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RELATIVE POVERTY DYNAMICS IN PAKISTAN

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In any study of poverty and inequality, the diagnosis of relative poverty is imperative for drawing reasonable policy responses. Relative Poverty measures the extent and magnitude of poverty by comparing the population at arbitrary poverty lines. This study is aimed at estimating the incidence, depth and severity of poverty in relative perspective across regions and over time. While employing HIES data sets, relative deprivations have been estimated at 50 percent, 66.66 percent, and 75 percent of the mean consumption expenditure of respective survey years during 1998-99–2004-05. Taking a moderate view of the poverty line at threshold level of 66.66 percent, 41.38 percent population was found relatively poor at country level during 1998-99 with corresponding P_1 and P_2 at 10.25 and 3.60, respectively. Though the relative poverty has declined (4.31 percent) at country level during studied period; however, it is still very high (37.78 percent). Inter-provincial dynamics exhibited improvement in relative poverty at all its levels in NWFP; whereas, mixed trends were observed in other provinces. Rural relative poverty improved in Sind and Baluchistan while it worsened in Punjab. In case of urban areas, relative poverty worsened in Sind and Baluchistan. When we compare the trends of relative poverty with absolute poverty for the same period, trends were largely found opposite for both the interregnum periods. Moreover, overall dynamics revealed decline in absolute poverty manifolds than relative poverty for the whole period. The relative poverty dynamics for the whole period (1998-99 to 2004-05), what we call "Difference of Difference" depicted a decrease of 4.31 percent in population of the relative poor in the country. Provincial statistics of relative poverty estimates reflect that Punjab was the worst of all provinces for having 45.61 percent of its population living below the threshold level of 66.66 percent of average consumption expenditures, followed by Sind (44.41 percent), NWFP (36.40 percent) and Baluchistan (27.04 percent), respectively. Similar ranking is also observed in case of relative poverty gap and its severity for these provinces. The findings suggest that instead of uniform policy strategy across the board, policy packages must be defined for absolute poor and relative poor separately. A two pronged policy scenario is suggested for each province which not only contains the absolute poverty but addresses the poor as well who are relatively deprived in terms of income, education, health and empowerment.

Keywords: Relative poverty, dynamics, inter-provincial, Pakistan

INTRODUCTION

Poverty can be viewed by using different measurement dimensions and indicators. The measured, described and perceived extent and magnitude of poverty is wide when the conceptual basis of poverty are not restricted to its absolute concept (subsistence below minimum socially acceptable living conditions based on nutritional requirement and other basic necessities). Absolute poverty is the situation of severe deprivation of basic human needs such as food, safe drinking water, sanitation facilities, health, shelter, education and information (United Nations, 1995). Assessment of absolute poverty treats all the households of the universe at a consistent poverty line, same consumption level and living standard, irrespective of time and place, resulting in an inconsistent poverty profile (Ravallian and Bidani, 1994).

On the other hand, Relative Poverty measures the extent and magnitude of poverty by comparing the upper and lower segments of the population at varying poverty lines, consumption level and living standards across regions and over time. It is measured as a fixed proportion of the mean income of population (Bourguignon, 2004). Relative deprivations are normally measured at less than half, two thirds or three-fourths of the expenditures or income norm. Different ways of measuring poverty may yield conflicting trends or results. Dessallien (2000) compared the poverty results (absolute and relative) and concluded that relative poverty may decline while absolute poverty increases if the gap between upper and lower strata of a population is reduced by a decline in well being of the former at the same time that the additional households fall beneath the absolute poverty line.

The poverty analysis in Pakistan remained restricted to the concept of absolute poverty during the four decades. The concept of relative deprivations did not enter poverty analysis till 1991. Difficulties in

substantiating the absolute poverty approaches in robust empirical terms led analysts to a social formula for defining poverty. Some have defined relative deprivation, as having income less than half to three fourths of mean income or expenditure norm (Rein, 1970; Townsend, 1970). Zaidi (1992) argued that the concept of relative poverty is better indicator of poverty. The author used household income and expenditure data for 1984/85, employed expenditure and income approaches to measure poverty by defining monetary poverty lines separately for expenditure and income bases (Rs. 255 and Rs. 276, respectively), using the OECD equivalence scale that satisfies all basic needs. A relative measure poverty, defined as 75 percent of the national average poverty line was used. The relative poverty estimate revealed that 39 percent of households in Pakistan were poor, at the poverty line of Rs.255. Among the four provinces, the incidence of poverty in Punjab and Baluchistan was higher than Sind and NWFP. The study further decomposed the poor and concluded that 65 percent of the poor households were involved in agriculture, production, transport operators and laborers. Moreover, the incidence of poverty was influenced by household size and educational level of the household head. The study was criticized on grounds that consumption pattern varied across different provinces and the use of OECD technique was also inappropriate for Pakistan where family size is large and food expenditure dominates overall expenditure of a household.

Zaidi and Vos (1993) used three equivalence scales to construct a threshold to estimate the proportion of relative poor. They concluded that at 66.66 percent of the poverty line, the highest rate of poverty was observed in the households headed by workers in agriculture followed by laborers in transport and construction. Moreover, 70 percent of all poor were self employed. At the provincial level, the highest and lowest rate of poverty was observed in Punjab and Baluchistan, respectively. Rural areas had double the incidence of poverty as urban areas. Results of different equivalence scales did not affect the poverty rates or the composition of poor. The results of this study based on the 1984-85 HIES data set, were compared with results when 1987-88 data set was used. Dynamic trends revealed a reduction in income inequality in Baluchistan along with a substantial decrease of poverty in urban areas, while poverty worsened in NWFP after a period of three years (Zaidi and Vos, 1994).

With the criticism of Zaidi findings (1992)in mind, Anwar (1998), using the HIES data for 1987-88, calculated poverty lines (Rs. 251, Rs. 336 and Rs. 380 adult equivalent expenditure for overall Pakistan) defined as 50, 66 and 75 percent of national adult equivalent expenditure. Engel's method was used to correct the consumption expenditure data for household size. Using these cutoff points it was found that 14.7 percent, 39.2 percent and 48.2 percent of all households were poor in 1987-88. The author also derived province specific poverty cutoff points using the difference in the cost of living across provinces and regions, taking account of food price and behavioral differences in cost of living. The urban poverty line was determined to be much higher than the rural poverty line. The incidence of poverty in urban areas (23 percent) was found to be higher than in rural areas (11percent) at the 50 percent average expenditure level. Similarly, the highest poverty incidence was observed in Punjab (17 percent) and lowest in Baluchistan (9 percent). Critics suggested food prices were the main source of differing rural and urban living cost and that the difference in the poverty lines should be based on this difference.

Anwar (2005) using the 2000-01 HIES data set, calculated separate rural urban poverty lines across provinces accounting for the difference in food prices by using the regional price index. Average food prices were calculated 13 percent higher for urban areas. The national average monthly per capita expenditure of Rs. 1163 at current prices for 2000-01 was adjusted accordingly. At relative threshold level of two-thirds of national average per capita expenditure, 41 percent of individuals were found below the poverty line in 2000-01. Incidence of relative poverty was found higher in rural (47 percent) than in urban areas (31 percent). At the provincial level, overall relative poverty was lowest in Punjab (36 percent) and highest in the NWFP (46 percent). Relative rural poverty was highest in Sind (52 percent) and lowest in Punjab (40 percent). Relative poverty, based on 66.67 percent of per capita monthly income, was found too much higher (50 percent) than the expenditure based poverty line (41 percent). The higher incidence of relative poverty in later case may be due to: more income inequality in comparison to consumption; under estimation of income for low income households in comparison to high income households; and low income households possibly supplementing consumption through dis-savings or borrowing. The income distribution became more skewed and the share of income of the richest 1 percent increased from 10 to 20 percent of the total income. The objective of the study was to analyze poverty and inequality for making policies to overcome the problem.

MATERIALS AND METHODS

The following procedures/statistical indices have been employed in this study:

The data

This study encompasses the time horizon from 1998-99 to 2004-05 for estimating relative poverty across regions and over time. Primary data files have been taken from the Household Integrated Economic Survey (HIES), conducted periodically by the Federal Bureau of Statistics (FBS), Statistics Division, Government of Pakistan. These surveys provide complete information on income (sources and level), consumption (quantity and expenditure of all food and non-food items), access to social services and assets (both movable and immovable) at the household level. The primary data files contained population weights for each primary sampling unit designed to approximate nationally representative estimates of population.

Sampling frame and design

The FBS used separate sampling frames for urban and rural areas. Households were the unit of survey / element of the sampling frame. A two-stage stratified sample design was adopted for these surveys. Allocation of Primary Sampling Units (PSUs) and Secondary Sampling Units (SSUs) for each survey year across the regions are presented in Table 1 (FBS, 1999, 2002, 2005).

Measuring poverty

There are a wide variety of statistical poverty measures. Chief among them is the FGT (Foster *et al.,* 1984) poverty measures. These indices satisfy a broad

$$P_{\alpha} = \frac{1}{n}\sum_{i=1}^{q}[(Z - Y_i)/Z]^{\alpha}$$

array of poverty axioms while specific members satisfy monotonicity and transfer axioms as well. The general formula of the FGT Class is:

Where:

n = total population

q = number of poor persons

Z= poverty line

Y_i = income or consumption (welfare indicator) below poverty line

α= poverty aversion parameter

If the value of α is zero, the answer shows head count ratio (P_o). When it is equal to one, it shows poverty gap (P_1). Setting α =2, amounts to the measure of squared poverty gap (P_2).

P_1 and P_2 are the higher order measures of poverty. P_1 give average shortfall of poor income and indicates the minimum cost required to pull the poor from below the poverty line (depth of poverty) and is also called the depth of poverty index. P_2 captures the distributional changes within the poor segment of population which the P_1 cannot. It is sensitive to the severity of poverty and also satisfies the axiom of weak transfer.

Table 1. Distribution of Primary and Secondary Sampling Units

Year	Province/Area	Sample PSUs			Sample SSUs		
		Urban	Rural	Total	Urban	Rural	Total
1998-99	Punjab	220	238	458	2,640	3,808	6,448
	Sind	128	136	264	1,536	2,176	3,712
	NWFP	72	116	188	864	1,856	2,720
	Baluchistan	52	88	140	624	1,408	2,032
	Total	472	578	1,050	5,664	9,248	14,912
2001-02	Punjab	206	230	436	2,432	3,668	6,100
	Sind	128	136	264	1,534	2,174	3,708
	NWFP	72	116	188	857	1,842	2,699
	Baluchistan	52	88	140	623	1,406	2,029
	Total	458	570	1,028	5,446	9,090	14,536
2004-05	Punjab	210	226	436	2,511	3,607	6,118
	Sind	125	125	250	1,497	1,980	3,477
	NWFP	91	118	209	1,088	1,878	2,966
	Baluchistan	60	90	150	713	1,434	2,147
	Total	486	559	1,045	5,809	8,899	14,708

Poverty lines

Consumption aggregates have been used as proxy for income. Relative poverty estimation is based on three equivalence scales of poverty threshold cut-off points (50, 66.66 and 75 percent of the reported average per capita monthly consumption expenditure) were used at provincial and their rural urban levels (Table 2).

Table 2. Relative poverty lines based on average per capita monthly consumption expenditure for the years 1998-99 to 2004-05

Region	1998-1999			2001-2002			2004-2005		
	Average per capita consumption expenditure poverty lines			Average per capita consumption expenditure poverty lines			Average per capita consumption expenditure poverty lines		
	50%	66.66%	75%	50%	66.66%	75%	50%	66.66%	75%
Pakistan	627.33	836.36	941.00	606.46	808.54	909.70	827.59	1103.35	1241.39
Urban	849.99	1133.21	1274.99	819.84	1093.01	1229.76	1093.55	1457.93	1640.33
Rural	490.98	654.58	736.48	475.79	634.32	713.69	654.99	873.23	982.48
Punjab	627.05	835.98	940.57	614.80	819.65	922.20	857.53	1143.26	1286.29
Urban	860.26	1146.90	1290.40	801.30	1068.29	1201.95	1118.00	1490.51	1677.00
Rural	463.34	617.73	695.01	484.57	646.03	726.86	678.27	904.27	1017.41
Sind	692.19	922.82	1038.28	676.02	901.27	1014.03	910.44	1213.80	1365.66
Urban	978.49	1304.53	1467.74	1010.91	1347.74	1516.36	1288.20	1717.43	1932.30
Rural	490.24	653.59	735.36	439.65	586.15	659.48	624.83	833.02	937.25
NWFP	562.78	750.30	844.17	530.59	707.38	795.88	724.72	966.20	1087.08
Urban	747.73	996.88	1121.60	650.31	867.00	975.47	922.67	1230.11	1384.01
Rural	477.43	636.51	716.14	475.45	633.88	713.18	610.04	813.31	915.06
Baluchistan	595.30	793.66	892.95	553.46	737.87	830.19	753.63	1004.74	1130.45
Urban	628.02	837.28	942.03	653.00	870.58	979.50	863.54	1151.27	1295.31
Rural	581.03	774.63	871.55	509.40	679.13	764.10	698.99	931.89	1048.48

RESULTS

Table 3 indicate the headcount ratio, depth of poverty and its severity within country, across the various provinces at their regional levels based on consumption poverty lines calculated in Table 2. All the poverty indices showed direct nexus with threshold level *i.e.* higher value of the poverty lines leads to higher value of various poverty indices.

Taking a moderate view of the poverty line at 66.66% threshold level of the average consumption expenditure, 41.38 percent population was found relatively poor (P_o) at country level during 1998-99 with corresponding P_1 and P_2 at 10.25 and 3.60, respectively. Regional bifurcation for the same period at identical level showed higher incidence of relative poverty and corresponding P_1 and P_2 in urban areas as compared to its rural counterpart. Table 3 also revealed decline in average per capita consumption expenditure at the proportion 3 percent in 2001-02; however relative poverty declined from 41.38 percent to 37.78 percent at the threshold level of 66.66 percent of the average consumption expenditure. This declining trend in both per capita consumption expenditure and headcount ratio showed that poverty gap and severity in poverty has declined over the period of time. Regional bifurcation of urban and rural areas also depicted the same trend with varying magnitude in all poverty indices. Decrease in per capita income during 1998-99 to 2001-02 may be attributed to nuclear testing in May 1998 and consequential world economic sanctions, roll back of political system by Musharaf's Marshal Law, sharp decline in overall growth rate of economy to the level of 1.8 percent in 2000-01, negative growth rate in agricultural sector due to unprecedented drought period (2000-01 and 2001-02), decline in import of critical items for agricultural industry, dismal performance of manufacturing sector, increased inflation as result of intensified efforts to raise revenue through sales tax, major blow in private foreign investment (822 to 182 million US$) and resultant increase in unemployment from 5.9 to 8.3 percent (Zaidi, 1999; Amjad and Kemal, 1997; Cheema, 2005; Jamal, 2006 and Kemal, 2004). Despite the aforesaid reasons, relative poverty declined (9 percent) due to reduction in relative poverty gap (19 percent) and improvement of inequality (26 percent) among poor. This showed that resource distribution policies relatively benefited more to the low and middle income groups rather than higher income groups. It is worth mentioning that absolute measurement of poverty indices moved in opposite direction during said period as explained elsewhere by Dessallien (2000).

While moving from 2001-02 to 2004-05, 36 percent rise in average per capita consumption expenditure is accompanied by 4.3 percent increase in relative

Table 3. Relative poverty based on average per capita monthly consumption expenditure for the years 1998-99 to 2004-05

Region	Poverty lines (percentage of average monthly consumption expenditure)	1998-1999			2001-2002			2004-2005		
		Consumption poverty headcount (P_0)	Consumption poverty depth (P_1)	Consumption poverty severity (P_2)	Consumption poverty headcount (P_0)	Consumption poverty depth (P_1)	Consumption poverty severity (P_2)	Consumption poverty headcount (P_0)	Consumption poverty depth (P_1)	Consumption poverty severity (P_2)
Pakistan	50%	18.77	3.59	1.07	14.73	2.44	0.64	16.39	2.97	0.86
	66.66%	41.38	10.25	3.60	37.78	8.31	2.65	39.44	9.20	3.10
	75%	50.99	14.26	5.42	48.20	12.17	4.25	49.87	13.17	4.80
Urban	50%	28.82	6.71	2.28	23.89	4.93	1.50	25.59	5.48	1.74
	66.66%	49.15	14.86	6.04	45.53	12.44	4.65	47.42	13.41	5.13
	75%	57.62	19.17	8.36	54.71	16.65	6.74	55.41	17.65	7.32
Rural	50%	8.89	1.47	0.39	6.22	0.83	0.18	7.61	1.24	0.34
	66.66%	26.95	5.40	1.65	22.42	3.96	1.07	25.49	4.83	1.45
	75%	37.61	8.40	2.75	33.33	6.62	1.95	36.38	7.72	2.46
Punjab	50%	23.57	4.98	1.58	17.47	3.24	0.93	21.14	4.25	1.31
	66.66%	45.61	12.41	4.70	38.55	9.42	3.27	42.72	11.21	4.10
	75%	54.32	16.61	6.77	48.14	13.20	4.96	51.94	15.26	6.03
Urban	50%	33.96	8.80	3.23	24.04	5.38	1.78	29.47	6.76	2.28
	66.66%	52.48	17.49	7.65	44.74	12.63	4.95	49.72	15.16	6.12
	75%	59.95	21.82	10.18	53.32	16.72	7.00	56.99	19.46	8.49
Rural	50%	10.42	1.76	0.48	8.66	1.35	0.34	11.72	2.00	0.55
	66.66%	28.55	6.03	1.92	26.56	5.15	1.54	30.68	6.70	2.15
	75%	38.56	9.09	3.10	36.63	8.05	2.60	40.97	9.92	3.45
Sind	50%	21.78	4.19	1.24	23.64	4.35	1.21	20.27	3.75	1.10
	66.66%	44.41	11.45	4.10	48.04	12.37	4.34	45.18	10.94	3.79
	75%	53.86	15.64	6.09	57.00	16.86	6.50	55.24	15.31	5.76
Urban	50%	27.08	5.93	1.84	31.70	7.42	2.41	29.72	6.57	2.18
	66.66%	48.62	14.18	5.46	53.81	16.47	6.63	49.69	14.93	5.98
	75%	56.46	18.50	7.75	61.77	21.11	9.20	55.64	19.16	8.32
Rural	50%	8.01	1.24	0.32	5.43	0.53	0.09	5.40	0.88	0.25
	66.66%	25.73	4.97	1.47	20.71	3.47	0.86	20.25	3.59	1.05
	75%	36.78	7.90	2.51	31.12	5.95	1.66	31.21	6.07	1.87
NWFP	50%	11.79	1.91	0.49	6.31	0.70	0.13	9.74	1.47	0.40
	66.66%	36.40	7.34	2.21	25.70	4.29	1.07	32.80	6.32	1.84
	75%	46.60	11.15	3.69	38.44	7.36	2.06	44.87	9.94	3.16
Urban	50%	25.49	5.21	1.67	11.68	1.70	0.38	18.38	3.26	0.95
	66.66%	47.35	13.05	4.96	36.11	7.22	2.09	41.45	10.03	3.40
	75%	55.58	17.33	7.12	46.36	11.01	3.57	50.64	14.12	5.23
Rural	50%	6.12	0.76	0.16	3.23	0.34	0.05	4.31	0.65	0.18
	66.66%	24.07	3.96	1.04	18.88	2.76	0.62	21.56	3.39	0.89
	75%	35.68	6.86	1.95	30.02	5.18	1.31	33.22	6.03	1.68
Baluchistan	50%	7.04	0.97	0.24	4.84	0.50	0.09	6.66	1.13	0.31
	66.66%	27.04	4.89	1.32	23.07	3.72	0.88	26.08	4.75	1.37
	75%	37.86	7.96	2.39	34.68	6.59	1.77	36.32	7.67	2.38
Urban	50%	7.18	1.02	0.24	8.37	1.17	0.25	10.37	1.57	0.37
	66.66%	28.26	5.16	1.40	28.34	5.41	1.52	31.13	6.21	1.85
	75%	37.90	8.27	2.51	38.80	8.55	2.66	41.37	9.55	3.12
Rural	50%	6.34	0.94	0.23	2.92	0.26	0.04	18.34	3.17	0.93
	66.66%	26.44	4.72	1.27	18.88	2.67	0.57	22.38	3.77	1.10
	75%	36.70	7.74	2.31	30.93	5.12	1.26	32.70	6.44	1.94

Table 4. Regional dynamics of relative poverty

Region	Poverty lines (percentage of average monthly consumption expenditure)	Percentage change in 1998-99 to 2001-02			Percentage change in 2001-02 to 2004-05			Difference of difference		
		Poverty headcount (P_0)	Poverty depth (P_1)	Poverty severity (P_2)	Poverty headcount (P_0)	Poverty depth (P_1)	Poverty severity (P_2)	Poverty headcount (P_0)	Poverty depth (P_1)	Poverty severity (P_2)
Pakistan	50%	-21.52	-32.03	-40.19	11.27	21.72	34.38	-10.25	-10.31	-5.81
	66.66%	-8.70	-18.93	-26.39	4.39	10.71	16.98	-4.31	-8.22	-9.41
	75%	-5.47	-14.66	-21.59	3.46	8.22	12.94	-2.01	-6.44	-8.65
Urban	50%	-17.11	-26.53	-34.21	7.12	11.16	16.00	-9.99	-15.37	-18.21
	66.66%	-7.37	-16.29	-23.01	4.15	7.80	10.32	-3.21	-8.49	-12.69
	75%	-5.05	-13.15	-19.38	1.28	6.01	8.61	-3.77	-7.14	-10.77
Rural	50%	-30.03	-43.54	-53.85	22.35	49.40	88.89	-7.69	5.86	35.04
	66.66%	-16.81	-26.67	-35.15	13.69	21.97	35.51	-3.12	-4.70	0.36
	75%	-11.38	-21.19	-29.09	9.15	16.62	26.15	-2.23	-4.57	-2.94
Punjab	50%	-25.88	-34.94	-41.14	21.01	31.17	40.86	-4.87	-3.77	-0.28
	66.66%	-15.48	-24.09	-30.43	10.82	19.00	25.38	-4.66	-5.09	-5.04
	75%	-11.38	-20.53	-26.74	7.89	15.61	21.57	-3.48	-4.92	-5.16
Urban	50%	-29.21	-38.86	-44.89	22.59	25.65	28.09	-6.62	-13.21	-16.80
	66.66%	-14.75	-27.79	-35.29	11.13	20.03	23.64	-3.62	-7.76	-11.66
	75%	-11.06	-23.37	-31.24	6.88	16.39	21.29	-4.18	-6.99	-9.95
Rural	50%	-16.89	-23.30	-29.17	35.33	48.15	61.76	18.44	24.85	32.60
	66.66%	-6.97	-14.59	-19.79	15.51	30.10	39.61	8.54	15.50	19.82
	75%	-5.01	-11.44	-16.13	11.85	23.23	32.69	6.84	11.79	16.56
Sind	50%	8.54	3.82	-2.42	-14.26	-13.79	-9.09	-5.72	-9.97	-11.51
	66.66%	8.17	8.03	5.85	-5.95	-11.56	-12.67	2.22	-3.53	-6.82
	75%	5.83	7.80	6.73	-3.09	-9.19	-11.38	2.74	-1.39	-4.65
Urban	50%	17.06	25.13	30.98	-6.25	-11.46	-9.54	10.81	13.67	21.43
	66.66%	10.67	16.15	21.43	-7.66	-9.35	-9.80	3.02	6.80	11.62
	75%	9.40	14.11	18.71	-9.92	-9.24	-9.57	-0.52	4.87	9.14
Rural	50%	-32.21	-57.26	-71.88	-0.55	66.04	177.78	-32.76	8.78	105.90
	66.66%	-19.51	-30.18	-41.50	-2.22	3.46	22.09	-21.73	-26.72	-19.40
	75%	-15.39	-24.68	-33.86	0.29	2.08	12.65	-15.10	-22.60	-21.21
NWFP	50%	-46.48	-63.35	-73.47	54.36	110.00	207.69	7.88	46.65	134.22
	66.66%	-29.40	-41.55	-51.58	27.63	47.32	71.96	-1.77	5.77	20.38
	75%	-17.51	-33.99	-44.17	16.73	35.05	53.40	-0.78	1.06	9.22
Urban	50%	-54.18	-67.37	-77.25	57.36	91.76	150.00	3.18	24.39	72.75
	66.66%	-23.74	-44.67	-57.86	14.79	38.92	62.68	-8.95	-5.75	4.82
	75%	-16.59	-36.47	-49.86	9.23	28.25	46.50	-7.36	-8.22	-3.36
Rural	50%	-47.23	-55.26	-68.75	33.44	91.18	260.00	-13.79	35.91	191.25
	66.66%	-21.56	-30.30	-40.38	14.19	22.83	43.55	-7.37	-7.48	3.16
	75%	-15.86	-24.49	-32.82	10.66	16.41	28.24	-5.20	-8.08	-4.58
Baluchistan	50%	-31.25	-48.45	-62.50	37.60	126.00	244.44	6.35	77.55	181.94
	66.66%	-14.68	-23.93	-33.33	13.05	27.69	55.68	-1.63	3.76	22.35
	75%	-8.40	-17.21	-25.94	4.73	16.39	34.46	-3.67	-0.82	8.52
Urban	50%	16.57	14.71	4.17	23.89	34.19	48.00	40.47	48.89	52.17
	66.66%	0.28	4.84	8.57	9.84	14.79	21.71	10.13	19.63	30.28
	75%	2.37	3.39	5.98	6.62	11.70	17.29	9.00	15.08	23.27
Rural	50%	-53.94	-72.34	-82.61	528.08	1119.23	2225.00	474.14	1046.89	2142.39
	66.66%	-28.59	-43.43	-55.12	18.54	41.20	92.98	-10.05	-2.23	37.86
	75%	-15.72	-33.85	-45.45	5.72	25.78	53.97	-10.00	-8.07	8.51

headcount ratio. When we look at the changes in relative poverty gap and income distribution among poor, the relative poverty gap and consumption inequality increased by 11 percent and 17 percent, respectively.

During this period growth led policy was adopted by the government. Resultantly pro poor expenditures increased from 3.8 percent of GDP in fiscal year 2002-03 to 4.7 percent in 2004-05, along with modest growth rate of agriculture sector (during 2002-03 and 2003-04),followed by impressive recovery of 7.5 percent in 2004-05. This growth was ably supported by impressive performance of all the sectors of economy. Real GDP grew by 7.5 percent in 2003-04 and 8.4 percent in 2004-05, surpassing the target of 6.6 percent (GOP 2005-06). This growth led policy benefited more to those who were relatively non-poor than those of poor or richest poor. Absolute measurement of various poverty indices showed improvement during this period.

In this way overall relative poverty dynamics for the whole period (1998-99 to 2004-05), what we call "Difference of Difference" depicted a decrease of 4.31 percent in population of the relative poor in the country. The same differential decrease in urban and rural poor was found to be 3.21 percent and 3.12 percent, respectively, at threshold level of 66.66 percent of average per capita consumption expenditures (Table-4).

Inter-provincial relative poverty

During 1998-99, Punjab was the worst of all provinces for having 45.61 percent of its population living below the threshold level of 66.66 percent of average consumption expenditures, followed by Sind (44.41 percent), NWFP (36.40 percent) and Baluchistan (27.04 percent), respectively. Similar ranking is also observed in case of relative poverty gap and its severity for these provinces. Taking an account of regional bifurcation, the results showed that Punjab, Sind and NWFP are positioned close to each other with half of their urban population as relatively poor, while the extent of relative poverty in their rural areas is accounted to one-fourth. Similar ranking is also observed for these provinces in case of relative poverty gap and severity in relative poverty at their urban and rural levels; however, their extent is relatively higher in the urban areas. In case of Baluchistan, one-fourth of population was found to be relatively poor at all the levels for the same period.

Comparing the situation prevailed in 1998-99 with that of 2001-02, it is revealed that all the indices of relative poverty exhibited declining trend in all the provinces (both at urban and rural levels) at varying magnitude, except overall and urban Sind along with marginal increase in urban Baluchistan. It is of worth mentioning that maximum decline in relative P_o was observed at all its levels in NWFP, followed by Punjab. In case of Sind and Baluchistan, urban poverty increased while rural poverty decreased. Decline in rural poverty was found highest in Baluchistan. The scenario prevailed during 1998-99 to 2001-02 reversed during 2001-02 – 2004-05 for whole country, except rural Sind.

Overall dynamics for the whole period 1998-99–2004-05, what we call "Difference of Difference" revealed:

1. Decrease of relative poverty at overall and urban Punjab, while it worsened in its rural areas. Similar trends are also observed in depth and severity of poverty in the province.
2. Marginal increase in overall and urban relative poverty in Sind contrary to its rural counterpart. Depth and severity of poverty declined in overall and rural Sind, while it worsened in its urban areas.
3. NWFP exhibited declining trend in relative poverty at all its levels; however, poverty gap declined at its urban and rural levels while severity in poverty increased at all its levels.
4. In Baluchistan, relative poverty declined at its overall and rural levels contrary to its urban counterparts. Depth of poverty marginally declined in its rural areas while severity worsened at all its levels.

CONCLUSIONS

Relative deprivations have been viewed at 66.66 percent of the mean consumption expenditure of respective survey years during 1998-99 - 2004-05. Though the relative poverty has declined (4.31 percent) at country level during studied period; however, it is still very high (37.78 percent). Decline in depth and severity of poverty is almost twice than decline in relative poverty. Inter-provincial dynamics exhibited improvement in relative poverty at all its levels in NWFP; whereas, mixed trends were observed in other provinces. Rural relative poverty improved in Sind and Baluchistan while it worsened in Punjab. In case of urban areas, relative poverty worsened in Sind and Baluchistan. When we compare the trends of relative poverty with absolute poverty for the same period, trends were largely found opposite for both the interregnum periods. Moreover, overall dynamics revealed decline in absolute poverty manifolds than relative poverty for the whole period suggesting that poverty reduction policies largely address the richest poor than other categories of poor.

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