |
| 24                    | Jul 69-Jun 70 | 46.16  | 66.20                  | 22.902                  | 10.637                             | 29.12         | 60.76  | 49.19                  | 16.567                  | 7.473                              | 34.14         |
| 25                    | Jul 70-Jun 71 | 46.67  | 64.77                  | 22.173                  | 10.162                             | 28.54         | 56.72  | 54.43                  | 17.162                  | 7.121                              | 32.24         |
| 27                    | Oct 72-Sep 73 | 47.33  | 67.03                  | 23.693                  | 10.952                             | 31.45         | 58.45  | 55.53                  | 18.133                  | 7.853                              | 35.46         |
| 28                    | Oct 73-Jun 74 | 50.63  | 58.67                  | 17.662                  | 7.108                              | 26.75         | 55.15  | 59.99                  | 20.203                  | 8.778                              | 34.94         |
| 32                    | Jul 77-Jun 78 | 50.08  | 62.52                  | 20.443                  | 8.955                              | 30.63         | 54.07  | 57.26                  | 19.743                  | 9.057                              | 33.28         |
| 38                    | Jan 83-Dec 83 | 51.25  | 56.76                  | 16.962                  | 7.126                              | 27.01         | 55.58  | 54.94                  | 16.701                  | 6.710                              | 30.59         |
| 42                    | Jul 86-Jun 87 | 59.14  | 44.95                  | 11.950                  | 4.462                              | 27.35         | 66.78  | 49.81                  | 14.793                  | 5.789                              | 37.70         |
| 43                    | Jul 87-Jun 88 | 57.68  | 47.86                  | 11.699                  | 3.840                              | 25.58         | 61.12  | 47.53                  | 13.371                  | 5.014                              | 30.62         |
| 45                    | Jul 89-Jun 90 | 63.77  | 39.48                  | 8.454                   | 2.403                              | 25.37         | 67.69  | 41.09                  | 11.599                  | 4.385                              | 32.20         |
| 46                    | Jul 90-Jun 91 | 69.70  | 27.14                  | 5.376                   | 1.532                              | 24.92         | 72.26  | 40.42                  | 10.912                  | 3.928                              | 34.84         |
| 48                    | Jan 92-Dec 92 | 68.23  | 36.57                  | 8.195                   | 2.530                              | 29.37         | 86.24  | 48.74                  | 17.120                  | 7.366                              | 47.96         |
| 50                    | Jul 93-Jun 94 | 61.04  | 40.28                  | 8.724                   | 2.79                               | 24.57         | 66.67  | 40.76                  | 11.257                  | 4.148                              | 30.69         |

(continued)

## APPENDIX (continued)

| NSS round             | Survey period | Rural  |                        |                         |                                    |               | Urban  |                        |                         |                                    |               |
|-----------------------|---------------|--|------------------------|-------------------------|------------------------------------|---------------|--|------------------------|-------------------------|------------------------------------|---------------|
|                       |               | Mean con-<br>sumption<br>(Rs/person/<br>month) | Head<br>count<br>index | Poverty<br>gap<br>index | Squared<br>poverty<br>gap<br>index | Gini<br>index | Mean con-<br>sumption<br>(Rs/person/<br>month) | Head<br>count<br>index | Poverty<br>gap<br>index | Squared<br>poverty<br>gap<br>index | Gini<br>index |
| <b>11: Rajasthan</b>  |               |  |                        |                         |                                    |               |  |                        |                         |                                    |               |
| 13                    | Sep 57-May 58 | 65.95  | 50.64                  | 17.935                  | 8.495                              | 40.39         | 64.31  | 48.26                  | 14.570                  | 5.957                              | 35.13         |
| 14                    | Jul 58-Jun 59 | 61.16  | 49.07                  | 14.510                  | 5.734                              | 32.50         | 70.74  | 41.11                  | 11.564                  | 5.941                              | 37.92         |
| 15                    | Jul 59-Jun 60 | 72.79  | 40.43                  | 10.630                  | 4.513                              | 37.49         | 56.37  | 46.94                  | 11.672                  | 3.917                              | 23.82         |
| 16                    | Jul 60-Aug 61 | 55.70  | 57.47                  | 18.218                  | 7.580                              | 33.12         | 66.60  | 46.56                  | 13.951                  | 5.634                              | 33.15         |
| 17                    | Sep 61-Jul 62 | 57.66  | 55.89                  | 19.958                  | 9.239                              | 36.56         | 63.12  | 44.40                  | 12.838                  | 5.113                              | 31.68         |
| 18                    | Feb 63-Jan 64 | 58.03  | 49.94                  | 15.420                  | 6.381                              | 30.49         | 70.81  | 43.28                  | 12.134                  | 4.465                              | 35.79         |
| 19                    | Jul 64-Jun 65 | 55.10  | 55.79                  | 17.943                  | 7.779                              | 32.25         | 62.08  | 48.26                  | 13.501                  | 5.009                              | 31.93         |
| 20                    | Jul 65-Jun 66 | 54.98  | 55.13                  | 17.724                  | 7.767                              | 31.80         | 57.89  | 54.51                  | 15.347                  | 5.528                              | 30.73         |
| 21                    | Jul 66-Jun 67 | 52.06  | 63.13                  | 22.066                  | 10.191                             | 34.88         | 56.11  | 57.95                  | 18.241                  | 7.504                              | 33.68         |
| 22                    | Jul 67-Jun 68 | 51.65  | 60.02                  | 21.176                  | 10.073                             | 33.16         | 59.82  | 49.15                  | 13.612                  | 5.184                              | 30.49         |
| 23                    | Jul 68-Jun 69 | 52.47  | 67.24                  | 25.016                  | 12.092                             | 39.34         | 61.36  | 52.11                  | 15.170                  | 5.780                              | 33.97         |
| 24                    | Jul 69-Jun 70 | 49.11  | 68.87                  | 25.280                  | 11.829                             | 35.51         | 60.01  | 52.50                  | 14.981                  | 5.797                              | 32.98         |
| 25                    | Jul 70-Jun 71 | 47.41  | 65.28                  | 24.459                  | 12.006                             | 32.77         | 68.57  | 44.12                  | 13.033                  | 5.277                              | 35.77         |
| 27                    | Oct 72-Sep 73 | 50.02  | 63.42                  | 21.949                  | 9.891                              | 32.19         | 64.44  | 47.47                  | 13.601                  | 5.164                              | 33.97         |
| 28                    | Oct 73-Jun 74 | 51.09  | 59.26                  | 18.460                  | 7.634                              | 28.40         | 57.03  | 54.19                  | 14.665                  | 5.197                              | 29.55         |
| 32                    | Jul 77-Jun 78 | 76.21  | 53.52                  | 14.611                  | 5.575                              | 46.28         | 65.45  | 42.68                  | 11.191                  | 3.950                              | 31.06         |
| 38                    | Jan 83-Dec 83 | 62.04  | 48.99                  | 15.586                  | 6.654                              | 34.59         | 69.63  | 36.94                  | 9.606                   | 3.548                              | 30.96         |
| 42                    | Jul 86-Jun 87 | 61.30  | 45.65                  | 13.168                  | 5.238                              | 30.30         | 78.44  | 33.31                  | 8.069                   | 2.734                              | 34.22         |
| 43                    | Jul 87-Jun 88 | 57.99  | 50.35                  | 14.888                  | 5.967                              | 30.34         | 73.79  | 37.68                  | 9.154                   | 2.992                              | 32.56         |
| 45                    | Jul 89-Jun 90 | 65.74  | 40.49                  | 12.194                  | 5.190                              | 32.36         | 79.51  | 31.08                  | 7.450                   | 2.411                              | 33.08         |
| 46                    | Jul 90-Jun 91 | 64.53  | 38.96                  | 12.097                  | 5.045                              | 28.54         | 77.57  | 29.98                  | 7.219                   | 2.422                              | 30.61         |
| 48                    | Jan 92-Dec 92 | 57.46  | 50.90                  | 13.761                  | 5.249                              | 28.93         | 74.25  | 29.13                  | 6.543                   | 2.037                              | 28.87         |
| 50                    | Jul 93-Jun 94 | 58.07  | 47.52                  | 11.762                  | 4.118                              | 26.48         | 75.87  | 29.38                  | 6.549                   | 1.988                              | 29.36         |
| <b>12: Tamil Nadu</b> |               |  |                        |                         |                                    |               |  |                        |                         |                                    |               |
| 13                    | Sep 57-May 58 | 41.74  | 72.73                  | 29.469                  | 15.138                             | 32.12         | 70.08  | 49.92                  | 17.173                  | 7.511                              | 41.16         |
| 14                    | Jul 58-Jun 59 | 46.76  | 66.15                  | 24.866                  | 11.987                             | 32.02         | 64.80  | 42.62                  | 12.263                  | 4.969                              | 30.70         |
| 15                    | Jul 59-Jun 60 | 44.27  | 70.84                  | 25.036                  | 11.381                             | 29.00         | 62.38  | 48.08                  | 13.846                  | 5.330                              | 32.71         |
| 16                    | Jul 60-Aug 61 | 46.40  | 65.12                  | 24.322                  | 11.565                             | 30.52         | 60.47  | 42.56                  | 12.633                  | 5.461                              | 29.15         |
| 17                    | Sep 61-Jul 62 | 53.19  | 57.20                  | 18.501                  | 8.155                              | 31.14         | 64.85  | 47.04                  | 13.277                  | 5.229                              | 34.33         |
| 18                    | Feb 63-Jan 64 | 56.03  | 53.83                  | 16.500                  | 6.790                              | 30.87         | 66.29  | 46.06                  | 12.587                  | 4.730                              | 34.49         |
| 19                    | Jul 64-Jun 65 | 48.45  | 64.69                  | 21.340                  | 9.346                              | 29.60         | 64.24  | 50.74                  | 15.130                  | 6.044                              | 36.39         |
| 20                    | Jul 65-Jun 66 | 46.70  | 66.68                  | 22.515                  | 9.959                              | 28.89         | 59.75  | 54.53                  | 17.262                  | 7.097                              | 35.21         |
| 21                    | Jul 66-Jun 67 | 44.41  | 70.86                  | 24.184                  | 10.666                             | 27.96         | 56.52  | 53.93                  | 16.888                  | 7.132                              | 31.96         |
| 22                    | Jul 67-Jun 68 | 46.84  | 65.52                  | 21.310                  | 9.150                              | 27.33         | 60.67  | 55.37                  | 17.366                  | 7.339                              | 37.13         |
| 23                    | Jul 68-Jun 69 | 46.06  | 67.64                  | 22.795                  | 10.015                             | 28.46         | 71.02  | 38.34                  | 10.668                  | 4.147                              | 33.28         |
| 24                    | Jul 69-Jun 70 | 45.77  | 69.73                  | 24.722                  | 11.256                             | 30.69         | 60.62  | 51.09                  | 15.670                  | 6.492                              | 33.89         |
| 25                    | Jul 70-Jun 71 | 46.56  | 66.36                  | 20.881                  | 8.716                              | 26.41         | 60.51  | 62.31                  | 21.232                  | 9.210                              | 41.83         |
| 27                    | Oct 72-Sep 73 | 51.03  | 59.27                  | 17.730                  | 7.153                              | 27.61         | 60.78  | 49.83                  | 14.283                  | 5.434                              | 32.02         |
| 28                    | Oct 73-Jun 74 | 50.93  | 59.29                  | 17.801                  | 7.148                              | 27.44         | 60.05  | 49.96                  | 14.167                  | 5.334                              | 31.20         |
| 32                    | Jul 77-Jun 78 | 54.78  | 58.07                  | 18.196                  | 7.560                              | 32.41         | 63.30  | 47.69                  | 14.752                  | 6.230                              | 34.48         |
| 38                    | Jan 83-Dec 83 | 56.42  | 54.96                  | 17.682                  | 7.587                              | 32.90         | 68.54  | 44.53                  | 13.498                  | 5.634                              | 36.42         |
| 42                    | Jul 86-Jun 87 | 61.88  | 44.78                  | 13.139                  | 5.313                              | 30.46         | 72.25  | 39.54                  | 10.664                  | 4.147                              | 35.32         |
| 43                    | Jul 87-Jun 88 | 62.81  | 48.35                  | 13.417                  | 4.891                              | 32.33         | 73.37  | 39.74                  | 10.847                  | 3.933                              | 35.37         |
| 45                    | Jul 89-Jun 90 | 61.46  | 41.99                  | 9.901                   | 3.277                              | 26.93         | 74.43  | 35.02                  | 9.030                   | 3.150                              | 32.91         |
| 46                    | Jul 90-Jun 91 | 61.16  | 42.02                  | 11.573                  | 4.377                              | 27.29         | 78.73  | 33.80                  | 8.624                   | 2.989                              | 34.02         |
| 48                    | Jan 92-Dec 92 | 60.52  | 46.65                  | 12.888                  | 4.910                              | 29.65         | 93.26  | 30.50                  | 8.473                   | 3.454                              | 41.60         |
| 50                    | Jul 93-Jun 94 | 70.1   | 36.74                  | 8.592                   | 2.982                              | 31.24         | 80.43  | 31.32                  | 7.769                   | 2.834                              | 34.84         |

(continued)

## APPENDIX (continued)

| NSS round                | Survey period | Rural  |                        |                         |                                    |               | Urban  |                        |                         |                                    |               |
|--------------------------|---------------|--|------------------------|-------------------------|------------------------------------|---------------|--|------------------------|-------------------------|------------------------------------|---------------|
|                          |               | Mean con-<br>sumption<br>(Rs/person/<br>month) | Head<br>count<br>index | Poverty<br>gap<br>index | Squared<br>poverty<br>gap<br>index | Gini<br>index | Mean con-<br>sumption<br>(Rs/person/<br>month) | Head<br>count<br>index | Poverty<br>gap<br>index | Squared<br>poverty<br>gap<br>index | Gini<br>index |
| <b>13: Uttar Pradesh</b> |               |  |                        |                         |                                    |               |  |                        |                         |                                    |               |
| 13                       | Sep 57-May 58 | 53.45  | 55.01                  | 17.498                  | 7.599                              | 29.67         | 58.80  | 58.43                  | 20.971                  | 9.624                              | 39.22         |
| 14                       | Jul 58-Jun 59 | 60.94  | 50.69                  | 15.767                  | 6.516                              | 34.01         | 55.35  | 60.17                  | 21.218                  | 9.433                              | 35.96         |
| 15                       | Jul 59-Jun 60 | 65.76  | 38.34                  | 10.492                  | 3.930                              | 28.83         | 56.77  | 59.48                  | 21.523                  | 9.907                              | 37.89         |
| 16                       | Jul 60-Aug 61 | 64.37  | 40.82                  | 11.796                  | 4.622                              | 29.56         | 61.80  | 50.28                  | 16.859                  | 7.623                              | 36.21         |
| 17                       | Sep 61-Jul 62 | 73.44  | 34.49                  | 8.397                   | 2.769                              | 31.60         | 59.79  | 53.54                  | 18.258                  | 8.156                              | 36.11         |
| 18                       | Feb 63-Jan 64 | 58.38  | 49.45                  | 14.169                  | 5.513                              | 29.77         | 65.27  | 53.05                  | 16.872                  | 6.851                              | 38.94         |
| 19                       | Jul 64-Jun 65 | 52.93  | 56.82                  | 17.336                  | 7.208                              | 29.24         | 51.79  | 63.28                  | 23.186                  | 10.821                             | 35.45         |
| 20                       | Jul 65-Jun 66 | 57.12  | 50.77                  | 14.520                  | 5.594                              | 28.98         | 51.82  | 62.95                  | 22.179                  | 9.951                              | 34.08         |
| 21                       | Jul 66-Jun 67 | 50.31  | 59.25                  | 18.810                  | 8.046                              | 28.10         | 54.14  | 60.77                  | 20.937                  | 9.366                              | 35.34         |
| 22                       | Jul 67-Jun 68 | 47.77  | 64.72                  | 21.142                  | 9.108                              | 28.33         | 55.25  | 60.86                  | 20.442                  | 8.938                              | 35.93         |
| 23                       | Jul 68-Jun 69 | 59.00  | 50.29                  | 14.571                  | 5.828                              | 31.16         | 56.48  | 58.00                  | 20.330                  | 9.089                              | 35.80         |
| 24                       | Jul 69-Jun 70 | 55.04  | 53.71                  | 16.160                  | 6.508                              | 29.28         | 55.52  | 59.12                  | 19.735                  | 8.540                              | 34.88         |
| 25                       | Jul 70-Jun 71 | 61.09  | 45.16                  | 11.908                  | 4.338                              | 29.30         | 57.51  | 54.28                  | 17.474                  | 7.410                              | 33.38         |
| 27                       | Oct 72-Sep 73 | 54.66  | 55.51                  | 15.246                  | 5.620                              | 28.25         | 56.02  | 56.42                  | 17.122                  | 6.770                              | 31.71         |
| 28                       | Oct 73-Jun 74 | 52.18  | 55.59                  | 14.462                  | 5.125                              | 24.30         | 51.63  | 62.17                  | 19.093                  | 7.576                              | 29.99         |
| 32                       | Jul 77-Jun 78 | 62.69  | 45.09                  | 11.804                  | 4.342                              | 30.34         | 57.59  | 56.55                  | 9.395                   | 2.627                              | 25.96         |
| 38                       | Jan 83-Dec 83 | 61.66  | 44.72                  | 12.004                  | 4.406                              | 29.41         | 61.00  | 50.03                  | 14.592                  | 5.593                              | 32.32         |
| 42                       | Jul 86-Jun 87 | 70.41  | 36.22                  | 8.970                   | 3.120                              | 30.65         | 65.48  | 46.85                  | 14.429                  | 5.819                              | 34.76         |
| 43                       | Jul 87-Jun 88 | 64.43  | 41.36                  | 9.646                   | 3.024                              | 28.26         | 67.96  | 44.20                  | 11.923                  | 4.197                              | 33.51         |
| 45                       | Jul 89-Jun 90 | 71.02  | 31.14                  | 7.009                   | 2.140                              | 26.67         | 68.14  | 44.71                  | 12.091                  | 4.236                              | 33.76         |
| 46                       | Jul 90-Jun 91 | 62.40  | 36.88                  | 9.079                   | 3.255                              | 25.60         | 70.59  | 37.54                  | 9.430                   | 3.241                              | 32.16         |
| 48                       | Jan 92-Dec 92 | 61.80  | 46.67                  | 12.694                  | 4.681                              | 30.53         | 66.58  | 46.22                  | 12.420                  | 4.349                              | 33.76         |
| 50                       | Jul 93-Jun 94 | 63.52  | 41.6                   | 10.195                  | 3.462                              | 28.12         | 74.72  | 34.28                  | 8.498                   | 2.844                              | 32.33         |
| <b>14: West Bengal</b>   |               |  |                        |                         |                                    |               |  |                        |                         |                                    |               |
| 13                       | Sep 57-May 58 | 53.96  | 52.92                  | 15.024                  | 5.860                              | 26.81         | 74.73  | 34.37                  | 10.581                  | 4.521                              | 32.96         |
| 14                       | Jul 58-Jun 59 | 58.34  | 48.31                  | 12.773                  | 4.629                              | 28.06         | 83.60  | 25.41                  | 5.352                   | 1.518                              | 30.46         |
| 15                       | Jul 59-Jun 60 | 56.15  | 50.41                  | 13.590                  | 5.027                              | 27.08         | 86.74  | 26.75                  | 5.700                   | 1.628                              | 33.60         |
| 16                       | Jul 60-Aug 61 | 67.80  | 32.36                  | 7.614                   | 2.469                              | 25.60         | 81.28  | 29.99                  | 6.776                   | 2.076                              | 32.70         |
| 17                       | Sep 61-Jul 62 | 58.63  | 50.20                  | 11.536                  | 3.795                              | 27.68         | 84.19  | 27.35                  | 6.705                   | 2.365                              | 33.18         |
| 18                       | Feb 63-Jan 64 | 52.93  | 55.68                  | 15.401                  | 5.754                              | 26.37         | 83.14  | 25.69                  | 6.735                   | 2.443                              | 31.47         |
| 19                       | Jul 64-Jun 65 | 50.31  | 56.54                  | 15.773                  | 6.086                              | 23.88         | 72.24  | 38.49                  | 11.091                  | 4.231                              | 33.32         |
| 20                       | Jul 65-Jun 66 | 46.76  | 64.38                  | 20.546                  | 8.837                              | 26.30         | 66.05  | 42.52                  | 11.806                  | 4.459                              | 31.88         |
| 21                       | Jul 66-Jun 67 | 45.38  | 67.85                  | 21.386                  | 9.005                              | 25.56         | 70.15  | 37.35                  | 9.895                   | 3.602                              | 31.18         |
| 22                       | Jul 67-Jun 68 | 40.33  | 75.84                  | 26.057                  | 11.580                             | 24.08         | 64.96  | 41.83                  | 11.660                  | 4.452                              | 31.02         |
| 23                       | Jul 68-Jun 69 | 44.25  | 69.63                  | 21.030                  | 8.418                              | 23.13         | 70.46  | 35.12                  | 8.724                   | 3.011                              | 29.67         |
| 24                       | Jul 69-Jun 70 | 49.38  | 60.15                  | 17.467                  | 6.827                              | 25.11         | 77.07  | 32.68                  | 8.090                   | 2.814                              | 32.50         |
| 25                       | Jul 70-Jun 71 | 48.02  | 62.57                  | 19.519                  | 8.053                              | 26.32         | 75.62  | 32.36                  | 8.773                   | 3.304                              | 32.92         |
| 27                       | Oct 72-Sep 73 | 50.95  | 60.51                  | 20.159                  | 9.026                              | 30.64         | 71.75  | 39.16                  | 11.750                  | 4.728                              | 34.40         |
| 28                       | Oct 73-Jun 74 | 48.78  | 63.24                  | 21.399                  | 9.665                              | 30.13         | 68.13  | 39.27                  | 11.739                  | 4.805                              | 32.31         |
| 32                       | Jul 77-Jun 78 | 53.70  | 56.25                  | 17.067                  | 7.016                              | 29.75         | 70.93  | 38.15                  | 10.830                  | 4.165                              | 33.05         |
| 38                       | Jan 83-Dec 83 | 56.59  | 49.21                  | 14.786                  | 6.202                              | 28.83         | 79.79  | 32.30                  | 8.324                   | 3.026                              | 34.42         |
| 42                       | Jul 86-Jun 87 | 64.21  | 34.10                  | 7.723                   | 2.634                              | 24.27         | 87.22  | 30.20                  | 7.510                   | 2.620                              | 37.64         |
| 43                       | Jul 87-Jun 88 | 65.32  | 34.87                  | 7.303                   | 2.142                              | 25.57         | 82.02  | 32.19                  | 7.125                   | 2.077                              | 34.25         |
| 45                       | Jul 89-Jun 90 | 71.71  | 26.19                  | 4.614                   | 1.134                              | 25.25         | 84.76  | 25.93                  | 5.493                   | 1.578                              | 32.58         |
| 46                       | Jul 90-Jun 91 | 65.40  | 39.11                  | 9.520                   | 3.083                              | 27.62         | 89.09  | 23.27                  | 4.878                   | 1.399                              | 33.28         |
| 48                       | Jan 92-Dec 92 | 68.54  | 28.15                  | 5.310                   | 1.417                              | 24.21         | 94.03  | 25.66                  | 6.037                   | 1.939                              | 35.98         |
| 50                       | Jul 93-Jun 94 | 70.45  | 27.27                  | 4.697                   | 1.294                              | 25.41         | 95.28  | 22.45                  | 4.405                   | 1.153                              | 33.84         |

(continued)

## APPENDIX (continued)

| NSS round                     | Survey period | Rural                                 |                  |                   |                           |            | Urban                                 |                  |                   |                           |            |
|-------------------------------|---------------|---------------------------------------|------------------|-------------------|---------------------------|------------|---------------------------------------|------------------|-------------------|---------------------------|------------|
|                               |               | Mean consumption<br>(Rs/person/month) | Head count index | Poverty gap index | Squared poverty gap index | Gini index | Mean consumption<br>(Rs/person/month) | Head count index | Poverty gap index | Squared poverty gap index | Gini index |
| <b>15: Punjab and Haryana</b> |               |                                       |                  |                   |                           |            |                                       |                  |                   |                           |            |
| 13                            | Sep 57-May 58 | 74.74                                 | 33.39            | 9.687             | 3.838                     | 32.21      | 71.80                                 | 39.57            | 11.309            | 4.278                     | 34.06      |
| 14                            | Jul 58-Jun 59 | 81.82                                 | 28.09            | 7.239             | 3.495                     | 36.90      | 76.62                                 | 35.21            | 8.088             | 2.441                     | 32.87      |
| 15                            | Jul 59-Jun 60 | 73.37                                 | 32.79            | 8.530             | 3.079                     | 31.37      | 73.55                                 | 35.51            | 9.136             | 3.172                     | 32.44      |
| 16                            | Jul 60-Aug 61 | 82.06                                 | 32.00            | 7.282             | 2.249                     | 30.16      | 83.71                                 | 26.25            | 7.219             | 3.210                     | 33.83      |
| 17                            | Sep 61-Jul 62 | 83.45                                 | 31.36            | 8.442             | 3.106                     | 35.33      | 70.93                                 | 41.57            | 12.619            | 5.146                     | 36.08      |
| 18                            | Feb 63-Jan 64 | 70.87                                 | 33.92            | 8.989             | 3.297                     | 30.05      | 78.61                                 | 38.99            | 10.610            | 3.873                     | 38.39      |
| 19                            | Jul 64-Jun 65 | 72.10                                 | 36.12            | 9.281             | 3.384                     |            | 71.35                                 | 37.59            | 8.750             | 2.750                     |            |
| 20                            | Jul 65-Jun 66 | 70.43                                 | 38.43            | 10.042            | 3.858                     |            | 65.08                                 | 47.13            | 13.141            | 4.882                     |            |
| 21                            | Jul 66-Jun 67 | 68.03                                 | 38.64            | 9.358             | 3.159                     |            | 65.45                                 | 43.14            | 11.107            | 4.035                     |            |
| 22                            | Jul 67-Jun 68 | 61.31                                 | 44.22            | 12.189            | 4.703                     |            | 65.58                                 | 37.07            | 11.530            | 4.825                     |            |
| 23                            | Jul 68-Jun 69 | 71.40                                 | 32.38            | 8.227             | 2.943                     |            | 68.39                                 | 39.15            | 9.416             | 3.037                     |            |
| 24                            | Jul 69-Jun 70 | 72.30                                 | 35.57            | 9.724             | 3.696                     |            | 73.73                                 | 33.72            | 8.281             | 2.802                     |            |
| 25                            | Jul 70-Jun 71 | 72.89                                 | 31.73            | 7.895             | 2.742                     |            | 80.37                                 | 28.61            | 6.585             | 2.178                     |            |
| 27                            | Oct 72-Sep 73 | 81.14                                 | 25.47            | 5.591             | 1.765                     |            | 82.08                                 | 27.03            | 6.156             | 2.007                     |            |
| 28                            | Oct 73-Jun 74 | 69.13                                 | 35.08            | 8.556             | 2.851                     |            | 71.55                                 | 36.40            | 7.849             | 2.280                     |            |
| 32                            | Jul 77-Jun 78 | 81.90                                 | 25.46            | 5.950             | 2.010                     |            | 82.28                                 | 32.11            | 7.762             | 2.792                     |            |
| 38                            | Jan 83-Dec 83 | 82.89                                 | 21.52            | 4.193             | 1.239                     |            | 87.51                                 | 25.29            | 5.615             | 1.815                     |            |
| 42                            | Jul 86-Jun 87 | 85.39                                 | 22.96            | 4.658             | 1.326                     |            | 89.80                                 | 16.71            | 2.785             | 0.727                     |            |
| 43                            | Jul 87-Jun 88 | 85.87                                 | 20.00            | 3.798             | 1.135                     |            | 86.78                                 | 19.25            | 3.620             | 0.945                     |            |
| 45                            | Jul 89-Jun 90 | 82.18                                 | 14.16            | 2.755             | 0.820                     |            | 96.74                                 | 15.91            | 2.680             | 0.620                     |            |
| 46                            | Jul 90-Jun 91 | 82.17                                 | 18.55            | 3.413             | 0.943                     |            | 92.57                                 | 13.44            | 2.452             | 0.631                     |            |
| 48                            | Jan 92-Dec 92 | 88.41                                 | 18.14            | 3.474             | 0.987                     |            | 87.31                                 | 16.02            | 2.844             | 0.709                     |            |
| 50                            | Jul 93-Jun 94 | 79.23                                 | 25.23            | 5.172             | 1.608                     |            | 100.34                                | 11.42            | 1.720             | 0.404                     |            |

Note: In the tables in this appendix, mean consumption is expressed as Rs at October 1973-June 1974 all-India rural and urban prices. All poverty measures and Gini indexes are expressed as percentages.



**REFERENCES**

- Bhattacharya, S. S., A. B. Roy Choudhury, and P. D. Joshi. 1980. Regional consumer price indices based on NSS household expenditure data. *Sarvekshana* 3: 107–121.
- Chen, S., G. Datt, and M. Ravallion. 1994. Is poverty increasing in the developing world? *Review of Income and Wealth* 40 (4): 359–376.
- Datt, G. 1997. Poverty in India 1951–1994: Trends and decompositions. World Bank and IFPRI, Washington, D.C. Photocopied.
- Datt, G., and M. Ravallion. 1992. Growth and redistribution components of changes in poverty measures: A decomposition with applications to Brazil and India in the 1980s. *Journal of Development Economics* 38 (2): 275–295.
- Datt, G., and M. Ravallion. 1996. Macroeconomic crises and poverty monitoring: A case study for India. Food Consumption and Nutrition Division Discussion Paper No. 20. International Food Policy Research Institute, Washington, D.C.
- Datt, G., and M. Ravallion. 1997. Why have some states performed better than others at reducing rural poverty? Food Consumption and Nutrition Division Discussion Paper No. 26. International Food Policy Research Institute, Washington, D.C.
- Foster, J., J. Greer, and E. Thorbecke. 1984. A class of decomposable poverty measures. *Econometrica* 52 (3): 761–765.
- India. 1979. *Report of the task force on projections of minimum needs and effective consumption*. New Delhi: Planning Commission.

- India. 1993a. *Final population totals: Brief analysis of primary census abstract, census of India 1991, series 1, paper 2 of 1992*. New Delhi: Registrar General and the Census Commissioner of India.
- India. 1993b. *Report of the expert group on estimation of proportion and number of poor*. New Delhi: Planning Commission.
- Özler, B., G. Datt, and M. Ravallion. 1996. A database on poverty and growth in India. Policy Research Department, World Bank. Washington, D.C. Photocopied.
- Ravallion, M. 1994. *Poverty comparisons. Fundamentals in pure and applied economics*, Vol. 56. Chur, Switzerland: Harwood Academic Press.
- Ravallion, M., and S. Chen. 1996. *What can new survey data tell us about recent changes in distribution and poverty?* Policy Research Working Paper 1694. Washington, D.C.: World Bank.
- Ravallion, M., and G. Datt. 1995. *Growth and poverty in India*. Policy Research Working Paper 1405. Washington, D.C.: World Bank.
- Ravallion, M., and G. Datt. 1996a. How important to India's poor is the sectoral composition of growth? *World Bank Economic Review* 10 (1): 1–26.
- Ravallion, M., and G. Datt. 1996b. India's checkered history in fight against poverty: Are there lessons for the future? *Economic and Political Weekly* 31: 2479-85.
- Ravallion, M., G. Datt, and D. van de Walle. 1991. Quantifying absolute poverty in the developing world. *Review of Income and Wealth* 37 (4): 345–361.

World Bank. 1990. *World development report 1990: Poverty*. New York: Oxford University Press.

World Bank. 1993. *World development report 1993: Investing in health*. New York: Oxford University Press.