

Trends, Characteristics and inter-face of Primary and Secondary Poverty in Urban India

D Subrahmanyam*

Visiting Research Fellow

Korea Research Institute for Human Settlements

1. Introduction

For majority of the developing countries, including India, poverty is a major development problem. Poverty is a system of wheels within wheels in the sense there are poor people and poor people. That is, poor people are several types; some are poorer than the others are and there are those who border the poverty line just below minimum subsistence level. The ultra poor lie far below the poverty line; and still others are completely destitute. They are disabled and incapable of earning a living on their own, irrespective of the nature and volume of enablement (inducement) they might receive. Merely, they have to be taken care of by the government and society.

As nature of poverty vary from country to country, it is very important

to understand the characteristics of poverty in India before looking at it analytically. The salience of poverty in India relates to poverty being a syndrome, equilibrium of low productivity and a stranglehold of pattern of constraints to development. Poverty represents an institutional manifestation comprising of assetlessness, seasonal unemployment & chronic under-employment, low wages & incomes, nutritional intake lower than individual physiological requirements for extended periods of time, proneness to disease, illiteracy, low social status and political powerlessness. Urban poverty is a syndrome rather than a specific and single identifiable socio-economic characteristic, hence any efforts to tackle poverty should be multi-dimensional and so should be multi-pronged policy orientation.

Poverty definitions in many countries usually refer to either deficiency or inadequacy. The former refers to 'absolute' and later refers to 'relative'

* Senior Project Appraisal Officer, Housing & Urban Development Corporation (HUDCO), New Delhi, India. He is currently on deputation to KRIHS.

poverty. In practice, the measurement of poverty line in India is anchored in a nutritional norm and defined as signifying that level of income percapita which will be just suffice to satisfy (i.e., pay for) the nutritional norm, which is widely referred to as 'Primary Poverty'.

However, in the last two decades, the link between the nutritional norm and the poverty line has been seen to become rather tenuous. More precisely, an invariant nutritional norm (based on fixed requirements) is seen to be lacking in both economic relevance and policy realism. Resources in real terms, which were enough to provide a minimum nutrition ten years ago are not adequate to do so today because the consumption pattern has changed, especially of the poor. This fact has rendered time-wise comparison of absolute fraught with all kinds of limitations, both data-based and analysis-and-interpretation-oriented. Another factor which has had the effect of delimiting the importance and policy usefulness of absolute poverty, which comprises unfulfilled non-nutritional basic needs like housing, health, and education. Though percapita income, percapita consumption and the relative price level faced by the poor appear to be satisfactory in their role as explanators of urban poverty over time, time-series comparisons of poverty bristle with problems relating to:

- a) Changes in the prices of commodities entering the consumption basket of the poor vis-a-vis other commodities and the impact of changing regional development levels on the prices of commodities;
- b) Changes in the extent of welfare services covering the needs of the poor as well as changes in the absorptive capacity of the poor;
- c) Changes in the consumption pattern of the poor, especially in the urban areas and
- d) Changes in the levels of secondary poverty.

Hence it is appropriate to look at the 'relative' poverty, which is widely referred to as 'Secondary Poverty' and is defined as consisting of inadequate shelter, sanitation, water supply, health, educational facilities etc.

In the above backdrop and using Indian data on poverty, this paper examines the implications of poverty in terms of its forms: primary and secondary poverty and brings out the synergetic relationship between the reduction of primary and secondary poverty. The paper also demonstrates the influence that the alleviation of secondary poverty exerts on the alleviation of the primary poverty and it pinpoints the macro-level policy implications and suggests envisaged strategy for poverty alleviation applicable to the developing world. In

this paper the other elements of secondary poverty, especially health and education could not be covered owing to the paucity of data.

2. Primary Poverty

1) Extent of Poverty, Per capita income, and the Cost of living of the Poor

Minhas (1987) estimates number of

poor as 313 millions and head-count ratio as 43.2 for the year 1983; while the Expert Group constituted by the Government of India (in 1993) estimates 302 million and 37.96 respectively for 1987-88. For 1985, World Bank estimates show that the India's poor numbered 420 million (including 250 million extremely poor people) and head-count ratio is 55. It also shows that India has the dubious distinction of having the World's largest number of

Table 1. The Number of Poor, Head-Count Ratio, Per Capita Income and the Relative cost of Living of The Poor

Author/Source and year	Extent of poverty	Headcount ratio	Per capita income	Imputed Per capita of poor	Cost of living of poor
MINHAS (1969)					
1957-58	238	58.00	1223.7	604.5	0.97
1960-61	235	54.00	1350.3	662.1	1.00
1967-68	247	48.00	1413.4	693.7	1.17
1973-74	232	39.00	1482.9	728.9	1.13
1980-81	186	27.00	1630.1	802.1	1.02
PLANNING COMMISSION					
1973-74	292	51.50	1482.9	728.9	1.13
1977-78	307	48.30	1635.2	802.7	1.09
1983-84	271	37.40	1787.2	879.6	1.00
1987-88	238	29.90	1903.3	937.9	0.93
MINHAS (1987)					
1970-71	281	52.00	1519.6	745.7	1.07
1972-73	311	54.90	1446	710.8	1.08
1973-74	314	54.90	1482.9	728.9	1.13
1977-78	314	49.50	1635.2	802.7	1.09
1983	313	43.20	1213.0	847.5	1.00
EXPERT GROUP (1993)					
1973-74	311	53.14	1482.9	728.9	1.13
1977-78	321	50.13	1635.2	802.7	1.09
1983-84	316	43.28	1787.2	879.6	1.00
1987-88	302	37.96	1903.3	937.9	0.93

poor people. In regard to the nexus between percapita income growth and poverty, the Indian data (as in Table 1) demonstrates an inverse relationship between poverty and percapita income of the poor and direct relationship between poverty and the relative cost of living of the poor.

2) Poverty vis-a-vis income related variables

The estimates of the Planning Commission of the Government of India are in conformity with the observed trends of income and consumption (both, percapita), and with developments in the fields of health and education. The ratio of the monthly percapita total consumer expenditure (MPCTE) to the poverty line consumption (income) requirements had steadily increased both for rural and urban areas. The decadal proportionate increase of the ratio was 12.1 percent in the urban areas.

The decline in poverty according the Planning Commission during the decade (1977-78 and 1987-88) was of the order of 22 per cent. State-wise data on the percentage reduction in poverty during the decade on one hand, and literacy rate in 1991, life expectancy in 1986 and infant mortality rate in 1988, on the other indicate a high degree of correlation among themselves either positive or negative, as appropriate.

Figure 1 represents the same data graphically.

The highs and lows match with each other in regard to poverty reduction, literacy, and life expectancy and reflect inversely in the case of infant mortality rates. The link between the improvements in education and health on the one hand and poverty on the other is that such improvements could not have taken place without an improvement in food-calorie in-take and nutrition. Any improvements in the later could not but reduce poverty, because a major, if not the sole, consideration in setting a poverty line is that a certain minimum calorie intake percapita should be available and should be maintained.

The associated multiple regression obtained clearly indicate the close covariance of these four variables, with the literacy rate, life expectancy, and infant mortality as independent variables, and reduction in poverty as the dependent variable. The designation of independent and dependent variables is only notional as no specific causal relationship among these variables per se is hypothesized. The adjusted R^2 is 0.6993.



Figure 1. Administrative Map of India indicating States and Union Territories

3) Cross-sectional Analysis of Rural and Urban Differentials

This section probes a state-wise cross-sectional analysis of poverty differential in the rural and urban areas. Figure 1 showing the administrative map of India indicates the spatial context of the investigation of this paper. The relationship of state level poverty on the one hand and percapita income and monthly percapita total consumer expenditures on the other. It is hypothesized that percapita income and expenditures determine the head-count ratio of poverty reasonably adequately. There are doubtless other factors, which influence poverty such as attitudinal and institutional differences obtaining among states as well as in their natural endowments and physical equipment. It is assumed, however, that these differentials get reflected adequately in percapita income and expenditure patterns.

A striking feature with regard to the urban head-count ratio is that it varies across states more closely with percapita state expenditure than with monthly percapita total consumer expenditures. Perhaps, it is true that the percapita state expenditures, a proportion of the expenditure at any rate, do create amenities, which tend to alleviate harshness of poverty. And that in the urban areas the services rendered by the government are less inaccessible

to the population, including the poor, than in the rural areas. Though all three variables seem to be related in a large measure to poverty relevance in a theoretically postulated manner, it is monthly percapita total consumer expenditures and percapita state expenditure that have become the dominant influences. In order to bear out the above observations, the relationship through multiple regression was obtained. The multiple regression is linear, and its general form is as follows:

Y = the dependant variables, Poverty Ratio(rural, urban, and total)

X_1 = Percapita Income (SDP)

X_2 = Percapita State Expenditure(SEx)

X_3 = Monthly percapita total consumer expenditure(MPCTE)

} independent variables

The regression results shown that the regression coefficient of the independent variable, percapita income has a wrong sign in the regressions of the rural poverty ratio and the total poverty ratio, but in both cases it is not statistically significant. The regression coefficient of the independent variable, monthly percapita total consumer expenditure, has a wrong sign in the regression on urban poverty, but again it is not statistically significant. In the

case of the independent variable state expenditure, though its regression coefficient has the right sign in the regressions on rural poverty and total poverty ratios, it is not statistically significant.

In these cases, a possible reason for the non-performance of percapita income and percapita state expenditure is that the values of these two variables relate to the entire population (either rural or urban), and not specifically to the low-end income groups comprising those in poverty. The data on these variables for the groups are not available. Monthly percapita total consumer expenditure (the regression coefficient) is statistically significant (at less than one percent) in explaining the variations of both the rural and total poverty levels. The regression coefficient of percapita state expenditure is statistically significant (at less than 3 percent level) in explaining the state-wise differentials in urban poverty.

The analysis of variance for the multiple regressions gives an over-all F-ratio of 19.891, 8.006 and 18.121 for the rural, urban and total poverty ratios, respectively. The R^2 adjusted for the number of independent variables explains 80.19 percent, 60.02 percent, and 78.58 percent of the variability of the dependent variable for the rural, urban, and total poverty ratios, respectively. The standard errors of estimation for the full regression are 5.35, 4.23, and

4.88 in the three multiple regressions on rural, urban, and total poverty. They are, in each case, the square root of the mean squared error and measure the unexplained variability in the dependent variable.

4) Poverty Index and Urban Poverty : All India Time Series Analysis

The purpose of time series analysis is threefold. One, to look at the intensity of poverty (using Sen's Index) in addition to the number of poor and their head-count ratio. Two, to focus solely on urban poverty in relation to its determining variables. Three, to compare the result of the time-series analysis made here with the results of the cross-sectional analysis made in the earlier section. The data on the head-count ratio (in urban areas) and the corresponding Sen's Index for 21 points in time (years) during the period 1954-55 and 1988-89 are given in Table 2.

It may be seen that three variables, viz., the head-count ratio, Sen's Index, and the relative price ratio of the poor exhibit an inverted 'U' pattern. That is to say they rise initially to a plateau which is maintained roughly for the decade of 1960's, and they start falling around 1973-74. Percapita real income and the monthly percapita consumption expenditure of the bottom 50 per cent

Table 2. Time-Series Data on Urban Poverty and Its Determinants (1954-55 to 1988-89): All India

Year	Measures of poverty		Determining variables		
	Head count ratio	Sen's Index	Per capita real income in 1980-81	Relative price ratio of poor	Monthly per capita of bottom 50%(1960)
(1)	(2)	(3)	(4)	(5)	(6)
1954-55	48.98	0.227	1221	0.97	14.74
1956-57	56.58	0.271	1271	0.95	14.60
1957-58	51.72	0.236	1224	0.97	14.42
1958-59	51.08	0.217	1289	0.98	15.41
1959-60	55.18	0.239	1286	1.01	14.44
1960-61	49.87	0.210	1350	1.00	15.45
1961-62	50.94	0.216	1355	0.99	15.44
1963-64	51.61	0.214	1384	1.02	15.30
1964-65	53.60	0.224	1455	1.13	15.05
1965-66	56.40	0.241	1355	1.14	14.50
1966-67	55.51	0.235	1335	1.22	14.80
1967-68	54.59	0.231	1413	1.17	14.78
1968-69	52.35	0.218	1415	1.09	15.32
1969-70	51.05	0.209	1478	1.08	15.72
1970-71	48.15	0.193	1520	1.07	16.14
1972-73	47.62	0.186	1446	1.08	16.47
1973-74	48.88	0.181	1483	1.13	16.56
1977-78	44.96	0.174	1635	1.09	16.91
1986-87	37.01	0.136	1866	0.92	18.98
1987-88	37.74	0.131	1903	0.93	18.84
1988-89	36.15	0.126	2078	0.95	19.16

Source : Col.(2), Col.(3), and Col.(6) Pradip Maiti and Manabendu Chattopadyay, "Trends in Level of Living in Urban India", Economic and Political Weekly, (1993), Vol.XXVIII, Nos.46 and 47, 13-20 November.2.4.5

show a rising trend, though niggardly in its slope and punctuated by random slide-downs. Two sets of two multiple regression each are obtained and the results four multiple regressions of Urban Poverty on its determining variables are given below:

a) Dependent variable:

head-count ratio of the urban poor
Independent variables: Percapita real income and the relative price level of 'the urban poor.

b) Dependent variable:

head-count ratio of the urban poor
Independent variables: monthly percapita consumption expenditure of the bottom 50 percent; and the relative price level of the poor.

c) Dependent variable:

Sen's Index of urban poverty
Independent variables: percapita real income and the relative price level of the poor.

d) Dependent variable:

Sen's Index of urban poverty
Independent variables: monthly percapita consumption expenditure of the bottom 50 percent of the urban poor and the relative price level of the poor.

The observed and fitted values of the four regressions showed a close correspondence between the estimated and actual values, which is indicated by high value of adjusted R^2 in all four regressions. In somewhat greater detail,

regressions B and D seem superior to regressions A and C. The monthly percapita consumption expenditure seems to be a better explanator of the changing poverty profile than percapita income. Indeed this is so expected in economic theory. The consumption expenditure of the poor is not merely determined by percapita income. It depends also on several kinds of subsidies and services, which the poor receive in addition to their income as conventionally measured. Moreover, income (per capita) differentials over time tend to depend on weather, law and order, gestation lags of development projects and other autonomous factors like natural resource endowments. However, consumption tends to remain stable than income as it is financed from sources like capital consumption (i.e. loans) government subventions, community charity etc. Since a reduction in poverty depends principally on increased consumption, the relationship between the two is immediate and obvious, though inverse.

The above observation is also borne out by the fact that the regression coefficients of monthly percapita total consumer expenditure in Regressions B and D have higher 't' values (-15.2521 and -17.937) than the percapita real income regression coefficient of Regressions values of A and C (-9.4051 and -9.5317). The same is true of

values of adjusted R^2 . The R^2 values for B and D are 0.9424 and 0.947; and for A and C are 0.86434 and 0.8357. It should also be noted that the DW-statistic deviates from 2 which is the desired value more in the case of regressions involving monthly percapita total consumer expenditure than in the case of regressions involving percapita real income. In the case of the former, DW-statistic is somewhat larger than 2.0 indicating a suspicion of negative first order serial correlation of the regression residuals.

The independent variable, viz., the relative price level turns out to be a much better explainer of the variations in the head-count ratio than those in the Sen's Index. This may be because relative price changes are not only taken into account by the poor in determining the optimum distribution of the sources of funding consumption, (mainly through decisions relating to the extent of capital consumption to under-write current consumption) but also influence personal income distribution of the poor groups, which is taken into account in calculating the Sen's Index.

3. Secondary Poverty

As mentioned earlier, secondary poverty is defined as consisting of inadequate shelter, inadequate sanitation facilities, and inadequate water supply.

In the subsequent analysis, the other elements of secondary poverty (especially health and education) could not be covered owing to the paucity of data.

1) Housing shortage

The economy-wide housing shortage for 1981 was 23.27 million units (16.29 million in the rural area and 6.98 in the urban areas) and for 1991 were 18.05 million units (13.28 million in the rural areas and 4.77 in the urban areas). These estimates were for the country as a whole. As a proportion of the number of households in the rural and urban areas as well as the economy as a whole the housing shortage had decreased, in some states substantially, from 1981 to 1991, as can be seen from the Figure 2.

Three directly measurable independent variables are used in explaining the changes in state-wise housing stock in the rural and urban areas separately as well as the two combined together in a total. These independent variables are the number of households; percapita state gross domestic product; and value added in the construction sector.

The symbols used in the multiple regression are:

Y_r = rural housing stock,

Y_u = urban housing stock,

Y_T = total housing stock,

X_1 = the number of households,

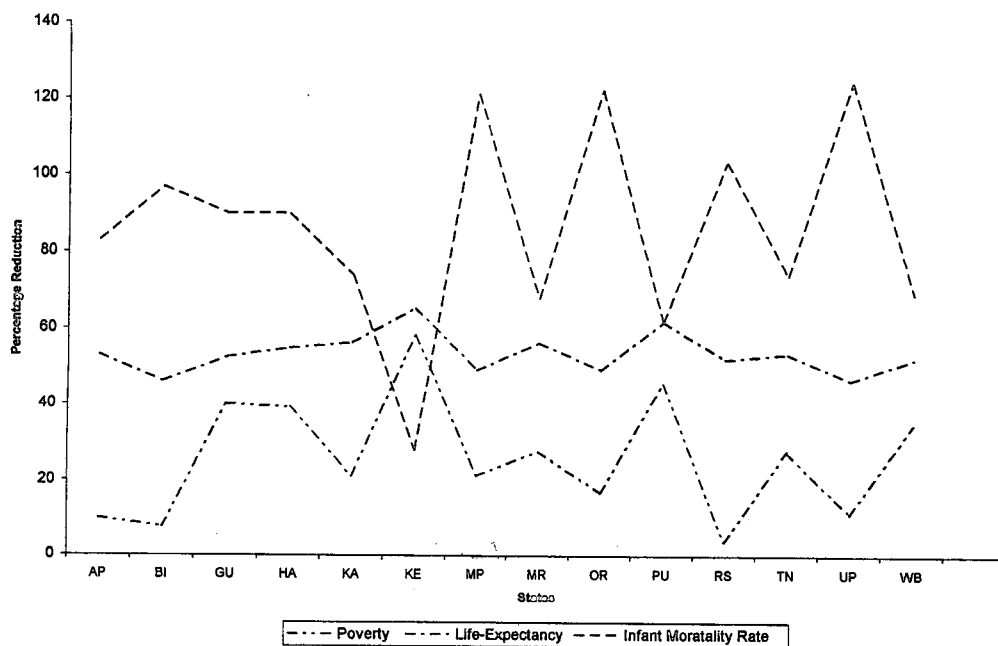


Figure 2. Percentage Reduction in Poverty, Literacy, Life-expectancy, and Infant Mortality Rate

X_2 = percapita state gross domestic product,

X_3 = value added in the construction sector.

In all the three regression equations relating to the rural, urban, and total housing stock, the explanatory variable, which is significant in terms of explaining the variability of housing stock is the number of households. Households represent the demand for housing while the housing stock stands for the supply of housing. It, therefore, seems to be a case of demand inducing the supply of houses. The variables of percapita income and value added in

construction do not seem to play much of an explanatory role. The reason for their failure is perhaps that they are both flow variables and cannot, therefore, satisfactorily explain variations in an asset (stock) variable like housing, especially in a cross-sectional analysis such as the present one. In a time-series analysis, the stock (housing) and flow variables (income etc.) could be better correlated owing to the fact that increases in flows could contribute to the additions in stock. However, data on a time-series basis are hard to come by, as far as these variables are concerned. However, the R^2 (adjusted) in all three cases is very

high (and seems capable of explaining over 95 percent variation in the dependent variable. It may also be noted that the DW statistic has a value close to 2, and that there is, therefore, no first order serial correlation of the regression residuals.

2) Housing shortage in the urban slums

The urban slum housing shortage may be regarded as the sum of the two components. State-wise Component-I relates to varying percentage of the total urban housing shortage, the variations in the percentage for any one year originating from the distribution of

Table 3. Urban Slum Housing Shortage: 1981 and 1991

Name of the State	Urban Slum Housing Shortage 1981			Urban Slum Housing Shortage 1991			Proportion of Component II in total urban slum housing	
	Component I	Component II	Total	Component I	Component II	Total	1981	1991
							(8)	(9)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Andhra Pradesh (AP)	242206	117827	360033	185511	227106	412617	0.327	0.55
Assam (AS)	N/A	N/A	N/A	37556	53151	90707	N/A	0.586
Bihar (BI)	151128	158451	309579	82045	161269	243314	0.512	0.663
Gujarat (GU)	45686	32949	78635	62583	80267	142850	0.419	0.562
Haryana (HA)	11496	5227	16723	13074	23555	36629	0.313	0.643
Himachal Pradesh (HP)	2733	1750	4483	1732	2248	3980	0.39	0.565
Jammu and Kashmir(J&K)	30101	3932	34033	N/A	N/A	N/A	0.116	N/A
Karnataka (KA)	37284	13336	50620	70161	113694	183855	0.263	0.618
Kerala (KE)	28628	10960	39588	46161	10795	56956	0.277	0.190
Madhya Pradesh(MP)	43821	34539	78360	38033	116350	154383	0.441	0.754
Maharashtra (MR)	174019	54306	228325	81722	138031	219753	0.238	0.628
Orissa (OR)	28591	9368	37959	69094	53622	122716	0.247	0.437
Punjab (PU)	37704	2549	40253	25892	14128	40020	0.063	0.353
Rajasthan (RS)	40110	14378	54488	31189	46455	77644	0.264	0.598
Tamilnadu(TN)	183372	210673	394045	165996	401356	567352	0.535	0.707
Uttarpradesh (UP)	108631	71242	179873	129666	224004	353670	0.396	0.633
West Bengal (WB)	111550	27238	138788	107052	56492	163544	0.196	0.345
Delhi	88663	63741	152404	93392	181345	274737	0.418	0.660
India	1365723	832466	2198189	1240859	1903868	3144727	0.379	0.605

Source: Census of India, National Building Organization and National Sample Survey Organization

the houseless households across the States. State-wise, Component-II is based on the dilapidated houses in the urban slums.

The method of estimating the urban slum housing shortage is explained below.

Let

USHsge = urban slum housing shortage

C-I = component-I of the urban slum housing shortage

C-II = component-II of the urban slum housing shortage

HLHH = houseless households

USP = urban slum population

UP = urban population

UHH = urban households

UHHk = urban households living in dilapidated(non-serviceable) houses

Upk = urban population living in dilapidated houses

USPk = an slum population living in dilapidated houses

HHZ = household size

UHSge = urban housing shortage

Assumption-1: $Upk / UP = UHHk / UHH$

Assumption-2: All the houseless households in the urban areas are found only in the urban slums.

Assumption-3: Size of Households in urban areas is same

in Dilapidated and non-Dilapidated (serviceable) houses.

Assumption-4: Housing shortage is equally distributed in slums and non-slum areas.

$$USHsge = C-I + C-II$$

$$C-I = [(UHSge - HLHH) USP/UP] + HLHH$$

$$C-II = [(UPk / UP (USP))] [USPk/ USP - Upk/UP]1/HHZ$$

Components I and II, and their totals for 1981 and 1991 are given in table 3. The urban slum housing shortage, which was 2.20 million in 1981 increased to 3.14 millions in 1991. This 43 percent decadal increase contrasts, with the decadal decrease of 13 percent of the economy-wide housing shortage, from 23.3 million in 1981 to 18.495 million in 1991. It also contrasts, even more sharply, with the decadal decrease of urban housing shortage in the country as a whole by about 46 per cent from 6.98 million in 1981 to 4.774 million in 1991.

The proportion of component-II (i.e. the component relating to dilapidated houses in the urban slums) rose from 38 per cent in 1981 to 61 per cent in 1991, leading obviously to the conclusion that dilapidated houses characterize the housing profile of the urban slums. The proportion of

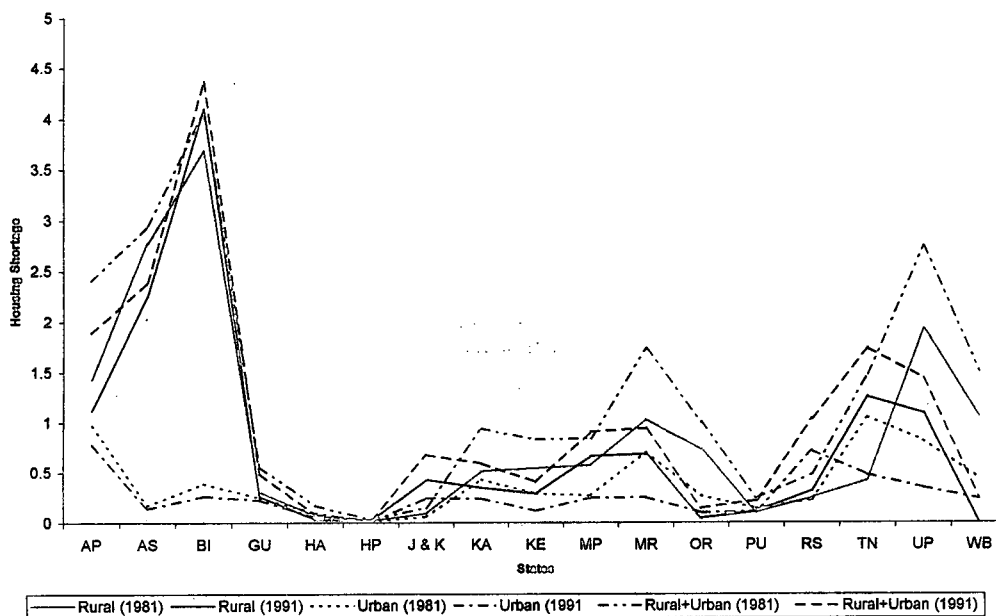


Figure 3. Housing Shortage in India : Rural, Rural, Urban and Rural+Urban 1981 and 1991

component-II in the total urban slum-housing shortage state-wise was calculated, may be seen from Table 3. While the increase in the proportion of dilapidated houses was substantial in all states from 1981 to 1991, except Kerala, even a progressive state like the Punjab had an increase in the proportion of Component-II from 0.06 in 1981 to 0.35 in 1991, an almost six hundred percent increase.

Though the urban slum housing shortage seemed to have increased in almost all the states and in the country, the data on urban slum housing shortage when standardized for the growth in the urban slum population

tell a different story as a whole from 1981 to 1991, in some cases rather substantially. That is to say, the percapita housing shortage in the urban slums has gone down everywhere during the decade of 1981-91.

The implication of the phenomenon being that the urban slum housing stock had increased faster than the urban slum population, however, the increase in the housing stock was increasingly in the direction of a qualitative decrease of housing standards. The data on percapita housing shortage in urban areas for 1981 and 1991 are given in Table 4.

The percapita urban slum housing

shortage is a measure of the absolute housing shortage in the urban slums. When compared with the per capita housing shortage in the urban areas as a whole, it becomes a measure of the relative housing shortage in the urban areas as a whole, then it becomes a measure of the relative housing shortage in the urban slums. For the purpose of obtaining the relative housing shortage in the urban slums,

data on the per capita housing shortage in the urban areas as a whole in each state are obtained as a first step. With the help of these data the percentages of absolute and relative deprivation of housing for the urban slums are obtained for the years 1981 and 1991. They are presented in Table 4. It may be noted from this data that, while the absolute deprivation of housing had somewhat been remedied from 1981 to

Table 4. Per capita Housing Shortage and Deprivation of housing facilities: 1981-91

Name of the State	Per capita Housing Shortage in urban areas 1981			Deprivation of Housing Facilities-1981 (in %)				Per capita Housing Shortage in urban areas 1991			Deprivation of Housing Facilities-1991 (in %)			
	Housing Shortage in urban areas (million)	Urban population (million)	Per capita housing shortage in urban areas	Per capita Housing adequacy in Urban areas	Per capita Housing adequacy of Urban Poor	Per capita absolute deprivation of housing of urban poor	Per capita relative deprivation of housing of urban poor	Housing Shortage in urban areas (million)	Urban population (million)	Per capita Housing Shortage in urban areas	Per capita Housing adequacy in Urban areas	Per capita Housing adequacy of Urban Poor	Per capita absolute deprivation of housing of urban poor	Per capita relative deprivation of housing of urban poor
AP	0.97	12.49	0.08	92	87	13	5	0.771	17.89	0.04	96	89	11	7
AS	0.17	2.05	0.08	92	N/A	N/A	N/A	0.138	2.49	0.06	94	87	13	7
BI	0.39	8.72	0.04	96	91	9	5	0.267	11.35	0.02	98	93	7	5
GU	0.25	10.6	0.02	98	95	5	3	0.226	14.25	0.02	98	95	5	3
HA	0.1	2.83	0.04	96	93	7	3	0.051	4.05	0.01	99	96	4	3
HP	0.01	0.33	0.03	97	95	5	2	0.005	0.45	0.01	99	96	4	3
J&K	0.06	1.26	0.05	95	95	5	0	N/A	1.84	N/A	N/A	N/A	N/A	N/A
KA	0.43	10.73	0.04	96	91	9	5	0.246	13.91	0.02	98	95	5	3
KE	0.29	4.77	0.06	94	90	10	4	0.242	7.68	0.03	97	96	4	1
MP	0.27	10.59	0.03	97	93	7	4	0.116	15.34	0.01	99	96	4	3
MR	0.7	21.99	0.03	97	95	5	2	0.247	30.54	0.01	99	96	4	3
OR	0.27	3.11	0.09	91	86	14	5	0.254	4.23	0.06	94	89	11	5
PU	0.14	4.65	0.03	97	97	3	0	0.099	5.99	0.02	98	97	3	1
RS	0.23	7.21	0.03	97	95	5	2	0.109	10.07	0.01	99	97	3	2
TN	1.05	15.95	0.07	93	85	15	8	0.713	19.08	0.04	96	87	13	9
UP	0.82	19.9	0.04	96	93	7	3	0.476	27.61	0.02	98	95	5	3
WB	0.44	14.45	0.03	97	95	5	2	0.346	18.71	0.02	98	97	3	1

Source: Calculated based on the data from Census of India and National Building Organization

1991, the relative deprivation of housing of the urban poor has become exacerbated during the 1981-91.

In other words, remedial measures to ease housing shortage have had a greater degree of success insofar as the urban non-poor is concerned than in the case of the urban poor. The relative housing situation of the urban poor had become worse during the decade. This was true of the majority of states in India. Explanators of the urban slum

housing stock, it may be hypothesized can be found in

- a) the real percapita expenditure of the State Governments;
- b) percapita state gross domestic product; and
- c) value added in the construction sectors.

Data on these four independent variables and dependent variables, urban slum housing stock are given in

Table 5. Urban Slum Housing Stock and Its Determinants 1981 and 1991

States	Urban Slum Housing Stock and Its Determinants 1981					Urban Slum Housing Stock and Its Determinants 1991				
	Urban Slum Housing Stock (millions)	Urban Slum house-holds (millions)	Real per-capita state GDP (Rs.)	Real value added in construction (Rs. millions)	Real value added in construction (Rs. millions)	Urban Slum Housing Stock (millions)	Urban Slum house-holds (millions)	Real per-capita state GDP (Rs.)	Real value added in construction (Rs. millions)	Real value added in construction (Rs. millions)
AP	0.276	0.672	247.9	1543	4149.6	0.42	0.83	505.74	1917	4714.9
AS	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BI	0.28	0.59	161.3	1041	3483	0.35	0.59	356.08	1224	5299.8
GU	0.21	0.29	329.94	2236	3819.4	0.46	0.6	699.89	2880	4671.6
HA	0.03	0.05	409	2647	1234.7	0.14	0.18	755.38	3429	1267.4
HP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
J&K	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
KA	0.06	0.11	293.56	1774	3312.9	0.45	0.63	576.85	2265	3890
KE	0.04	0.08	305.93	1624	2750.3	0.2	0.26	594.39	1690	2898.4
MP	0.13	0.21	222.74	1183	3293	0.5	0.65	447.71	1756	3492.7
MR	0.64	0.87	365.64	26668	10440.1	1.05	1.27	702.09	3295	13953.1
OR	0.02	0.06	242.82	1335	1951.9	0.1	0.23	489.54	1468	2825.1
PU	0.19	0.23	451.96	2977	2268.8	0.23	0.27	943.52	3906	2723.1
RS	0.14	0.19	264.93	1373	2471.5	0.35	0.43	539.24	1819	3498.8
TN	0.2	0.59	267.93	1677	4310.7	0.37	0.94	594.83	2324	4292.4
UP	0.29	0.47	206.41	1424	7026.7	0.83	1.18	428.53	1728	7621.5
WB	0.5	0.64	230.66	1725	4456.5	0.88	1.04	430.9	2175	5510.5

Source: Calculated based on the data from Census of India, Central Statistical Organization and National Building Organization

Table 5.

The data on slum housing stock are obtained as the urban slum households minus urban slum housing shortage. The multiple regression obtained for 1981 and 1991

respectively. The independent variables used are:

X_1 = urban slum households

X_2 = real percapita expenditure of state governments

X_3 = percapita state gross domestic product

X_4 = value added in the construction sector.

Three sets of multiple regression are calculated

- a) using only two independent variables, X_1 and X_2 ,
- b) using only three independent variables, X_1 , X_2 , and X_3 and
- c) using all four independent variables, X_1 , X_2 , X_3 , and X_4 .

The adjusted R^2 in all cases is over 0.8 and seems capable of explaining over 80 percent of the variation in the dependent variable. The DW statistic is between 1.5 and 2.0 indicating absence of first order serial correlation of the regression residuals.

- 3) Inadequacy of Sanitation Facilities, Drinking Water Facilities in Urban Slums
Secondary poverty of the urban

slums was defined as a composite of three elements,

viz., (i) housing shortage; (ii) deprivation of sanitary facilities and (iii) deprivation of safe

drinking water. The data are presented in Table 6.

The same conclusion can be derived from these data as in the case of the housing situation of the urban poor. While the percentage of absolute deprivation remained same from 1981 to 1991, the percentage of relative deprivation of the urban poor had gone up from 1981 to 1991. This was true of all the states without exception. Apparently, sanitation development programs benefited the urban non-poor more than the urban poor.

The same kind of an exercise was performed in the matter of assessing the condition of the urban poor in regard to safe-drinking water. Data regarding access to tap water only are used as a proxy for data on the access of safe drinking water for the urban poor, from all sources. Moreover, the same set of data on the access of the urban poor to safe drinking water (tap water only) was used in obtaining the absolute and relative poverty data for 1981 and 1991. It can be seen from the Table 7 and that the same conclusion applies to the safe-drinking water element of secondary poverty as in the case of the other two elements viz., housing and sanitation.

Table 6. Access to Sanitation facilities: 1981-91

State	Access to Sanitation Facilities in 1981 (%)				Access to Sanitation Facilities in 1991 (%)			
	Urban Households having Access to Sanitation facilities	Bottom 40 % of Urban households having access to Sanitation facilities	Absolute deprivation of Urban households having access to Sanitation facilities	Relative Deprivation of Urban households having access to Sanitation facilities	Urban Households having Access to Sanitation facilities	Bottom 40 % of Urban households having access to Sanitation facilities	Absolute deprivation of Urban households having access to Sanitation facilities	Deprivation of Urban households having access to Sanitation facilities
AP	44.07	33.63	66.37	10.44	54.6	33.63	66.37	20.97
AS	N/A	66.1	33.9	N/A	86.06	66.1	33.9	199.96
BI	52.95	34.03	65.97	18.92	56.54	34.03	65.97	
GU	60.11	56.28	43.72	3.83	65.71	56.28	43.72	9.43
HA	58.09	52.49	47.51	5.6	64.25	52.49	47.51	11.76
HP	55.12	48.5	51.5	6.62	59.98	48.5	51.5	11.48
J&k	64.54	73.37	26.63	N/A	N/A	73.37	26.63	N/A
KA	53.28	38.40	61.60	14.88	62.52	38.4	61.6	24.12
KE	59.14	54.49	45.51	4.65	72.66	54.49	45.51	18.17
MP	52.73	39.41	60.59	13.42	53.00	39.41	60.59	13.59
MR	59.37	51.42	48.58	7.95	64.45	51.42	48.58	13.03
OR	41.38	20.25	79.75	21.13	49.27	20.25	79.75	29.02
PU	64.75	60.52	39.48	4.23	73.23	60.52	39.48	12.71
RS	56.48	39.67	60.33	16.81	62.27	39.67	60.33	22.6
TN	51.27	34.61	65.39	16.66	57.47	34.61	65.39	22.66
UP	62.06	65.48	34.52	N/A	66.54	66.48	34.52	1.06
WB	77.74	78.21	21.79	N/A	78.75	78.21	21.79	0.54
INDIA	57.44	48.1	51.82	9.26	63.58	48.18	57.82	15.4

Source: National Sample Survey Organization

Data on the relative secondary poverty of the urban poor for 1981 and 1991 have been given in table 8. As earlier indicated, the relative poverty situation in regard to the three constituent elements of secondary poverty had worsened from 1981-91 in all the States, except Gujarat

The Companion data on secondary absolute poverty are given in table 8 respectively for 1981 and 1991. They invariably show that across states, the absolute secondary poverty had

decreased from 1981 to 1991. As observed earlier, the decrease in absolute secondary poverty is indicative of the success obtained by the anti-poverty measures mounted during 1981-91. However, the success was not up to the level required to ameliorate relative poverty. Though the impact of the anti-poverty measures did percolate to the low-end income groups it fell short of the level at which relative poverty starts to decrease. The result had been an increase in relative poverty

of housing, sanitation and safe-drinking water.

Comparative estimates of the relative and absolute secondary poverty levels in urban slums are given in table 8. Two sets of data are given, separately for 1981 and 1991. One set of data is based on the average of all three

variables of housing, sanitation, and water supply. In view of these data difficulties on the variable of safe-drinking water, the other set of data on the relative and absolute levels of secondary poverty is based only on housing and sanitation. The conclusion however is the same; relative

Table 7. Access to Safe-drinking water facilities: 1981-91

States	Access to safe-drinking water facilities in 1981 (%)					Access to safe-drinking water facilities in 1981 (%)				
	Urban households having access to safe drinking water	Bottom 40% of Urban households having access to safe drinking water	Percent of the urban poor having access to safe drinking water	Absolute Deprivation of Urban households having access to safe drinking water	Relative Deprivation Of Urban Households having access to safe drinking water	Urban households having access to safe drinking water	Bottom 40% of Urban households having access to safe drinking water	Percent of the urban poor having access to safe drinking water to safe	Absolute deprivation of Urban households having access to safe drinking water	Relative deprivation of Urban households having access drinking water
AP	63.27	70.63	44.69	55.31	18.58	73.82	70.63	52.14	47.86	21.68
AS	N/A	33.34	N/A	N/A	N/A	64.07	33.34	21.36	78.64	42.71
BI	65.36	36.02	23.54	76.46	41.82	73.39	36.02	26.44	73.56	46.95
GU	86.78	90.27	78.34	21.66	8.44	87.23	90.27	78.74	21.26	8.49
HA	90.72	78.01	70.77	29.23	19.95	93.18	78.01	72.69	27.31	20.49
HP	89.56	93.3	83.56	16.44	6	91.93	93.3	85.77	14.23	6.16
J& K	86.67	91.21	79.05	20.95	7.62	N/A	91.21	N/A	N/A	N/A
KA	74.4	78.52	58.42	41.58	15.98	81.38	78.52	63.9	36.1	17.48
KE	39.72	43.52	17.29	82.71	22.43	38.68	43.52	16.83	83.17	21.85
MP	66.65	76.39	50.91	49.09	15.74	79.45	76.39	60.69	39.31	18.76
MR	85.56	90.26	77.23	22.77	8.33	90.5	90.26	81.69	18.31	8.81
OR	51.33	42.33	21.73	78.27	29.6	62.83	42.33	26.6	73.4	36.23
PU	91.13	52.75	48.07	51.93	43.06	94.24	52.75	49.71	50.29	44.53
RS	78.65	74.64	58.7	41.3	19.95	86.51	74.64	64.57	35.43	21.94
TN	69.44	67.54	46.9	53.1	22.54	74.17	67.54	50.09	49.91	24.08
UP	73.23	47.85	35.04	64.96	38.19	85.78	47.85	41.05	58.95	44.73
WB	79.78	60.5	48.27	51.73	31.51	86.23	60.5	52.17	47.83	34.06

Source: National Sample Survey Organization

Table 8. Relative and Absolute Secondary Poverty in Urban Slums 1981-91

States	Relative Secondary Poverty				Absolute Secondary Poverty			
	Based on housing, sanitation & safe-drinking water		Based on housing only		Based on housing, sanitation & safe-drinking water		Based on housing only	
	1981	1991	1981	1991	1981	1991	1981	1991
AP	11.34	16.55	7.72	13.99	44.89	41.74	39.69	38.69
AS	N/A	23.22	N/A	13.48	N/A	41.85	N/A	23.45
BI	12.91	24.82	11.96	13.76	50.48	48.84	37.49	36.49
GU	10.41	6.97	3.42	6.22	23.46	23.33	24.36	24.36
HA	6.18	11.75	4.3	7.38	27.91	26.27	27.26	25.76
HP	4.87	6.88	4.31	7.24	24.31	23.24	28.25	27.75
J&k	2.54	N/A	N/A	N/A	17.53	N/A	15.82	N/A
KA	11.95	14.87	9.94	13.56	37.39	34.23	35.3	33.3
KE	10.36	13.67	4.33	9.59	46.07	44.23	27.76	24.76
MP	11.02	11.78	8.66	8.3	38.89	34.65	33.8	32.3
MR	6.09	8.28	4.98	8.02	25.45	23.63	26.79	26.29
OR	18.58	23.42	13.07	17.01	57.34	54.72	46.88	45.38
PU	15.76	19.41	2.12	6.86	31.47	30.92	21.24	21.24
RS	12.92	15.51	9.41	12.3	31.54	32.92	32.67	31.67
TN	12.4	18.65	12.33	15.93	44.5	42.77	40.2	39.2
UP	13.73	16.26	1.5	2.03	35.49	32.82	20.76	19.76
WB	11.17	11.69	0.77	N/A	26.17	24.21	13.4	12.4

Source: Calculated based on data from Census and National Sample Survey Organization

deprivation had been more acute, but absolute deprivation had lessened somewhat.

4) Net Relative Secondary Poverty of the Urban Poor vis-a-vis the Urban Non-Poor : An Illustration Based on Housing

The assessment of secondary poverty in the urban slums made above was relative to the urban population as whole. That is to say, the relative position of the urban slums was

assessed vis-a-vis the urban population. This kind of assessment contains an overlap in the sense that the urban slum population is a component part of the urban population, and as such the assessment of the relative poverty of the urban slums is spurious. In order to avoid the element of spuriousness, the relative poverty of the urban slums may have to be assessed vis-a-vis the urban non-poor (or the urban non-slum dwellers) i.e. the urban population minus the urban slum population.

The assessment of the relative poverty vis-a-vis the urban population as a whole may be called the 'gross' relative poverty of the urban slums, and its assessment vis-a-vis the urban non-slum dwellers may be called the 'net' relative poverty of the urban slums. This section attempts an assessment of the 'net' relative secondary poverty of the urban slums for 1981 and 1991 only in the case of housing shortage as an element of secondary poverty. The other two constituent elements of secondary poverty as specified here could not be covered, owing to the fact that only one set of data exists on sanitation and safe-water supply to the urban slums. No independent data exist on the supply of sanitation and safe-water facilities to the urban non-slum areas. In the case of housing, however, there are two independent sets of data on the urban slum housing shortage. These permit obtaining the data on housing shortage for the urban non-poor as a residual.

As a first step in the assessment of 'net' relative poverty of the urban slums, an estimate is made of the non-slum population of the urban areas. Second, an estimate is made of the non-slum housing shortage for 1981 and 1991. Third, the percapita housing shortage of the non-slum urban areas for 1981 and 1991 are calculated. Fourth, the deprivation of housing facilities of the urban poor vis-a-vis the urban

non-poor is estimated for 1981 and 1991. The percentage of relative 'net' deprivation of the urban slums is shown as the difference between the percapita percentage of housing adequacy of the urban non-poor and the percapita percentage of housing adequacy of the urban poor. For ease of comparison, the 'gross' and 'net' deprivation of the urban poor in regard to housing are illustrated in figure 4. As expected, and inevitably, the 'net' relative housing shortage of the urban poor is more acute than their 'gross' relative housing shortage. And both the 'gross' and 'net' relative housing shortage of the urban poor has worsened in 1991 in comparison with 1981.

Thus, the urban poor seem to have become worse off on two counts:

- a) they continue to be more deprived than the urban non-poor is;
- b) and, on a comparable basis their relative deprivation depended over time from 1981 to 1991. The 'gross' and 'net' deprivation percentages are graphically illustrated in Table 9.

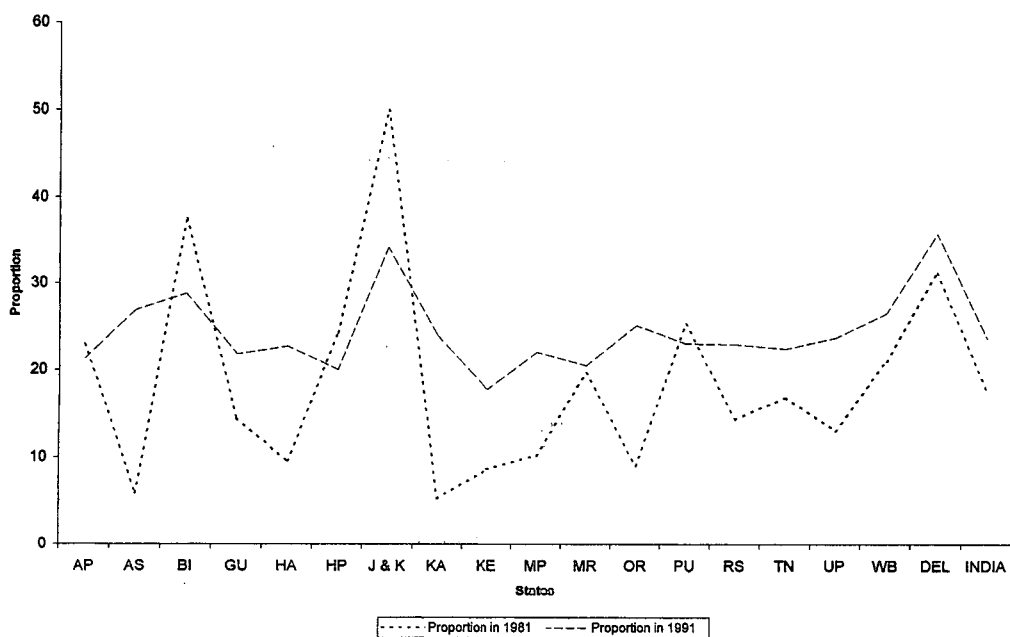


Figure 4. Proportion of Urban Slum Population in Urban Population-State-wise
Data: 1981 and 1991

5) Primary and Secondary Poverty : Interface

This section focuses on the interface of primary and secondary poverty in India during 1981-91 and brings out the synergistic relationship between the reduction of primary and secondary poverty. First it recognizes the tenuousness of the link between an invariant nutritional norm and primary poverty; and second, it emphasizes the importance of personal and environmental hygiene in improving the use-efficiency of nutrition in promoting health and well-being, and in curbing

the growth of casual labor markets.

The argument of earlier sections underscores the need to focus on both primary and secondary poverty in assessing the overall deprivation of the urban poor. Not only are primary and secondary poverty additive components of total poverty but they tend to influence each other and interact with each other. An index of total poverty, while reflecting the aggregation of these two components of poverty, captures their interaction as well. It is because the observed level of primary poverty includes in itself a quantitative element of the influence exerted on it by secondary poverty and vice-versa an

indicator of this overall or total (average total) poverty is calculated separately for 1981 and 1991, respectively.

The average total poverty is a measure which corresponds methodologically to the Human development Index of the UNDP, provided it is assumed that the maximum level attainable by each adequacy measure (100 - poverty measure) is 100 and the minimum level is '0'.

The reduction of average total poverty from its level in 1981 to its level in 1991 (i.e. in terms of percentage points) varied between 16.36 to a low of 6. This reduction in the average total reflects the reduction in primary as well as secondary poverty. And secondary poverty comprises inadequacy of housing, sanitation, and safe water supply.

So there are four components in the reduction of average total poverty which are not of equal weight. In order, therefore, to assess the contribution of each of these four components to a reduction of average total poverty, a system of weights needs to be devised.

Though the average total poverty is an unweighted average of its four components, a change over time in the value of the average total need not necessarily be an unweighted sum of its components. The average total is unweighted because data from which it is drawn do not contain any basis for

drawing a weighing diagram. But, the data provided in this regard provides enough bases for devising a system of weights. Elasticities of reduction in each of the four components with respect to a change in the value of the average total are obtained. That is:

Y = the average total poverty

X_1 = primary poverty

X_2 = housing shortage

X_3 = inadequacy of sanitation; and

X_4 = inadequacy of safe water facility.

$d(\log X_i) / d(\log y) = \eta_i$; the elasticity of reduction in the value of X_i with respect to a change in the value of Y . Multiplying η_i by (X_i / Y) gives values of reduction factors in the four components of average total poverty in terms of $(\Delta X_i / Y)$ such that $\Delta(X_i / Y) = 1$.

The weights thus derived are primary poverty 0.4427; secondary poverty 0.5573; of which housing 0.2668; sanitation 0.1445 and safe-water supply 0.1460. The relative weighted contribution of these four elements to a reduction in total poverty is also calculated separately. Given the system of weights, it follows that the contribution of secondary poverty reduction to the total poverty reduction is larger than that of the reduction of primary poverty.

The contribution of primary and secondary poverty reduction to average total poverty reduction should be distinguished from a change (in percentage points) over time (reduction, to be more specific) of either primary and secondary poverty. (For instance, the contribution of secondary poverty reduction to the reduction of average total poverty of Andhra Pradesh state during 1981-91 was 6.78 percentage points out of 12.19 percentage points of reduction in average total poverty. But the change in percentage points of average secondary poverty for the same period in Andhra Pradesh is 12.55. The former is an element of the reduction in average total poverty. The latter is a

reduction in the average secondary poverty over 1981-91.) The change in primary poverty, average secondary poverty, and average total poverty are plotted in Figure 4 and factors contributing to the reduction of secondary poverty in urban areas due to housing, sanitation and safe drinking water between 1981 and 1991 are shown in Figure 5. The change in secondary poverty is less than the change in primary poverty in all the States during 1981-91, except Andhra Pradesh. The change in average total poverty, as expected lies between the two. The fact that the change in secondary poverty is less the change in primary poverty lends credence to the

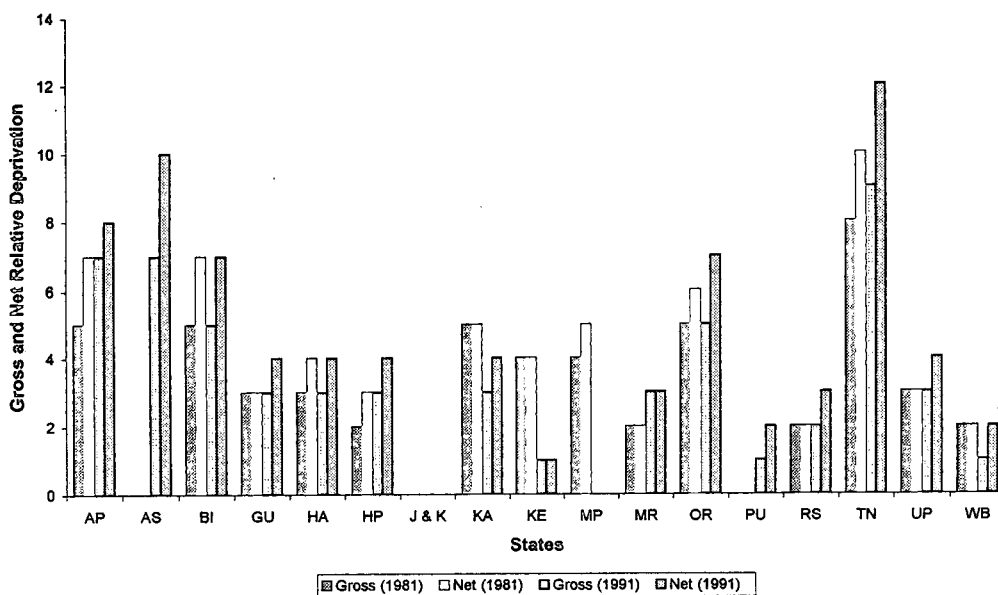


Figure 5. Gross and Net Relative Deprivation of Housing of Urban Poor 1981 and 1991

argument of this paper that secondary poverty reduction programs were given in planning and policy-making less importance than primary poverty reduction programs. This unbalance in emphasis on poverty reduction implied by these data is also corroborated by a simple analysis of rank correlation.

A distribution of ranks obtained by the fifteen states under study in primary (PP) and secondary (SP) poverty in 1981 and 1991 using the Spearman Rank correlation (ρ) are as follows: ρ_{PP-SP} (1981) = 0.71; ρ_{PP-SP} (1991)= 0.58; ρ_{PP} (1981) ρ_{PP} (1991)= 0.70 and ρ_{SP} (1981) ρ_{SP} (1991)= 0.96

Two statements can be made on the basis of these correlations.

- a) The rank correlation obtaining between PP and SP in 1981, which was 0.71 degenerated into a value of 0.58 in 1991. This is indicative of more dissimilar of primary and secondary poverty in 1991 compared to 1981.
- b) At the same time, the rank correlation of PP in 1981 and PP in 1991 is less (0.70) than the rank correlation of SP in 1981 and 1991 (0.96). The high values ρ_{PP-SP} 1981 and ρ_{SP} 1991 show that there was hardly any change in the ranking of the States on the basis of secondary poverty between 1981 and 1991. However, there

was a change, in some cases substantial, of the ranking of States on the basis of primary poverty.

These two statements together go to show that program and planning interventions focussed attention more sharply on the reduction of primary poverty than on the reduction of secondary poverty. On the basis of data obtained it can also be stated that even in the more modest reduction of secondary poverty, the component of sanitation seems to have received the least attention for the health and wellbeing of poor.

4. Conclusion

The argument about the variable relationship of the nutritional norm and the poverty line and the importance of alleviating secondary poverty can now be summarized. It comprises:

- 1) Loosening the link between a given nutritional norm and the poverty line in the sense that several nutritional norms can be associated with the same poverty line. These new norms may hover around a fixed requirement norm or may even depart from it quite a bit, though not necessarily as far away as the lower limit of the homeostatic range.

- 2) The efficiency-use of nutritional intakes is greatly enhanced by an adequate provision of water supply, sanitation facilities etc. These are calculated to improve environmental and personal hygiene, reduce vulnerability to disease, and promote work capacity.
- 3) Blanket nutritional programs, which are currently in operation, and which are based on a fixed nutritional norm tend to be hijacked by the relatively better off sections of the poor. Because, the poverty line does not distinguish between people who are near the poverty line (whether above or below) and other people who are far away from it, but below.

Despite the valid criticisms, leveled against the specification of a certain level of the poverty line, with its scaffolding provided by a nutritional norm, the poverty line itself is a highly useful socio-economic concept. It opens a new dimension of differential growth rates of income of different income groups. It is instrumental in setting a floor below which per capita incomes (entitlement) cannot or should not go. In so doing, it focuses attention on what may be termed absolute poverty and several distributional issues both functional and personal, surrounding it.

It gives a direction to planning and policy-making to include abolition of absolute poverty among their objectives, and often to make it objective *primus inter pares*.

Poverty (whether rural or urban) as measured by the poverty line (fixed or variable) is generally understood to be primary poverty or nutritional distress, denoting subsistence below nutritional requirements, constant or not. In order for the anti-poverty programs to graduate into measures for promoting a minimum level of living, primary poverty elimination programs should be combined with secondary poverty elimination programs. Minimum levels of health, education etc. assumed to be provided by the government as they are or in an improved measure. Income generating employment is assumed to be a function of private and public investment, its allocation among the production sectors, its spatial distribution, and the techniques (methods) of production at the project level.

The currently operative anti-poverty programs emphasize the provision of assets of the latter kind, i.e. assets related to a betterment of living conditions. Their marginal productivity in the absence of adequate provision for life-assets like shelter is bound to be low. Moreover, it is important to note that shelter and related amenities can have on their own, an income-earning-facilitation-effect, through better health

and reduced vulnerability to disease. Add to this the fact that shelter (house), especially for the low-end income groups, is a 'work-place' as well as a 'folk-place'. That is to say, shelter-plus (shelter, water supply and sanitation) provides the backdrop and a foundation for the income-earning assets to become more productive.

The upshot of the argument is that, for optimal results, the anti-poverty programs currently in operation, and in particular the provision of those assets of an income-yielding nature would become largely infructuous without the provision of shelter-plus. In the same manner, public (government) supported programs of health and education are liable to yield less than optimal results in the absence of emphasis on shelter-plus.

Thus elimination of secondary poverty has a reinforcing effect on the elimination of primary poverty an income effect on its own and a productivity augmentation effect of the directly income-earning assets. In other words, employment generation and shelter development operate synergistically (i.e. in a manner that the whole is greater than the sum of its parts). Shelter development creates at once an income flow (through promoting employment) and an augmentation of the household assets.

References

- Economic and Political Weekly, 1994, EPW Foundation, *Social Indicators of Development for India-II: Inter-state Disparities*, 21 May, Vo.XIX, No.21.
- National Institute of Urban Affairs, 1990, *Approaches to Urban Poverty: A Position Note* (mimeo).
- Government of India, Registrar General and Census Commissioner, *Census of India, 1991, Paper 2 of 1993, Series*.
- Government of India, Economic Survey of India 1992-93, New Delhi
- Government of India, Central Statistical Organization, 1990, *Estimates of State Domestic Product and Capital Formation and Economic Survey: 1992-93*.
- Government of India, *Report of the National Commission on Urbanization 1998*, Vol. IV and V.
- Government of India, National Building Organization and Regional Housing Center, ESCAP 1990, *HandBook of Housing Statistics*, Part I.
- Government of India, Report of the Expert Group on *Estimation of Proportion and Number of Poor 1993*, (mimeo).
- Jean Dreze and Amartya Sen 1989, *Hunger and Public Policy*, Oxford Publications
- Sukhatme, P.V. 1982. *I Measurement of Under Nutrition*, Economic and Political Weekly, 11 December, 1994.
- Sukhatme, P.V. 1982. *I Assessment of Adequacy of Diets and Differential Income Levels*, Economic and Political Weekly, 13, November, 1994. Special Issue.
- The World Bank 1993, *Poverty Reduction Hand Book* (IBRD)

ABSTRACT

This paper examines the policy implications of poverty in terms of its forms: primary and

secondary poverty and brings out the synergetic relationship between the reduction of primary and secondary poverty in Urban India. The paper also demonstrates the influence that the alleviation of secondary poverty exerts on the alleviation of the primary poverty and it pinpoints the macro-level policy implications and suggests envisaged strategy for poverty alleviation applicable to the developing world.