Rural Poverty in India: Structure, determinants and suggestions for policy reform

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ABSTRACT

Poverty, particularly rural poverty, has been one of the enduring policy challenges in India. Surely the most important objective of the reforms process would have been to make a significant dent on rural poverty. It is from this that a program of accelerated growth must draw its rationale. In this paper, I discuss the evolution of poverty in India – particularly during the reform period. Then I analyze the structure and determinants of this poverty. The rate of decline of poverty declined during the 1990s as compared to the 1980s. I advance some reasons for this. Policy prescriptions for a more effective anti poverty strategy are discussed.

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I. Introduction

This paper addresses the important issue of anti-poverty policy in India. In analyzing poverty I use the well-known NSS data set; hence concentrating on consumption measures of poverty. The poverty measures used in this paper are all drawn from the popular Foster-Greer-Thorbecke class of functions written as:

$$Y_\alpha = \sum_{y_i < z} [(z - y_i) / z]^\alpha / n \qquad (1)$$

where Y is the measure of poverty, y_i is the consumption of the ith household or the ith class of household, z is the poverty line[1], n is the population size, and α is a non-negative parameter. The headcount ratio, *HC*, given by the percentage of the population who are poor is obtained when α=0. This measure fails to capture the extent to which individual income (or expenditure) falls below the poverty line. A second measure is the poverty gap index (PG) given by setting α=1 in (1) is the aggregate income shortfall of the poor as a proportion of the poverty line and normalized by the population size. PG captures the acuteness of poverty since it measures the total short fall of the poor from the poverty line. This measure has the drawback that it does not consider the importance of the number of people who are below the poverty line. For this reason, it is important to use both measures of poverty jointly to evaluate the extent of poverty. There are certain policy changes that favor one group of poor and adversely affect another group. In such cases HC may not register any change but PG may get around this problem to some extent. A third measure is the square of PG measure, abbreviated as SPG, obtained by setting α=2 in (1).

II. Poverty in India

We calculate poverty measures for each of two parametric specifications of the Lorenz curve, i.e., the Beta model (BETA) of Kakwani (1980) and the general quadratic (GQL) model of Villasenor and Arnoid (1989). Standard tests based on R^2 and log likelihood functions enable us to make a choice between the two functional forms. The data set used is the standard National Sample Survey (NSS) consumption data from the 13th. to the 55th. Rounds.

Table 1 presents evidence on the existing poverty picture in the country as a whole. (State level figures are reported in Jha (2000b). Figure 1 traces movements in rural poverty. The 55th Round of the NSS (1999-2000) had a different recall period than the earlier rounds so the poverty figures are not entirely comparable[2]. Results for the 55th round are presented in Table 2. Table 3 provides details on state level poverty for 1999-2000.

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[1] *The poverty line is defined as per capita monthly expenditure of Rs. 49 (Rs. 57) at 1973-74 prices for the rural (urban) sector.*

[2] *In the 55th Round the NSS made a major deviation from the technique it had been using. The basic change was in terms of the reference period used in questions of consumption. In Rounds of the NSS including and after the 50th. the reference period was uniform with respondents asked about their consumption (in all categories) in the past thirty days. During the 55th. Round however, the question on consumption of clothing, footwear, education and institutional health were asked with a reference period of 365 days and that on food consumption only for (alternately) thirty and seven days. It should be noted that these adjustments had been asked for by several economists. Many had felt that the 7-day recall period for food consumption would give a better indication of actual consumption. Hence this change in technique should actually be welcomed. However, since the poverty estimates of the earlier rounds were done with the uniformly longer recall period, comparison of poverty estimates becomes difficult unless the results from the earlier Rounds are cast in terms of the new recall period. Unless this is accomplished the results of the 55th. Round are unlikely to provide any conclusive indication of the trends in poverty. As is evident from Tables 9a and 9b the shorter the recall period the lower is the computed Head Count Ratio. Some authors, e.g. Visaria (2000) wanted to keep the seven- day recall period but argued that the poverty line should be raised to better reflect minimum nutritional norms. However, as Howes and Lanjouw (1998) argue differences in sample design can be a more serious distortion to poverty estimates*

Table 1: India Poverty Trends (1951-1997) Corrected for CPIAL Changes
(Poverty line = Rs. 49 per capita per month at Oct 73 - Jun 74 rural prices)
(For urban sector Rs. 57 per capita per month at 1973-74 prices)

NSS	Survey period	Headcount index			Poverty gap index			Squared poverty gap index		
Round		Rural	Urban	National	Rural	Urban	National	Rural	Urban	National
3	Aug 51-Nov 52	47.37	35.46	45.31	16.05	11.14	15.20	7.53	4.82	7.06
4	Apr 52-Sep 52	43.87	36.71	42.63	14.64	10.91	13.99	6.71	4.41	6.31
5	Dec 52-Mar 53	48.21	40.14	46.80	16.29	13.25	15.76	7.56	5.96	7.28
6	May 53-Sep 53	54.13	42.77	52.15	19.03	13.83	18.12	9.12	6.29	8.62
7	Oct 53-Mar 54	61.29	49.92	59.30	21.95	17.24	21.12	10.26	7.74	9.82
8	Jul 54-Mar 55	64.24	46.19	61.07	25.04	15.76	23.41	12.50	7.02	11.54
9	May 55-Nov 55	51.83	43.92	50.44	18.44	14.65	17.78	8.80	6.40	8.38
10	Dec 55-May 56	48.34	43.15	47.43	15.65	13.34	15.24	6.71	5.41	6.48
11	Aug 56-Feb 57	58.86	51.45	57.55	19.45	18.16	19.22	8.50	8.51	8.50
12	Mar 57-Aug 57	62.11	48.88	59.77	21.69	16.31	20.73	10.01	7.25	9.52
13	Sep 57-May 58	55.16	47.75	53.84	19.01	15.95	18.47	8.78	7.00	8.46
14	Jul 58-Jun 59	53.26	44.76	51.75	17.74	13.75	17.03	7.88	5.87	7.52
15	Jul 59-Jun 60	50.89	49.17	50.58	15.29	15.83	15.39	6.13	6.75	6.24
16	Jul 60-Aug 61	45.40	44.65	45.27	13.60	13.84	13.64	5.53	5.83	5.59
17	Sep 61-Jul 62	47.20	43.55	46.54	13.60	13.79	13.64	5.31	6.05	5.45
18	Feb 63-Jan 64	48.53	44.83	47.85	13.88	13.29	13.77	5.49	5.17	5.43
19	Jul 64-Jun 65	53.66	48.78	52.75	16.08	15.24	15.93	6.60	6.38	6.56
20	Jul 65-Jun 66	57.60	52.90	56.71	17.97	16.82	17.75	7.60	6.98	7.49
21	Jul 66-Jun 67	64.30	52.24	62.00	22.01	16.81	21.02	10.01	7.19	9.47
22	Jul 67-Jun 68	63.67	52.91	61.60	21.80	16.93	20.86	9.85	7.22	9.35
23	Jul 68-Jun 69	59.00	49.29	57.11	18.96	15.54	18.29	8.17	6.54	7.85
24	Jul 69-Jun 70	57.61	47.16	55.56	18.24	14.32	17.47	7.73	5.86	7.36
25	Jul 70-Jun 71	54.84	44.98	52.88	16.55	13.35	15.91	6.80	5.35	6.51
27	Oct 72-Sep 73	55.36	45.67	53.37	17.35	13.46	16.55	7.33	5.26	6.90
28	Oct 73-Jun 74	55.72	47.96	54.10	17.18	13.60	16.43	7.13	5.22	6.73
32	Jul 77-Jun 78	50.60	40.50	48.36	15.03	11.69	14.28	6.06	4.53	5.72
38	Jan 83-Dec 83	45.31	35.65	43.00	12.65	9.52	11.90	4.84	3.56	4.53
42	Jul 86-Jun 87	38.81	34.29	37.69	10.01	9.10	9.79	3.70	3.40	3.63
43	Jul 87-Jun 88	39.23	36.20	38.47	9.28	9.12	9.24	2.98	3.06	3.00
44	Jul 88-Jun 89	39.06	36.60	38.44	9.50	9.54	9.51	3.29	3.29	3.29
45	Jul 89-Jun 90	34.30	33.40	34.07	7.80	8.51	7.98	2.58	3.04	2.69
46	Jul 90-Jun 91	36.43	32.76	35.49	8.64	8.51	8.61	2.93	3.12	2.98
47	Jul 91-Dec 91	37.42	33.23	36.34	8.29	8.24	8.28	2.68	2.90	2.74
48	Jan 92-Dec 92	43.47	33.73	40.93	10.88	8.82	10.35	3.81	3.19	3.65
50	Jul 93-Jun 94	36.66	30.51	35.04	8.39	7.41	8.13	2.79	2.42	2.69
51	Jul 94-Jun 95	39.75	33.50	38.40	8.89	8.38	..	2.90	2.80	..
52	Jul 95-Jun 96	37.46	28.04	35.00	8.31	6.78	..	2.64	2.22	..
53	Jan 97-Dec 97	35.69	29.99	34.40	8.39	7.77	..	2.83	2.73	..

Note: All poverty measures are expressed as percentage.
Source: Datta (1999), Jha (2000a).

than merely differences in recall periods. Sen (2000) has argued for a completely new 55th Round with the old reference period so that comparability of data can be maintained and shows that poverty figures in earlier rounds would be overestimates as per the 55th. Round methodology.

Table 2
India: Poverty in the 55th Round of NSS, 1999-2000

A. Results for the Rural Sector - 55th Round (1999-2000)

	Mean Consumption (Rs.)	Gini (%)	HCR (%)	PGR (%)	SPGR (%)	Preferred Distribution
Rural (30 day recall)	483.85	26.22	27.61	5.45	1.61	Beta
Rural (7 day recall)	502.02	26.23	24.49	4.75	1.42	Beta

B. Results for the Urban Sector - 55th Round (1999-2000)

	Mean Consumption (Rs.)	Gini (%)	HCU (%)	PGU (%)	SPGU(%)	Preferred Distribution
Urban (30 day recall)	838.57	34.40	25.09	5.75	1.86	Beta
Urban (7 day recall)	860.87	34.25	23.22	5.20	1.67	Beta

Source: Author's calculations.

Table 3: Number and Percentage of Population Below Poverty Line by States - 1999-2000
(30-day Recall period)

No.	States/U.T.'s	Rural		Urban		Combined	
		No. of Persons (Lakhs)	% of Persons	No. of Persons (Lakhs)	% of Persons	No. of Persons (Lakhs)	% of Persons
1.	Andhra Pradesh	58.13	11.05	60.88	26.63	119.01	15.77
2.	Arunachal Pradesh	3.80	40.04	0.18	7.47	3.98	33.47
3.	Assam	92.17	40.04	2.38	7.47	94.55	36.09
4.	Bihar	376.51	44.30	49.13	32.91	425.64	42.60
5.	Goa	0.11	1.35	0.59	7.52	0.70	4.40
6.	Gujarat	39.80	13.17	28.09	15.59	67.89	14.07
7.	Haryana	11.94	8.27	5.39	9.99	17.34	8.74
8.	Himachal Pradesh	4.84	7.94	0.29	4.63	5.12	7.63
9.	Jammu & Kashmir	2.97	3.97	0.49	1.98	3.46	3.48
10.	Karnataka	59.91	17.38	44.49	25.25	104.40	20.04
11.	Kerala	20.97	9.38	20.07	20.27	41.04	12.72
12.	Madhya Pradesh	217.32	37.06	81.22	38.44	298.54	37.43
13.	Maharashtra	125.12	23.72	102.87	26.81	227.99	25.02
14.	Manipur	6.53	40.04	0.66	7.47	7.19	28.54
15.	Meghalaya	7.89	40.04	0.34	7.47	8.23	33.87
16.	Mizoram	1.40	40.04	0.45	7.47	1.85	19.47
17.	Nagaland	5.21	40.04	0.28	7.47	5.49	32.67
18.	Orissa	143.69	48.01	25.40	42.83	169.09	47.15
19.	Punjab	10.20	6.35	4.29	5.75	14.49	6.16
20.	Rajasthan	55.06	13.74	26.78	19.85	81.83	15.28
21.	Sikkim	2.00	40.04	0.04	7.47	2.05	36.55
22.	Tamil Nadu	80.51	20.55	49.97	22.11	130.48	21.12
23.	Tripura	12.53	40.04	0.49	7.47	13.02	34.44
24.	Uttar Pradesh	412.01	31.22	117.88	30.89	529.89	31.15
25.	West Bengal	180.11	31.85	33.38	14.86	213.49	27.02
26.	A & N Island	0.58	20.55	0.24	22.11	0.82	20.99
27.	Chandigarh	0.06	5.75	0.45	5.75	0.51	5.75
28.	Dadra & Nagar Haveli	0.30	17.57	0.03	13.52	0.33	17.14
29.	Daman & Diu	0.01	1.35	0.05	7.52	0.06	4.44
30.	Delhi	0.07	0.40	11.42	9.42	11.49	8.23
31.	Lakshadweep	0.03	9.38	0.08	20.27	0.11	15.60
32.	Pondicherry	0.64	20.55	1.77	22.11	2.41	21.67
	All India	**1932.43**		**670.07**		**2602.50**	

Source: Government of India (2001)

Notes:
1. Poverty Ratio of Assam is used for Sikkim, Arunachal Pradesh, Meghalaya, Mizoram, Manipur, Nagaland and Tripura.
2. Poverty Line of Maharashtra and expenditure distribution of Goa is used to estimate poverty ratio of Goa.
3. Poverty Line of Himachal Pradesh and expenditure distribution of Jammu & Kashmir is used to estimate poverty ratio of Jammu & Kashmir.
4. Poverty Ratio of Tamil Nadu is used for Pondicherry and A & N Island.
5. Urban Poverty Ratio of Punjab used for both rural and urban poverty of Chandigarh.
6. Poverty Line of Maharashtra and expenditure distribution of Dadra & Nagar Haveli is used to estimate poverty ratio of Dadra & Nagar Haveli.
7. Poverty Ratio of Goa is used for Daman & Diu.
8. Poverty Ratio of Kerala is used for Lakshadweep.
9. Urban Poverty Ratio of Rajasthan may be treated as tentative.
10. One lakh = 100,000

Table 4: Number and Percentage of Population Below Poverty Line by States - 1999-2000

(7-day Recall period)

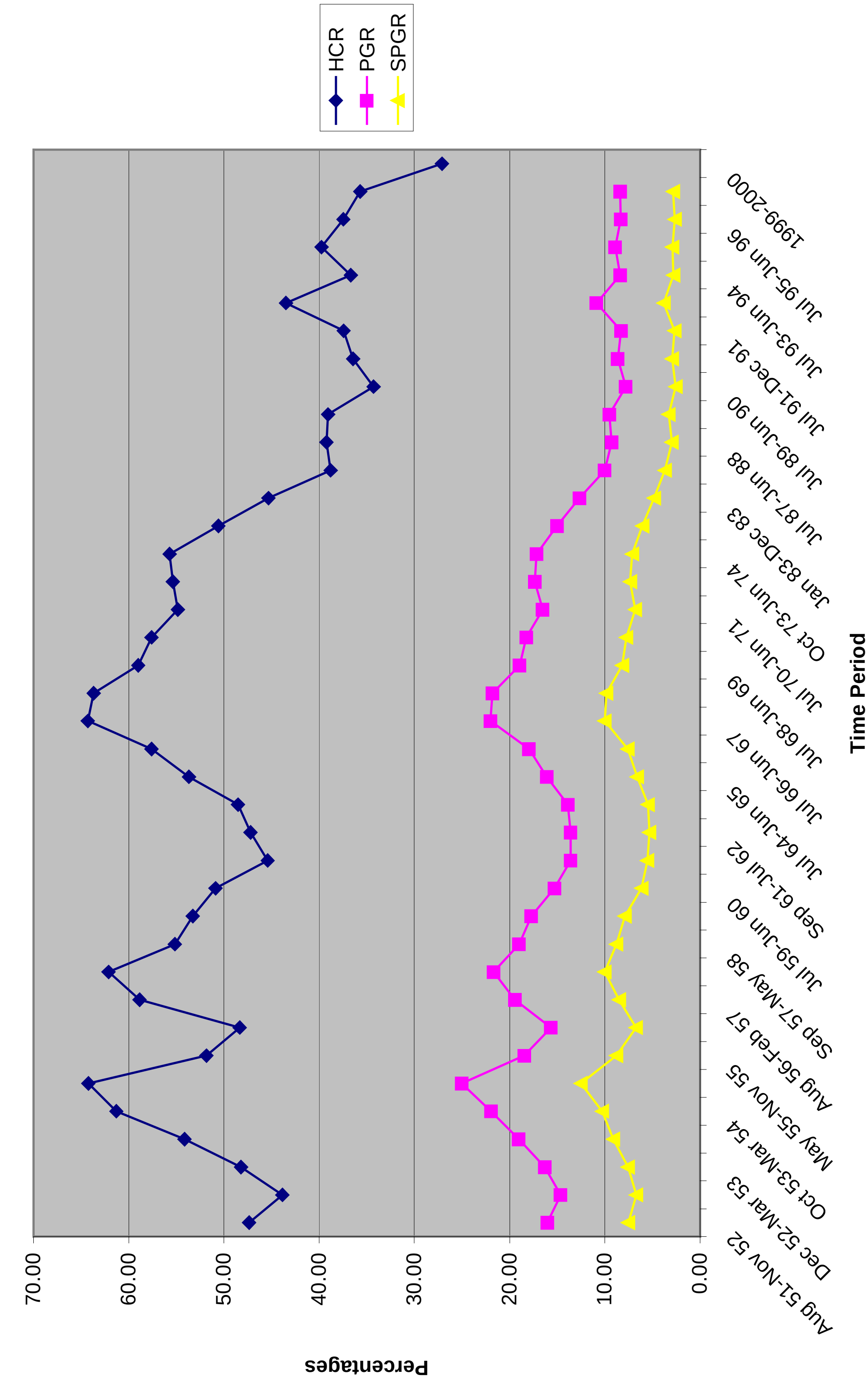
No.	States/U.T.'s	Rural		Urban		Combined	
		No. of Persons (Lakhs)	% of Persons	No. of Persons (Lakhs)	% of Persons	No. of Persons (Lakhs)	% of Persons
1.	Andhra Pradesh	48.14	9.15	55.96	24.48	104.10	13.79
2.	Arunachal Pradesh	3.23	34.00	0.15	6.29	3.38	28.41
3.	Assam	78.27	34.00	2.00	6.29	80.27	30.64
4.	Bihar	322.96	38.00	43.64	29.23	366.60	36.69
5.	Goa	0.23	2.80	0.40	5.03	0.62	3.90
6.	Gujarat	36.87	12.20	24.80	13.76	61.66	12.78
7.	Haryana	11.13	7.71	4.33	8.02	15.46	7.79
8.	Himachal Pradesh	4.63	7.61	0.24	3.95	4.88	7.27
9.	Jammu & Kashmir	3.10	4.14	0.42	1.70	3.52	3.53
10.	Karnataka	47.02	13.64	39.35	22.33	86.36	16.58
11.	Kerala	18.20	8.14	17.73	17.91	35.93	11.14
12.	Madhya Pradesh	202.78	34.58	74.93	35.46	277.70	34.81
13.	Maharashtra	109.25	20.71	96.81	25.23	206.05	22.61
14.	Manipur	5.54	34.00	0.56	6.29	6.10	24.21
15.	Meghalaya	6.70	34.00	0.29	6.29	6.99	28.75
16.	Mizoram	1.19	34.00	0.38	6.29	1.57	16.50
17.	Nagaland	4.42	34.00	0.24	6.29	4.66	27.73
18.	Orissa	131.63	43.98	23.92	40.33	155.55	43.38
19.	Punjab	8.53	5.31	4.03	5.40	12.56	5.34
20.	Rajasthan	48.97	12.22	25.36	18.80	74.33	13.88
21.	Sikkim	1.70	34.00	0.04	6.29	1.74	31.03
22.	Tamil Nadu	73.19	18.68	45.81	20.27	119.00	19.26
23.	Tripura	10.64	34.00	0.41	6.29	11.05	29.24
24.	Uttar Pradesh	379.41	28.75	110.82	29.04	490.23	28.82
25.	West Bengal	154.04	27.24	31.06	13.83	185.10	23.43
26.	A & N Island	0.52	18.68	0.22	20.27	0.75	19.13
27.	Chandigarh	0.06	5.40	0.42	5.40	0.48	5.40
28.	Dadra & Nagar Haveli	0.26	15.31	0.02	10.89	0.28	14.84
29.	Daman & Diu	0.02	2.80	0.04	5.03	0.05	3.92
30.	Delhi	0.12	0.63	6.52	5.38	6.64	4.75
31.	Lakshadweep	0.02	8.14	0.07	17.91	0.10	13.72
32.	Pondicherry	0.58	18.68	1.62	20.27	2.20	19.83
	All India	1713.35		612.57		2325.92	

Source: Government of India (2001)

Notes:

1. Poverty Ratio of Assam is used for Sikkim, Arunachal Pradesh, Meghalaya, Mizoram, Manipur, Nagaland and Tripura.
2. Poverty Line of Maharashtra and expenditure distribution of Goa is used to estimate poverty ratio of Goa.
3. Poverty Line of Himachal Pradesh and expenditure distribution of Jammu & Kashmir is used to estimate poverty ratio of Jammu & Kashmir.
4. Poverty Ratio of Tamil Nadu is used for Pondicherry and A & N Island.
5. Urban Poverty Ratio of Punjab used for both rural and urban poverty of Chandigarh.
6. Poverty Line of Maharashtra and expenditure distribution of Dadra & Nagar Haveli is used to estimate poverty ratio of Dadra & Nagar Haveli.
7. Poverty Ratio of Goa is used for Daman & Diu.
8. Poverty Ratio of Kerala is used for Lakshadweep.
9. Urban Poverty Ratio of Rajasthan may be treated as tentative

Figure 1: Profile of Rural Poverty in India, HC, PG and SPG



Poverty at an even more disaggregated level – the NSS regions - are portrayed in Table 5 which classifies the NSS regions into four groups – according to whether HCR was higher or lower than 40% in 1993-94 and whether there was a fall or rise in HCR between 1987-88 and 1993-94.

All regions in the northeast corner of Table 5 should be of particular concern to policy makers. Even among these Southern Bihar (now Jharkhand), Coastal Orissa and Eastern Maharshtra are of greatest concern since the rise in HCR was more than 5% and these regions had HCR of more than 50% in 1987-88.

Table 5: Characteristics of Rural Poverty Change between 1987-88 and 1994-94 among NSS regions

Low and Increasing	**High and Increasing**
Manipur Plains; Himachal Pradesh; Haryana; Himalayan UP; Mizoram	Four regions in Northern, Central and Eastern Maharashtra; South-west region of Madhya Pradesh; Assam; Arunachal Pradesh; Manipur Hills; Himalayan Region of West Bengal
Low and Decreasing	**High and Decreasing**
Inland and Southern Andhra Pradesh; Saurashtra Region of Gujarat; Coastal and Inland Eastern Karnataka; Malwa and North Madhya Pradesh; Punjab; Goa; North-Eastern Rajasthan; Coastal Maharashtra; Andaman and Nicobar; Chandigarh; Delhi; Lakshdweep; Pondicherry	Central and northern Bihar; Southern, central and Eastern UP: Inland northern Karnataka; South, southwest and central Madhya Pradesh; Orissa, Southern Rajasthan; Sikkim; Coastal and southern Tamilnadu; Eastern, western and central plains of West Bengal; Dadra and Nagar Haveli.

N.B. (i) "High" denotes HCR of 40% and above in 1993-94.
(ii) Increase/decrease between two periods of 1987-88 and 1993-94.

Source: Dubey and Gangopadhyay (1998).

Table 6 depicts the behavior of inequality. The rural Gini coefficient does not show any particular trend except that it grew marginally between 1994-95 and 1996-97. The coefficient of variation of rural Ginis across Indian states also fell. Thus the Gini rose for most Indian states during this period. The urban Gini, which is always higher than the rural Gini, has grown steadily since 1994-95 and in 1997 stood at one of its highest values ever. The coefficient of variation of the urban Gini shows no particular trend. Overall inequality in Indian society has increased over time. [Jha (2000a)].

Table 6: Selected measures of inequality: 1957-97

Rural	Rural Gini (%)	Urban Gini (%)
1957-58	33.74	35.90
1963-64	29.01	36.54
1968-69	30.70	32.90
1973-74	28.30	31.50
1977-78	31.20	33.70
1983	30.10	33.40
1986-87	30.15	35.60
1987-88	30.16	35.57
1989-90	28.23	35.59

1990-91	27.71	33.95
1992	29.88	35.55
1993-94	28.50	34.50
1994-95	29.19	33.43
1995-96	28.97	35.36
1997	30.11	36.12

Source: Jha (2000a).

Since data from the NSS regions are available for just two time periods, no analysis of trends in spatial variation is possible using these regions. However, a state level analysis is possible. In Figure 2 I plot the coefficients of variation across Indian states of the HCR. Figure 3 depicts trends in PG in the rural sector and Figure 4 in rural SPG. Inequality in the incidence of poverty – particularly rural poverty – seems to be growing over time, particularly since the reforms. Some states have registered sharp drops in poverty whereas (at least until 1997) the poverty performance of states such as Bihar and Orissa deteriorated sharply. This could also be true of the more disaggregated NSS regional level data.

Figure 2: Coefficients of Variation of Head Count Ratios in the Rural, Urban and Aggregte Sectors

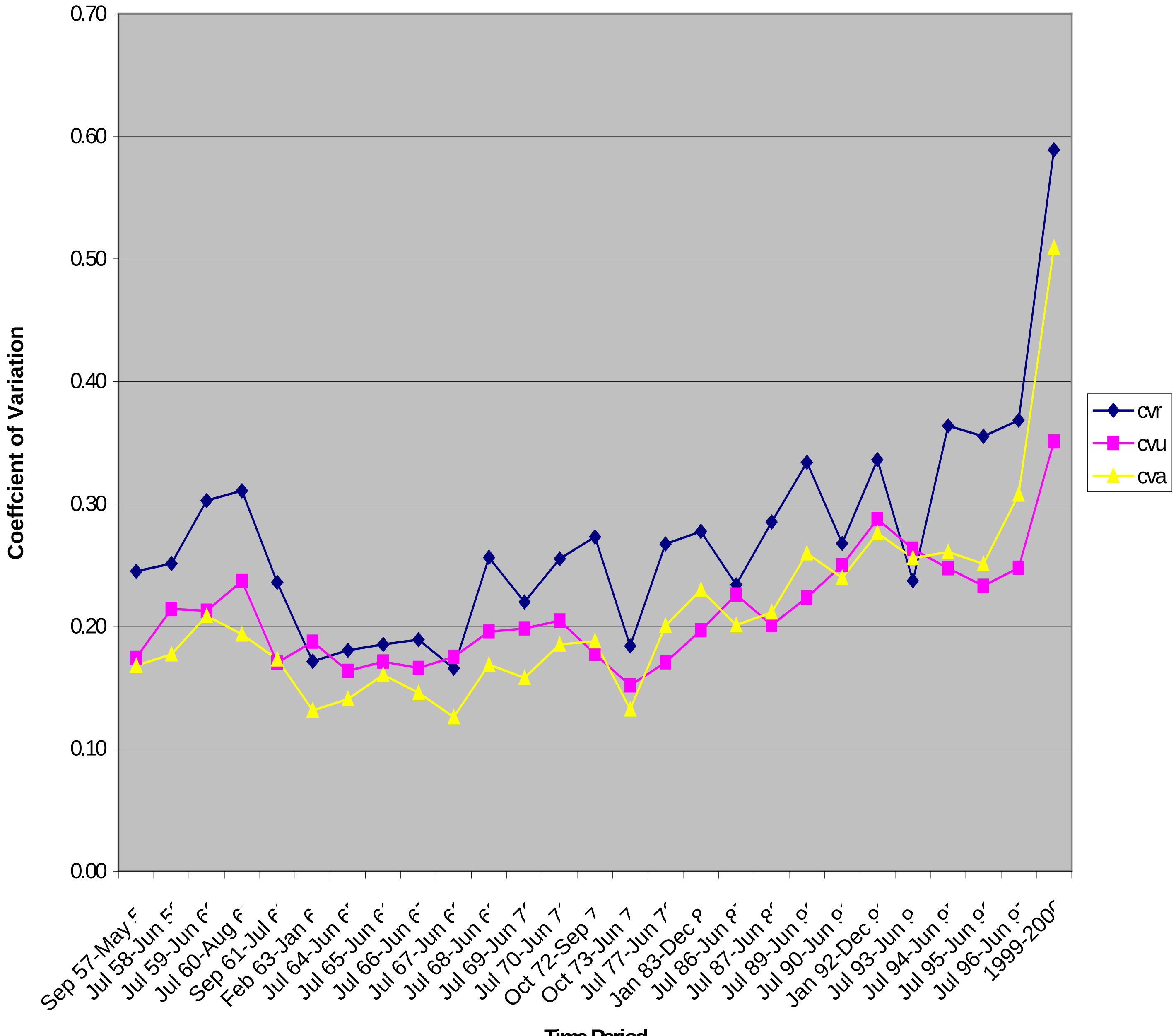


Figure 3: CV of Poverty Gap

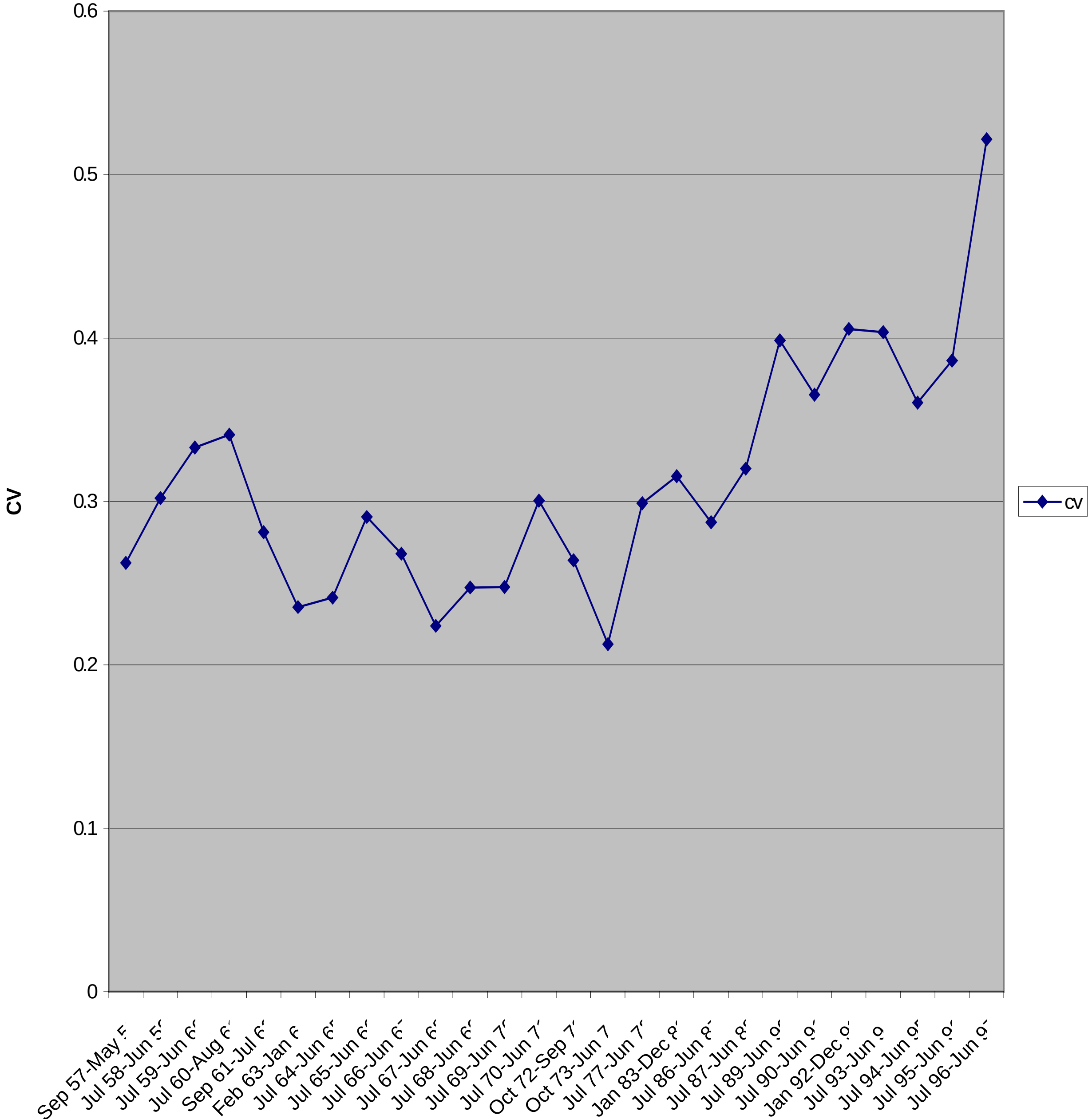


Figure 4: CV of SPG

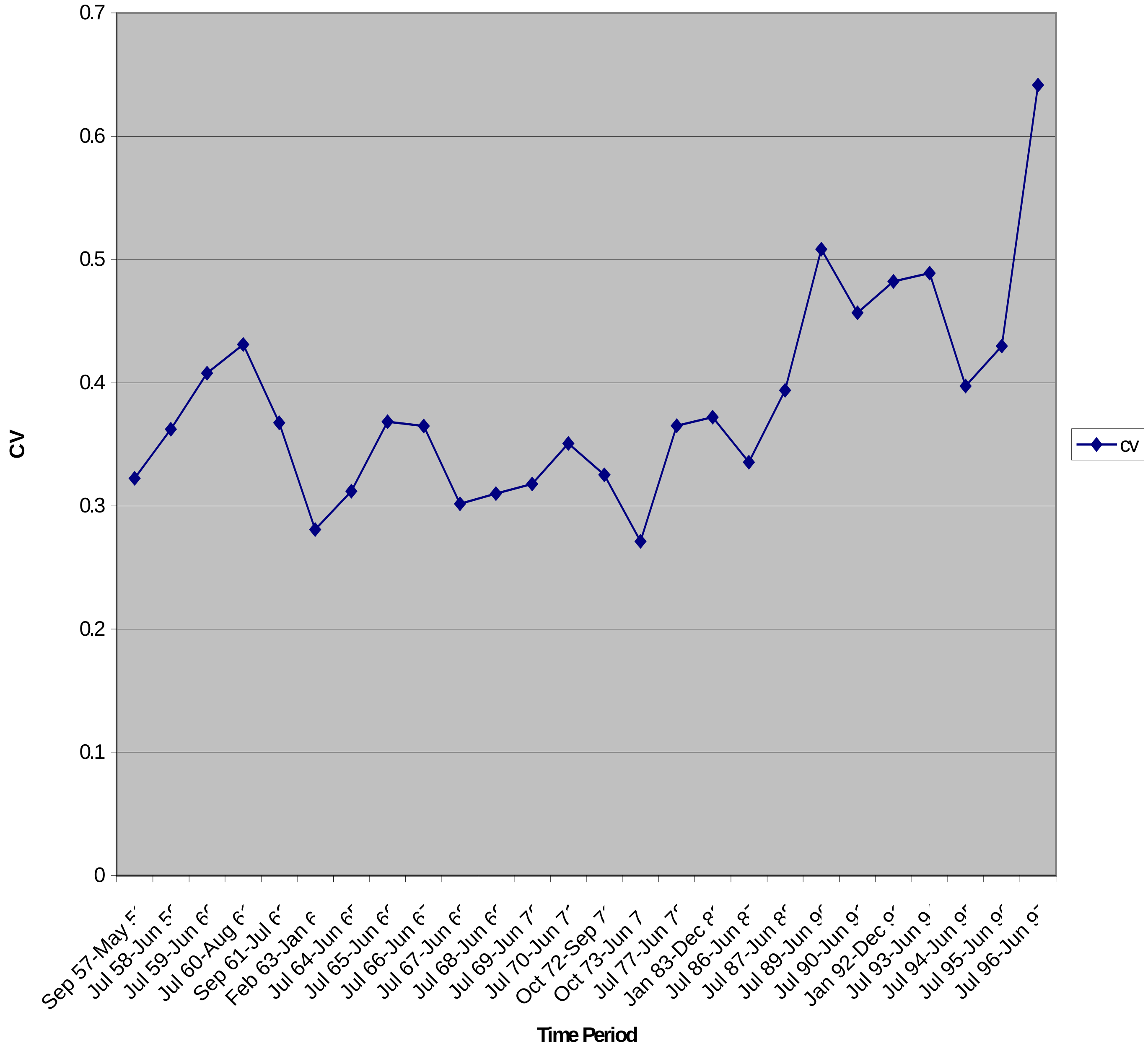
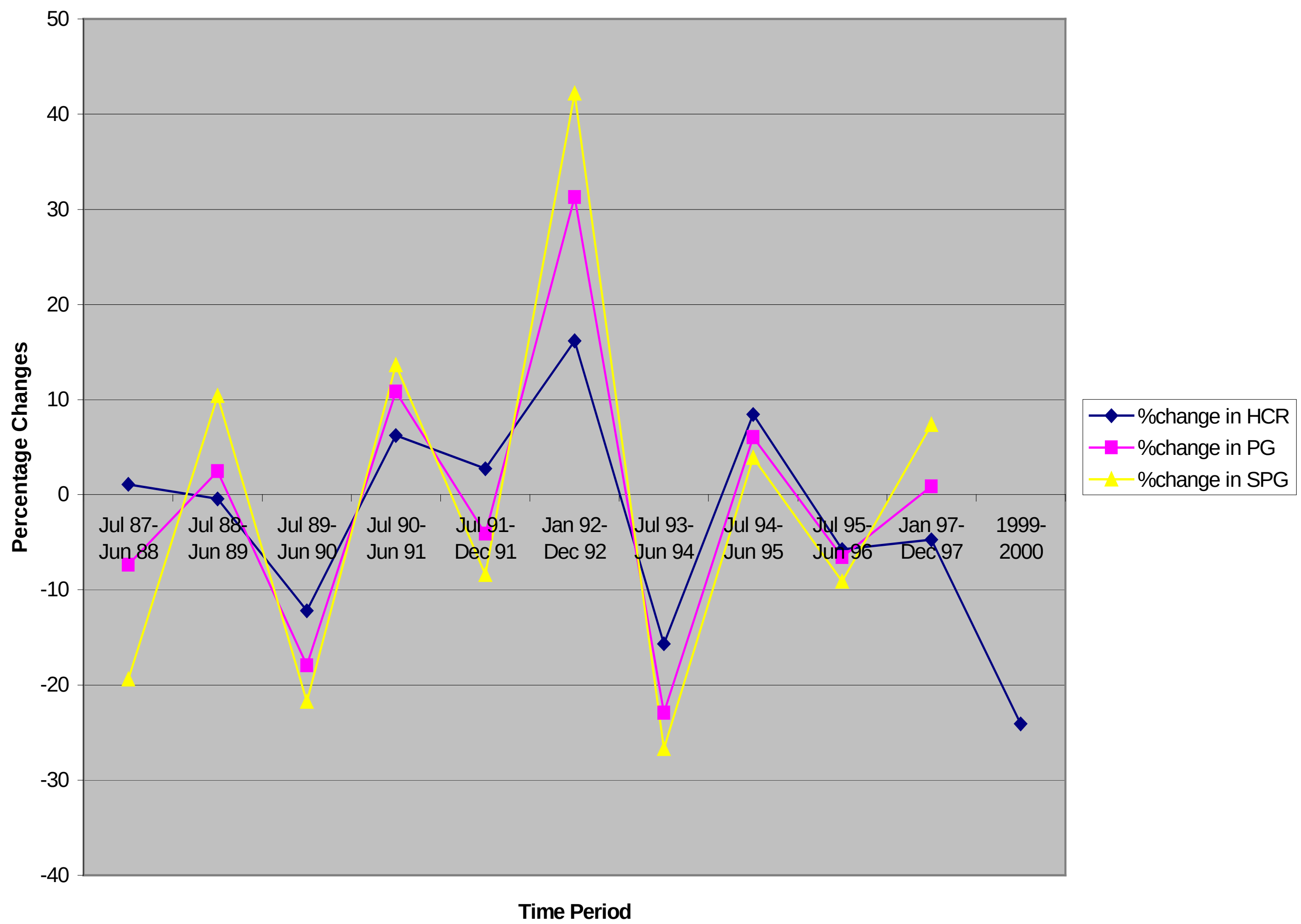


Figure 5 tracks percentage changes in the three measures of rural poverty over time. Of particular importance is the fact that since mid 1990s the HCR has behaved in a fundamentally different manner than the PGR and SPGR. Between 1995-96 and 1997 although the HCR registered negative growth, the PGR and SPGR registered increases. Thus, it would seem that although the proportion of poor below the poverty line has decreased, the severity of poverty has not.

Another point to note is that, in the early 1990s when poverty increased in response to the reforms, the percentage increase was greater for the PGR and SPGR than for the HCR. In fact whenever there are sharpest adverse poverty shocks (defined as a 10 percent or higher increase in SPG) the worsening of PGR and SPGR is greater[3] than HCR. Hence, the data seems to suggest that the poorest of the poor suffer inordinately higher during a period of severe adverse shocks and that the poorest did not benefit as much as the other poor during rapid economic growth.

[3] *A further example of this is the increase in poverty following the severe drought in 1987.*

Figure 5: Percentage Changes in Rural Poverty Indicators



Jha (2000b) reports on poverty and inequality in 14 Indian states: Andhra Pradesh, Assam, Bihar, Gujarat, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab (along with Haryana), Rajasthan, Tamilnadu, Uttar Pradesh, and West Bengal[4]. This analysis reveals a rich variety of experiences. For example, the rural Gini went up for India as a whole between 1993-94 and 1994-95, but fell at the state level in Andhra Pradesh, Madhya Pradesh, Orissa, Punjab, Tamilnadu, and West Bengal. The aggregate rural Gini fell between 1994-95 and 1995-96, but rose in Assam, Bihar, Kerala, Madhya Pradesh, Orissa, and Uttar Pradesh. Some states, e.g., Punjab and Andhra Pradesh, have reduced poverty impressively. In contrast, poverty has worsened in Assam, and its incidence remains disturbingly high in a populous state such as Bihar.

Some states that have had high rates of economic growth and enjoy high per capita consumption also show low inequality (and poverty levels) compared to states that are lagging behind. For example, the rural Gini for Bihar was 31.65 in the 13th Round (1957-58) and had deteriorated to 38.9 by the 52nd Round (1995-96)**.** Bihar has also had low rates of economic growth and is among the poorest states in India. On the other hand, in Punjab, the richest state[31] in the country, the rural Gini coefficient dropped from 32.2 to 24.4 over the same time period, with poverty falling sharply.

To illuminate the behavior of inequality at the level of states as a group, a number of panel regressions (covering the period 1957-97 for fourteen states) were run relating rural and urban Ginis to a host of variables. The best results are as follows.

GINIR=	0.00528 time	+0.34 HCR	+0.2569 RMCR	+0.00125 RMCR2
	(3.2752)*	(16.1379)*	(3.638)*	(1.8459)*
GINIU=	0.00518 time	+0.343 HCU	+0.4267 RMCU	-0.00111 RMCU2
	(3.543)*	(16.1367)*	(9.076)*	(-3.359)*

(A * indicates significance at 5%).

GINIR, GINIU, HCR, HCU, RMCR, RMCU, RMCR2, RMCU2 are, respectively, the rural Gini, the urban Gini, the rural head count ratio, the urban head count ratio, rural real mean consumption, urban real mean consumption; the square of the rural real mean consumption, and the square of the urban real mean consumption. The *t*-values (in parentheses) indicate that all coefficients are significant at 5 percent. The VARCOMPmodel is rejected in favor of the Within Model using the Hausman test at 5% in both sectors. In both sectors, inequality has a tendency to rise over time, and this tends to be accompanied by a rise in poverty**.** In the rural sector, inequality rises monotonically with mean consumption, whereas in the urban sector it may fall after a very large value of real mean consumption is reached. Furthermore, whereas the coefficients on poverty and time are comparable for the two sectors, the coefficient on real consumption is much higher in the urban sector. This underscores our finding that urban growth has been more inequalizing than rural growth. Overall, in the Indian context, there is reason to view growth as tending to increase inequality[5].

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[4] *Haryana and Punjab are considered as one state since they were one state until the mid 1960s. It would be interesting to conduct the regional analysis using he regions of NSS as units. However, calculations for these are hard to find. The results of Dubey and Gangaopdhyaya (1998) for 1987-88 and 1993-94 are the only ones known to exist. These results have already been discussed.*

[5] *However, it is important to state the caveat that the head count ratio, the Gini coefficient and real consumption could be mutually endogenous. We have not tested for this and if this turned out to be the case,*

Given these differences among states, it is pertinent to inquire whether there is formal statistical convergence in the performance of the states. In Jha (2000a) I conducted two modern tests of convergence (the rank test and the level test). In the rural sector there seems o be rank convergence only for the first two years for the Gini coefficient. In the urban sector this happens for the first four years for the Gini. In all other cases, the null hypothesis of no agreements among the ranks is rejected. Hence, by and large, there has been remarkable stability in ranks across these states in regards to these critical welfare-determining variables. Rank convergence obtains in urban mean consumption for some years, but not for other variables. States may not converge in ranks, but may do so in levels. To check this, the levels test of Evans & Karras (1996), an improvement upon the standard (β-type) tests of convergence, was carried out. Again there is a problem with convergence. In respect of poverty, inequality and mean consumption each state appears to be gravitating towards its own (individual) mean rather than to the (individual) grand mean. Hence, convergence is conditional rather than absolute. Regional inequality is becoming increasingly important.

III. A Summing up of Urgent Policy Reform

Much work needs to be done to push forward the reforms process - perhaps the most important of these is for the economic reforms begun at the central level to percolate to the level of individual states. On the macroeconomic side fiscal deficits of both central and state governments have to be reined in. This in itself requires considerable tax and expenditure reform and rational use of user fees for public services. The reform of public sector undertakings is well overdue. To function well, public sector undertakings must have more autonomy. Further, many of the assets (such as prime land other facilities) of these undertakings can be revenue earning but the government has been unable to give these undertakings the freedom to pursue such activities. To stimulate growth in the industrial sector all remaining barriers to entry must be removed. The climate for FDI investment needs to be improved further. Further, much needs to be done to improve the efficiency of capital and labor markets so that resources can be accumulated more efficiently and factor markets can function more smoothly. India's infrastructure development – particularly roads, ports and electricity - is urgent if she is to grow fast. Public funds are scarce and developing a legal and industrial framework for the involvement of the private sector in such development is a matter of priority. To stimulate rural development and lower rural poverty on an emergent basis, public investment should be redirected toward the rural sector and well targeted in terms of regions – those with high poverty and rainfed areas[6] – as well as people – the landless and small farmers. Rural, non-agricultural development is crucial for poverty reduction. Infrastructural investment would be crucial for this. Thus pressures for additional public investment continue. There is a serious paucity of public resources unless tax/GDP

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instrumental variable estimation would have been warranted. We did experiment with dummies for the reform period but these turned out to be insignificant and are not reported.

[6] *Fan and Hazell (2000) provide evidence of the effectiveness of investment in rainfed areas. The Fan-Hazell study classifies the districts into irrigated, and high and low potential rainfed areas. Two important features of the econometric analysis are: (i) focus on the disaggregation of infrastructure; and (ii) the computation of the impacts (direct and indirect) of different types of infrastructure and technology on production and poverty (e.g. roads contribute directly to production and on poverty through the effect of production on wages). The main findings are as follows: (a) For every investment, the highest marginal impact on production and poverty alleviation occurs in one of the two types of rainfed areas, while irrigated areas rank second or last. Many types of investments in low potential rainfed areas yield some of the highest production returns, and all types of investment except markets and education have some of the most favourable impacts on poverty. As this analysis does not explicitly consider differences in the costs of providing infrastructure (e.g. roads are costlier to build in remote mountainous areas), the evidence presented has some gaps. All that might be claimed legitimately on the present evidence is that the potential of larger investments in such areas, for poverty alleviation as well as production returns, must not be underestimated*

ratios and pubic savings pick up. There is ample scope for both in India. There is certainly a need for private investment but the private sector would not be interested in the poorest areas of India without substantial inducement. Reform of price policy with regard to inputs is necessary to ensure that such investment is not mistargeted. User cost pricing of ground water would lead to redirection of private investment away from excessive use of pumps and overuse of groundwater resources, which lead to depletion of the water table. Deep structural and financial reforms of the state electricity boards are well overdue.

Complementary Social Measures

The Government of India has been well aware that the reform and structural adjustment program initiated by it would result in a temporary fall in public expenditure – particularly consumption subsidies geared towards the poor and that economic growth did not automatically "trickle down" to the poor[7]. Hence, a number of poverty reduction programs (PRP) were initiated. Thus the Food for Work program begun in 1977, subsidized food supplies through a Public Distribution System[8] (PDS) and concessional loan schemes for on- and off-farm development for both small farmers (SFDP) and marginal farmers and agricultural laborers (MFALP).

Apart from these, most current programs concentrate on the creation of rural wage and self-employment program through asset endowment rather than on needs-oriented programs, which were designed to ensure access to basic amenities such as drinking water to the poor. The most prominent among these is the Jawahar Rozgar Yojana (JRY), which brings together the National Rural Employment Program and the Rural Landless Employment Guarantee Program. Among these the Maharashtra Employment Guarantee Scheme (MEGS), which derives its success mainly from the strong political commitment of the state government (Hirway and Terhal (1994)), is the best known. The MESG employs labor to create productive assets such as small-scale irrigation schemes, maintain roads and the like and pays wages on par with prevailing agricultural wages. Since the non-poor also find these jobs attractive, the MESG does not offer the poor the opportunity to self select themselves into its schemes. Other programs include the Integrated Rural Development Program (IRDP), the Employment Assurance Scheme and the Accelerated Rural Water

[7] *There is some disagreement about the extent of increase in poverty during the initial phase of the reform and the extent to which the reforms are responsible for this increase. Whereas Tendulkar and Jain (1995) and Gupta (1995) are willing to attribute some of the increase in rural poverty during this phase to the reforms, Datt and Ravallion (1997) after some careful empirical work argue that the vast bulk (about nine-tenths) of the measured deterioration in rural living standards in India in the immediate aftermath of the reforms is not attributable to the reforms themselves. Referring to the period 1993-94 to 1999-2000, Sundaram (2000) concludes that the principal changes in the rural sector were as follows: The share of rural areas in the work force fell by a little over 2 percentage points – from 78% in 1993-94 to about 76% in 1999-2000. The share of women workers also fell from 22.5% to 21%, over this period. There was a sharp rise in the daily (status) unemployment rate for rural males and females (29% and 21%, respectively). For both males and females, real average daily wage earnings of casual labourers in rural India grew at about 3% per annum. Average wage earning per capita rose at about 2.5% per annum in rural India, over the period in question. As wage laborers cover a segment of the rural poor, the growth of average wage earnings per capita is broadly consistent with a decline in rural poverty. Considering, however, that little is known about changes in other components of household income over this period, any inference about the pace of reduction in rural poverty must be avoided.*

[8] *The Public Distribution Scheme was designed to reduce disruptions in food supply and interstate differences in food availability. The GOI and the Food Corporation of India procure food grain – particularly rice, wheat and sugar – from farmers and sell them to state governments at a subsidized price – the issue price. The state governments then sell this food to ration cardholders. In recent times there has been a move to differentiate between ration card hordes that are above the poverty line from those that are below it and to charge the two groups different prices. There are a number of problems with the PDS. For one, its allocation scheme is badly designed [Jha, Murty, Nagarajan and Seth (1999)]. In addition, it is badly targeted and many poor persons have difficulties obtaining ration cards.*

Supply Program. These programs assist marginal and small farmers, agricultural laborers and artisans with investments in minor irrigation, livestock purchases and the like through grants and loans at subsidized interest rates. JRY and IRDP have recently been renamed as Jawahar Gram Samridhi Yojana (JGSY) and Swaranjayanthi Gram Swarozgar Yojana (SGSY), respectively, with some restructuring. JGSY involves two changes: (i) the implementing agency is exclusively the village Panchayats; and (ii) the main focus has been shifted to infrastructure development with employment generation being considered a secondary objective. Since efforts to improve infrastructure will have beneficial effects on poverty reduction only after a lag, the main short-run responsibility for a social safety net has been shifted to Employment Assurance Scheme (EAS). SGSY is an improvement on IRDP as it replaces individual lending with group lending, but the subsidy is retained. (Gaiha (2000b)). The Ninth Five Year Plan document, GOI (1997), put forward ambitious targets for poverty reduction. These targets are unlikely to be realized. Saxena (2000) enumerates serious problems in both formulation as well as implementation of PRP. The IRDP, for instance, has involved "sub-critical investment, unviable projects, lack of technological and institutional capabilities in designing and executing projects utilizing local resources and expertise; illiterate and unskilled beneficiaries with no experience in managing an enterprise; indifferent delivery of credit by banks (high transactions cost, complex procedure, corruption, one time credit, poor recovery), overcrowding of lending in certain projects such as dairying, poor targeting and selection of non-poor, absence of linkage between different components of the IRDP, rising indebtedness, and sale of IRDP outstripping capacity of government and banks to absorb." IRDP beneficiaries were also likely to remain indebted for long. RPW programs were also ineffective as they involved violation of material-labor (60:40) norms and fudging of muster rolls. Many of the contractors hired labor from outside the scheme. Central norms for setting aside 40 % of funds for watershed development and 20 % for minor irrigation have been disregarded. "Today Rs. 60 out of Rs. 100 in wage schemes is reserved for wages, but in reality only Rs. 10 to Rs. 15 actually goes to the poor worker, the rest is illegal income for bureaucracy, contractors and politicians" Saxena (2000).

There are other PRP in place as well e.g., programs to counter area specific endemic poverty caused by hostile agro-climatic conditions and a degeneration of the eco-system (Gaiha (1991)). In addition a National Renewal Fund was set up in February 1992 to provide assistance to workers who would become redundant as a result of the adjustment program. This program was expected to finance the retraining, redeployment or retrenchment of redundant workers following a restructuring of industries. Despite budgetary pressures, funds have been maintained and even enhanced for these social programs[9] but their performance has been disappointing. To make programs more decentralized the Indian Parliament passed the 73rd. Amendment to the Constitution of India in 1993. The *Panchayat*, a village level organization, was made directly responsible for implementing PRP[10].

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[9] There are some PRP designed specifically for the urban sector. Some of these urban anti-poverty programs provide basic physical and social amenities to urban slums. The program focuses on mother and infant survival through immunization, nutritional supplements and preschool care. There is also provision for basic water supply, drainage and sanitation. In addition, there is a scheme for self-employment of educated and unemployed youth (age 18-35), which targets both rural as well as urban sectors. Youth whose families' incomes does not exceed Rs. 10 000 per annum are given a subsidy of 25 percent from the central government and with the rest to be borrowed from banks. It appears that the non-poor have been able to corner most of the benefits of this program as well.

[10] The salient features of this amendment were " a three tier structure comprising District, Block and Village panchayats with the Gram Sabha (Village Assembly) as the foundation; direct and periodic elections; quotas for Scheduled Castes/Scheduled Tribes (SCs/STs) backward classes and women; delineation of major areas of financial and administrative requirements; a rational basis for sharing of resources between state governments

IV. Elements of a Strategy for Rural Poverty Reduction

That "Poverty is a multi dimensional problem" is a well-known cliché. In the Indian case this problem is more important than probably anywhere else because of the vast numbers of people who are poor and the fact that poverty in India has been so well entrenched for so long. A number of studies have deliberated on the problem of designing an appropriate anti-poverty strategy for India. We will, hence, be brief and approach the problem from first principles. We structure our approach to such poverty reduction as answers to select questions.

A. Who are the poor in rural India?

The vast majority of the rural poor in India are engaged in agriculture (including fishery and livestock) either as agricultural wage laborers or marginal farmers and self-employed. Table 7 gives a breakdown of the occupational characteristics of the rural poor in India in 1993-94.

Table 7: Livelihood Characteristics of the Rural Poor in 1993-94
(Percentages)

		Social Groups			
	Livelihood Category	**Scheduled Tribe**	**Scheduled Caste**	**Others**	**All Households in Livelihood Category**
1	Self-Employed Households in Non-Agriculture	0.75	2.38	7.70	10.83
2	Agricultural Labor Households	6.49	16.19	18.91	41.59
3	Other Rural Labor Households	1.45	2.40	3.98	7.83
4	Self-employed Households in Agriculture	5.62	4.76	22.49	32.87
5	Other (Residual Households)	0.73	1.46	4.69	6.88
6	All Households	15.04	27.19	57.77	100.00

Source: *Sarvekshana*

Table 7 reveals several important characteristics of the rural poor. First, almost 42 percent of the rural poor fall into the most economically disadvantaged group of agricultural labor. More than half of this group consists of scheduled castes (SC) and scheduled tribes (ST). Hence SC/ST constitute more than half of the most vulnerable section of the rural poor. SC and ST are about 32 percent of the rural population but account for more than 42 percent of the poor. Hence, there is good rationale for the targeting of SC and ST. Even within the rural poor the case of women[11] is particularly worrisome.

Table 8 gives information on asset ownership for select social groups for the year 1993-94.

Table 8: Percentage Distribution of Rural Poor Across Land Possessed Categories for Select Target Groups: All India for 1993-94

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and panchayats, provision for executive and supporting staff; clear-cut procedures for dissolution/suppression of panchayats, and mandatory elections within six months of dissolution" Gaiha and Kulkarni (1998).

[11] *Thus the Census of 1991 noted that of the 111 591 326 rural households, 91.79 percent were headed by men and only 8.21 percent by women. Of the 40 418 141 urban households 92.36 percent were headed by men and only 7.64 percent by women. In the aggregate there were 152 009 467 households in India of which 91.92 percent were headed by men and 8.08 percent by women.*

	All Households		Percentage non-SC and non-ST	
Land Possessed category (hectares)	**SC**	**ST**	**Ag. Lab.**	**Self Employed in Agriculture**
Less than 0.01	16.95	11.0	15.82	0.69
0.01-0.40	52.13	28.41	59.72	11.47
0.41-1.00	16.51	22.46	16.49	29.74
1.01-2.00	8.84	20.07	6.09	30.11
2.01-4.00	3.88	20.07	6.09	30.11
4.01 and above	1.69	4.97	0.16	10.51
All Categories	100.00	100.00	100.00	100.00
HCR for category	50.3	54.2	54.4	27.3
Total Estimated Rural Population in category (millions)	123.4	63.2	79.3	187.9

Source: National Sample Survey Organization: Report No. 422.

Almost 85 percent of SC are marginal farmers with farm sizes less than 2 hectares. More ST have rights to land, however these are mostly forests related. 19 percent of the ST poor and 28 percent of non-SC and non-ST self employed agricultural poor, numbering about 21 million belong to the category of large farmers. Since as high as 33 percent of the rural poor population consists of households that are self-employed in agriculture, their poverty is clearly related to poor productivity in agriculture.

Hence, part of the answer to the question raised here is that the rural poor are primarily those with limited ownership of assets – including land. [Sundaram and Tendulkar (2000)]. They are also getting increasingly concentrated in certain parts of this country. Also certain social groups, SC and ST in particular, form disproportionately large sections of the poor. The ST pockets of poverty can be relatively easily identified. In particular the Eastern part of the country and pockets with preponderance of tribal population such as Bastar in Madhya Pradesh and the Santhal Pargana Areas of Bihar (now Jharkhand) are obvious candidates for this. The SC, on the other hand, are much more widely dispersed within the country.

Table 9 and 10 provide credit profiles of the poor. Among rural households there was a sharp drop in loans for productive purposes for cultivators between 1981 and 1991. The same is true for non-cultivators as well as all households. Further, within the productive investment category, for cultivators' loans for capital expenditures related to farm business fell sharply from 45.3 percent to 14.4 percent. There was a smaller drop for non-farm business capital expenditure for cultivators. Debts for current expenditures related to non-farm business for cultivators remained stagnant whereas there was a sharp drop in loans for current expenditures for farm business.

Table 9: Cash Debt by Households Classified by Purpose of Loan, 1971-1991 (%)

Purpose	**Rural Households**									**Urban Households**						
	Cultivators			**Non-Cultivators**			**All Households**			**Self Employed**		**Others**		**All Households**		
	1971	1981	1991	1971	1981	1991	1971	1981	1991	1981	1991	1981	1991	1981	1991	
1. In farm Business																2.5
Capital Expenses	34.7	45.3	14.4	5.0	8.4	2.4	31.2	42.4	12.0	7.2	5.7	4.3	0.3	5.6	2.5	
Current Expenses	15.0	18.5	3.2	2.5	5.9	0.7	13.5	17.6	2.7	8.1	0.2	1.1	0.1	4.4	0.1	
2. In non-farm business																
Capital expense	3.2	6.3	4.7	8.0	18.8	9.8	3.7	7.2	5.8	41.6	21.1	7.3	3.3	23.2	10.8	
Current expense	1.1	1.5	1.5	5.7	4.5	3.8	1.7	1.7	2.0	15.0	8.1	2.5	1.0	8.3	4.0	
3. Household Expenses																
Residential	37.8	20.0	5.1	63.3	51.0	11.8	40.9	22.4	6.5	13.1	28.7	54.3	44.6	35.0	37.9	
Current expenses	N.A.	N.A.	0.5	N.A.	N.A.	0.4	N.A.	N.A.	0.5	N.A.	0.1	N.A.	2.5	N.A.	1.5	
4. Productive expense (1+2)	54.0	71.6	23.8	21.2	37.8	16.7	50.1	69.2	22.5	74.9	35.1	15.2	4.7	41.6	17.4	
5. Other Purposes*	7.9	8.2	45.4	15.5	11.4	57.6	8.7	8.5	48.0	14.7	33.9	30.4	46.6	23.2	41.4	
6. Unspecified	0.3	0.2	25.2	0.4	-	13.5	0.3	0.2	22.8	0.3	2.2	0.2	1.4	0.2	1.8	
7. All Purposes	100.0	100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

N.B. (i) "Other purposes" relate to repayment of debt, expenditure on litigation, financial investment and other expenditures of households for 1971 and 1981' and also include 'other purposes' of farm and non-farm business for 1991.

(ii) The use of the term "productive purposes" is consistent with the definition used by NSS.

(iii) N.A. = not available.

Source: All India Debt and Investment Survey (1991-92) reported in *RBI Bulletin* February 2000.

Table 10: Proportion of Households Reporting Debt and Share in Total Amount Outstanding According to Credit Agency and Asset Group, 1991

Asset Group (Rs. 000)	Rural						Urban					
	Institutional Agencies		Non-Institutional Agencies		Total		Institutional Agencies		Non-Institutional Agencies		Total	
	P	S	P	S	P	S	P	S	P	S	P	S
Less than 5	5.3	37.1	14.2	62.0	18.9	100.0	2.9	31.7	14.2	65.7	16.1	100.0
5-10	9.8	38.4	22.2	56.8	30.7	100.0	4.9	23.0	19.5	72.4	23.1	100.0
10-20	10.7	35.2	21.3	52.0	30.2	100.0	8.8	37.3	20.3	58.8	27.1	100.0
20-30	15.5	55.7	19.4	38.0	32.2	100.0	8.1	36.9	17.4	52.5	24.8	100.0
30-50	15.3	46.9	20.3	50.4	32.6	100.0	11.2	42.0	19.4	53.2	27.3	100.0
50-70	15.8	47.6	19.7	49.2	31.9	100.0	12.0	51.5	18.4	47.3	27.6	100.0
70-100	16.8	49.8	20.7	46.3	33.1	100.0	12.4	47.3	23.3	48.0	32.7	100.0
100-150	19.4	52.2	21.5	41.3	35.3	100.0	19.0	82.4	18.8	16.4	31.8	100.0
150-250	20.2	58.8	19.6	27.8	38.2	100.0	21.2	72.0	14.2	24.4	31.1	100.0
250 and above	25.5	56.6	20.0	39.6	32.0	100.0	11.8	64.3	18.0	32.0	26.9	100.0
Total	15.6	56.6	20.0	39.6	32.0	100.0	11.8	64.3	18.0	32.0	26.9	100.0

N.B. (i) Debt comprises cash loans and current liabilities. (ii) Total includes unspecified; P = proportion of households reporting (percent), S = Percentage share in total.

Source: All India Debt and Investment Survey (1991-92) reported in *RBI Bulletin* February 2000.

For non-cultivators there was a drop in share of loans for capital and current purposes of a productive kind. Debts for “other purposes” increased from 8.2 percent in 1981 to 45.4 percent in 1991 for cultivators and from 11.4 to 57.6 percent for non-cultivators again between 1981 and 1991. Hence the rural credit situation in India is shifting toward more and more loans for non-productive purposes. This has important implications for private capital formation within the rural sector. It appears that along with stagnating public sector investment we should also expect stagnating private sector investment.

Table 10 shows a strong association between the share of non-institutional agencies in advancing loans and the size of the asset group – both in the rural as well as the urban sectors. Asset sizes are likely to be smallest for the poor. For the smallest asset group the share of non-institutional credit is the highest. This share falls as the asset size increases. Thus banks and other financial institutions have not reached the poor to any substantial extent. The poor still have to rely largely on non-institutional credit – particularly from moneylenders and relatives. Since the relatives of poor people are likely to also be poor, the share of moneylenders is likely to be high.

To complete characterization of the poor we should examine the microeconomics of decision-making within the family of the rural poor. There are important inequalities within the typical rural family in general and that of the rural poor in particular. Women and children are less well looked after than men. As one example, Table 11 presents evidence on the education status of the bottom 40 percent of the rural population. Although the information is a bit dated, it does point out the fact that illiteracy among the poor is uniformly higher among females than males. In no state, including Kerala, are females less illiterate than men. Table 12 attests to the poor rates of literacy attained by women.

Table 11: Literacy Status of Persons belonging to Bottom 40 Percent of Rural Population (1986-87) (%)

S. No.	State	Literacy Codes									
		0	1	2	3	4	5	6	7	8	9
1	Andhra Pradesh										
	Male	53.20	17.54	9.56	4.80	-	1.20	0.29	0.12	0.09	-
	Female	67.64	9.67	3.70	1.08	0.01	0.23	0.14	0.42	0.04	-
2	Assam										
	Male	49.17	10.48	20.64	13.42	-	4.28	1.38	0.30	0.10	-
	Female	61.50	10.16	16.83	7.67	-	1.53	0.36	-	-	-
3	Bihar										
	Male	62.47	10.82	8.12	7.76	0.05	2.68	0.76	0.10	0.30	0.89
	Female	80.52	4.62	2.43	1.46	0.04	0.24	0.05	0.04	0.01	-
4	Gujarat										
	Male	47.19	15.85	16.15	21.13	0.09	3.78	0.42	0.24	0.33	0.10
	Female	71.60	11.30	9.65	4.45	0.12	1.07	0.45	0.03	0.01	-
5	Haryana										
	Male	77.19	19.39	14.76	6.27	-	3.72	0.98	0.06	0.53	0.04
	Female	54.77	11.99	8.28	1.30	-	0.16	0.04	-	-	-
6	Jammu & Kashmir										
	Male	49.43	16.16	11.85	8.94	0.03	2.85	0.50	0.14	0.39	0.11
	Female	70.71	9.15	5.13	1.65	0.13	0.55	0.07	-	-	-
7	Karnataka										
	Male	42.05	15.36	14.45	8.24	-	2.36	0.60	0.14	0.33	0.01
	Female	56.92	7.99	6.99	3.69	-	0.43	0.17	-	0.05	0.02
8	Kerala										
	Male	20.66	21.46	30.40	16.67	0.04	4.36	0.49	0.35	0.11	0.08
	Female	23.51	20.46	28.47	14.58	-	4.88	0.60	0.35	0.25	0.19
9	Madhya Pradesh										
	Male	64.78	19.35	9.71	2.66	0.010	0.61	0.75	0.03	0.09	0.02
	Female	89.25	5.17	2.98	1.08	-	0.36	0.10	0.01	0.02	-
10	Maharashtra										
	Male	39.51	15.48	19.01	11.18	0.03	2.83	0.53	0.15	0.44	0.05
	Female	56.03	11.48	10.60	4.20	-	0.77	0.11	0.06	0.03	-

11	Orissa										
	Male	66.16	15.91	9.35	6.12	-	0.77	0.46	0.08	0.11	-
	Female	84.89	7.96	3.32	2.23	-	0.27	0.03	0.03	-	-
12	Punjab										
	Male	47.14	15.25	15.15	6.70	0.21	4.01	0.61	0.25	0.21	0.22
	Female	68.44	14.84	12.88	2.58	0.09	0.25	0.23	0.25	0.06	-
13	Rajasthan										
	Male	64.14	17.10	8.37	5.52	-	1.05	0.70	0.04	0.31	0.05
	Female	91.08	4.14	1.88	0.42	-	0.04	0.01	-	-	-
14	Tamil Nadu										
	Male	41.51	26.32	7.97	8.75	-	1.80	0.26	0.26	0.19	0.05
	Female	64.87	17.67	10.42	2.90	0.01	0.51	0.10	0.02	0.05	-
15	Uttar Pradesh										
	Male	62.93	14.89	9.73	7.21	0.02	2.45	1.24	0.13	0.38	0.15
	Female	89.25	5.17	2.98	1.08	-	0.36	0.10	0.02	0.05	-
16	West Bengal										
	Male	62.71	15.42	14.29	3.48	-	0.97	0.40	0.08	0.23	0.01
	Female	76.69	8.87	7.45	1.28	-	0.21	0.03	0.01	-	-

0: Not Literate
1: Literate but below primary/Not undergone any formal education
2: Primary/Junior basic
3: Middle/Senior basic
4: Technical/Vocational school course
5: Matric/Secondary
6: Higher secondary/Per-university/ Intermediate
7: Under graduate, diploma/Certificate not equivalent to degree
8: Degree/Diploma equivalent to degree (at Graduation level)
Post graduate/Diploma certificate

Source: Sarvekshana, 55th Issue, Vol. XVI, No.4, and April-June 1993.

Table 12: Female Literacy in India - 1961-2001 (%)

Year	Rural	Urban	Overall
1961*	10.13	40.46	15.33
1971*	15.52	48.84	21.97
1981*	20.66	54.40	28.47
1991**	30.62	64.05	39.29
2001+	54.16	NA	NA

*: Relates to population 5 years and above
**: Relates to population 7 years and above
NA = Not Available.
Source: Statistical Database for Literacy - Vol.2, 1993, National Institute of Adult Education
+ Source of data for 2001 is Census of India, 2001.

Another particularly vulnerable section of the poor is the children. In terms of attainments for children, India performs poorly. A majority of Indian children under 5 (irrespective of the poverty status of their families) are underweight and the percentage of children that are wasting is among the highest in India. One can imagine that the status of children of families in poverty is even worse than that depicted in Table 13.

Table 13: Select Social Indicators: India in Comparison to Asia

Country	Adult Illiteracy Rate (age 15 and older) (%), 1997	Female Illiteracy Rate (Age 15-24) (%), 1997	Children under five who are underweight (%) 1990-98	Children under five who are Wasting (%) 1990-98	People not expected to survive to age 15, (%) 1997	People not expected to survive to age 40 (%), 1997
Bangladesh	61	63	56	18	13	21
Cambodia	.	43	52	13	17	28
China	17	4	16	.	5	8
India	47	44	53	18	11	16
Indonesia	15	4	34	13	7	13
Iran	27	10	16	7	6	10
South Korea	3	0	.	.	2	5
Lao	41	.	40	11	19	29
Malaysia	14	3	19	.	2	5
Mongolia	16	11	39	.	13	18
Myanmar	16	11	39	.	13	18
Nepal	62	62	47	11	14	23
Pakistan	59	61	38	.	12	15
Philippines	5	2	28	6	5	9
Singapore	9	0	.	.	1	2
Sri Lanka	9	4	34	14	2	5
Thailand	5	2	19	6	4	11
Vietnam	8	3	41	14	7	12

Source: UNDP, Poverty Report 2000.

Table 14: Percentage Distribution of Child Workers in India by Industry of Occupation

Location of Child Workers	Urban	Rural	Total
Cultivation	5.32	38.87	35.93
Agricultural Labor	14.73	45.42	42.74
Livestock, Forestry, Fishing Plantation	3.07	6.61	6.30
Mining and Quarrying	0.20	0.25	0.24

Manufacturing, Processing, Servicing and Repairs	39.16	5.72	8.65
Construction	3.27	0.47	0.72
Trade and Commerce	15.03	0.96	2.19
Transport, Storage and Communication	2.45	0.10	0.30
Other Services	16.77	1.60	2.93

Source: Census of India, 1981.

Table 14 makes striking reading. First, nearly 85 percent of child workers in India are employed in cultivation, agricultural laborers and livestock maintenance. Second, since these are occupations with low productivity of labor, one would not expect the economic conditions of these children to improve[12] when they become adults[13]. If the aim of the anti-poverty program is not just to alleviate current poverty but also to ensure that today's children do not fall into the poverty trap in the future, the targeting of anti-poverty programs must be sensitive to the composition and occupational structure of the family. Table 15 gives information on the educational status of the children of the poor as well as on dropout rates for girls.

Thus, in answer to the question posed, we can say that the rural poor are primarily those with very limited ownership of assets, including land and poor literacy status. SC and ST form disproportionately large amounts of the poor. The poor appear to be disadvantaged in the rural credit markets. This is all in the aggregate. Women are significantly more disadvantaged than men. They have poorer literacy rates and even less control over decision-making within the family and over family assets. The status of even a large section of the non-poor children in India is disturbing and that of children from poor families positively alarming.

[12] *This does not mean, of course, that the economic condition of children working in other occupations is any better. Nangia (1987) complied data from a sample study of adult and children's working condition in Delhi in 1983. Based on employer interviews he reported that for the same type of work only 39.5 percent of the children got wages equal to that of adults, 19.1 percent got wages equal to half that of adults, 7 percent received between half to a third of the adult wage whereas 6 percent of child workers received only a quarter of adult wages. Payments to 24.7 percent of the child workers belonged to the "uncertain" category.*

[13] *The Delhi study is only indicative of a widely prevalent trend. On a more general note, Grootaert and Kanbur (1995) note that "children's earnings are consistently lower than those of adults, even where these two groups are engaged in the same tasks".*

Table 15: Distribution of Rural Children (6-14 years) Over Levels of Education (1986 - 87) (%)

S. No.	State	Level of Education							
		1	1	2	2	3	3	4	4
		Male	Female	Male	Female	Male	Female	Male	Female
1	Andhra Pradesh	26.53	41.73	30.70	18.64	15.11	9.62	0.45	0.53
2	Assam	27.73	33.40	13.65	14.63	35.03	29.33	5.75	4.24
3	Bihar	46.44	65.04	20.50	16.83	14.50	6.51	1.92	0.51
4	Gujarat	20.76	32.54	17.95	18.77	24.11	23.03	3.22	3.35
5	Haryana	13.34	32.23	33.77	27.82	12.67	11.10	0.21	14.27
6	Jammu & Kashmir	24.66	46.57	32.84	25.27	7.60	4.25	13.99	6.56
7	Karnataka	21.97	32.36	17.98	18.22	22.28	16.85	13.66	1.55
8	Kerala	0.93	1.53	1.16	8.73	36.52	40.38	0.45	0.77
9	Madhya Pradesh	36.43	32.99	38.46	23.47	8.64	4.20	0.08	0.25
10	Maharashtra	13.33	24.05	19.86	20.92	31.28	24.44	1.75	1.29
11	Orissa	39.30	55.53	26.92	26.02	19.05	12.41	1.09	1.01
12	Punjab	23.74	28.67	23.32	30.19	13.16	11.46	0.63	0.51
13	Rajasthan	32.72	75.53	35.81	12.09	7.70	4.42	0.43	0.27
14	Tamil Nadu	15.39	28.00	28.32	37.38	22.53	19.09	0.43	0.73
15	Uttar Pradesh	34.00	66.87	29.07	17.45	12.56	4.78	0.55	0.53
16	West Bengal	38.50	51.46	25.40	24.20	13.03	10.48	0.24	0.22

Codes: 1: Not Literate.
2: Literate but below primary/not undergone any formal education.
3: Primary/Junior basic.
4: Middle/Senior basic.

Source: Sarvekshana, 55th Issue, Vol. XVI, No: 4, April-June 1993.

Table 16: School Drop-out Rates for Girls (Rural + Urban) - 1993-94, 1995-96 and 1996-97

Stage	1993-94	1995-96*	1996-97*
I-V	35.05	41.31	38.35
I-VIII	49.95	61.70	52.77
I-X	68.41	74.01	73.04

* Provisional
Source: Annual Report 1997-98, Ministry of Human Resource Development

Do the identified poor lend themselves for easy targeting in Poverty Reduction Programs (PRP)?

At first glance, an important strategy for a PRP would be to target the most significant of the social/economic groups identified in the previous question. However, on closer examination the issue is less clear since the question of targeting is intimately tied up with the question of empowerment and organization of the poor. Study after study of the impact of PRP in India shares some important conclusions about the effectiveness of these programs.. First, most PRP –no matter how poorly targeted - are effective initially but their impact wears off over time. A new program is under considerable scrutiny and, hence, is under pressure to perform. As time goes by, programs often develop leaks. Targeting becomes weak as entrenched social interests (the rich among the rural population) take over these programs. More often than not such PRP err on both sides – by including those who are not to be included (the non-poor) and by excluding those that are to be included (the poor) (Lipton (2001)).

Further, even the best designed PRP can fail if its clientele – the poor – fail to assert themselves and participate fully in the program[14]. This is a crucial and delicate point with wide implications. The inability of the poor to benefit from the PRP can be due to a variety of reasons. First, the poor are too fragmented and, hence, difficult to target. This is particularly true in the case of SC poor who are dispersed throughout the country. In any PRP, the actual immediate beneficiary from the program is important. If, for example, the program helps men only (or even exclusively) the benefits from the PRP are likely to be concentrated on increasing current consumption. If the immediate beneficiaries are women with powers to influence the pattern of household expenditure, it is more likely that there will be some savings from the program, children will be sent to school rather than being asked to look after/ work on assets such as land or cattle. In addition, there are the profound external effects (or the lack thereof) that are associated with exerting (not being able to exert) pressures to ensure that government sponsored PRP reach the poor. If the poor are able to organize themselves to take advantage of a civil society or NGO type PRP, they can be expected to exert their rights in any PRP and leakage from government programs could be reduced. Several studies, therefore, emphasize the importance of forming "coalitions of the poor". Targeting of poor women is general enough to yield fruits in general for the poor[15]. Surely, targeting is simple and straightforward in geographical areas where there is a large concentration of ethnic minorities, say the ST dominated regions[16] of Santhal Pargana in Bihar and Bastar in Madhya Pradesh. But when we try to target by SC there is a possibility that we may be creating divisions within the poor. Thus there is a tradeoff; the PRP can rigidly target the SC on the basis of the fact that a disproportionately large proportion of the poor are SC and risk weakening any possible coalition of the poor[17]. Or the PRP can design programs that encourage such coalition formation even though the targeting by ethnic group remains imperfect.

The greater is the concentration of the targeted group (e.g. SC, ST) in the rural poor, the greater is the chance that Self-Help Groups (SHG) would be more representative of the targeted group. Hence, it is useful to make a distinction between **statistical targeting** and **strategic targeting.** Statistical targeting follows from

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[14] *The need for the empowerment of the poor is noted by official documents as well. Thus the Ninth Five Year Plan document writes "Poverty (can be eradicated) through a process of social mobilization, encouraging participatory approaches and institutions and empowerment of the poor". Ninth Five Year document, volume 2, chapter 2.*

[15] *UNDP (2000) notes the benefits of targeting and empowering women in its mandal samakyas in Andhra Pradesh. It notes that through this program, women and young girls have benefited by gaining new self-confidence and have become much more involved in community affairs. Credit and technical assistance targeted to these women have enabled them to augment their family incomes and earn respect within and outside their families. Women have thus been able to make decisions of critical importance to their families. These include decisions such as avoiding early marriages, the promotion of family planning, sending children to school rather than to work and saving and investment. In some instances, the participation of women in such decision-making is exclusive of the male members of their families in that women who bring their husbands to meeting where such decisions are made are actually fined. Such women groups are also willing and able to pressurize government officials to pay heed to their problems.*

[16] *This is helped, in part, by the fact that the ST population, by and large, owns more land than the SC population.*

[17] *To be complete, one has to take into account not just the benefits but also the costs of targeting. Gaiha, Imai and Kaushik (2001) demonstrate in the case of individual-based targeting that targeting accuracy and the cost-effectiveness of associated PRP diverge. Hence, this reinforces the case for the community's involvement in the design and implementation of PRP.*

associating the incidence of poverty with certain identifiable groups and concentrating PRP on these groups. Strategic targeting is a broader concept and recognizes certain limitations of statistical targeting. When the target group is heavily concentrated within the geographical reach of a PRP and such targeting does not place an undue burden on the formation of pro-poor pressure groups, statistical targeting is indeed useful and should be pursued. However, if the targeted group is widely dispersed or there is a real risk that targeting might engender social exclusion to the extent of jeopardizing the chances of a pro-poor coalition.

Table 17 illustrates the difficulties of statistical targeting. The state with the highest proportion of SC population happens to be Punjab – a state with low poverty. States with high poverty like Bihar and Orissa do not necessarily have very high proportions of SC population. Clarity does not improve with disaggregation. At the district level, a poor district such as the district of Koch Bihar in West Bengal shows high SC concentration The union territory with the highest SC population is Delhi – but Delhi has low poverty. In terms of ST, the highest concentration is in Mizoram, which does not have abject poverty. Even at the district level the highest concentration of ST is in West Khasi Hills in Meghalaya which is, again, not particularly poor. On the other hand, some very poor areas of Bihar and Uttar Pradesh have low proportion of ST. Having said this, however, it is clear that some areas with the dual characteristics of high ST population and high poverty can be identified. These would include parts of Madhya Pradesh (now Chattisgarh) and Southern Bihar (now Jharkhand).

Table 17: Scheduled Castes and Scheduled Tribes Population (Excluding Jammu and Kashmir)

Scheduled Castes	138 223 277	16.48% of population
Scheduled Tribes	67 758 380	8.08% of population
Scheduled Castes		
State with the highest proportion of SC		Punjab (28.3%)
State with the lowest proportion of SC		Mizoram (0.1%)
UT with the highest proportion of SC		Delhi (19.1%)
UT with the lowest proportion of SC		D and N Haveli (2.0%)
District with the highest proportion of SC		Koch Bihar (51.8%) W.B.
Districts with lowest proportion of SC		Tamenglong (0%) Manipur, West Khasi Hills (0%) Meghalaya
Scheduled Tribes		
State with the highest proportion of ST		Mizoram (94.8%)
State with the lowest proportion of ST		Uttar Pradesh (0.2%)
UT with the highest proportion of ST		Lashwadeep (93.1%)
UT with the lowest proportion of ST		A&N Islands (9.5%)
District with the highest proportion of ST		West Khasi Hills (98.1%) Meghalaya
District with lowest proportion of ST		46 Districts in UP (0%) 11 Districts in Bihar ()%) 1 District in HP (0%)

Source: Census of India, 1991

C. Why has rapid economic growth in the 1990s failed to make a significant impact on poverty?

Traditionally economists have emphasized economic growth as a tool for poverty reduction (Dollar and Kraay (2000)). In India this thesis seemed to be relevant during the 1980s. Over the 1990s the trend rate of growth of agriculture was 3.3 percent, which is statistically similar to that in the 1980s. Similarly the growth rate of food production was 2.6 percent per annum (according to the New National Accounts), which is in excess of population growth (1.6 percent per annum). (World Bank (2000)). However, the impact of growth on rural poverty reduction in the 1990s has been much lower than in the 1980s. The reasons for this are as follows:

i) Although the growth of agriculture for the nation as a whole during 1980s and 1990s were comparable, the 1990s actually witnessed a decline in agriculture in the North and Eastern parts of India, where poverty has increased the most. Contributing to the lower agricultural growth was the slowdown in productivity growth. Investment in agriculture was tapering off, most of it was confined to irrigated areas as it was felt that the scope for high productivity investment in rainfed agriculture was limited. About two-thirds of cultivation takes place in rainfed areas and with maximal effort this ratio would go down to at most one-half.

ii)Demographic factors and associated declining access to land are also responsible for the slowdown in the rate of decline of poverty. Hossain (2001) estimates that poverty in rural India rises with the number if persons in the family. Non-land assets, the number of earning members in the family and the quality of human capital are also important determinants of poverty. Thus rapid development of non-farm activities in the rural sector would be crucial to the alleviation of poverty.

iii) The slow penetration of the official credit machinery into the rural areas has also had its impact. During the 1950s and 1960s the rural moneylender was considered an exploiter through high interest rates. Hence, when several major commercial banks were nationalized in 1969, this was perceived as an immediate impetus for concerted financial lending to the rural poor. The banks would replace the exploitative moneylender and would relieve the poor of large interest payments. During the 1980s, however, it was realized that the moneylender's high interest rates were serving an economic purpose, even though they may have reflected some degree of imperfection in the credit market. No better indication of this can be given than the fact that even now the access of the poor to institutional credit is limited, reaching only about 20 percent of the rural poor, mainly through the programs like the IRDP. Hence the rural poor have no option but to turn to the moneylenders. The reasons for the failure of institutional credit are manifold and only a few can be mentioned. First, there is the insensitivity of the official credit channels to the particular lending requirements of the poor. The poor may require credit at certain times of the year, they may require consumption loans as well as loans to augment their assets, they may or may not have sufficient collateral[18], and they may require flexible payments schedules. The IRDP type loans, on the other hand, are quite bureaucratic. These loans are to be given only for creating assets and collateral is always a problem. Furthermore, they are not fungible and have high transaction costs in terms of uncertainty in getting the loans, bribery demands and rather rigid repayment terms. Thus the formal credit mechanism has failed in the rural sector. In the 1980s, then, the pendulum swung the other way and official credit channels started getting derided. In the 1990s there was a synthesis of sorts with interest subsidies being ruled out in official lending and emphasis shifting to reducing the transactions costs of the poor borrowing from official agencies[19].

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[18] *Not having physical collateral sometimes leads to tie labor and credit targets.*

[19] *In Tables 15a and 15b we have already commented on the fact that institutional credit is finding it hard to reach the poor.*

Another reason for the inability of economic growth to translate into rapid decline in poverty is the lack of participation by the poor in the growth process. The process of economic growth has largely bypassed the poor leading to the phenomenon of their "social exclusion".

Finally it should be noted that the current rate of economic growth in India, although impressive by her own standards, has never been high as per the standards of the East Asian countries. There are problems from a macroeconomic perspective. First, there are real constraints to economic growth. These include (i) the rate of savings and investment has never been high enough to match the great experience of economic growth that East Asia (including China) and South-East Asia have experienced. India has always been wary of supplementing domestic savings with foreign savings in a big way lest she go through the trauma those countries such as Thailand went through in 1997. (ii) The productivity of public capital, which has financed much of the growth – particularly in agriculture – has been poor with no signs of any substantial improvement. (iii) The poor gains in poverty reduction from the first phase of economic reforms have contributed to a withering of the political consensus in pushing through with the next stage of economic reforms. The first stage of reforms required the lifting of controls – which was relatively easy to do by administrative fiat. More importantly, in the early 1990s there was sufficient political consensus on this issue. The second generation of reforms, consisting of widespread privatization, labor law reforms and the like would require substantial political consensus. This has all but disappeared. With a fractured polity, populism is at a premium and revenue expenditures have been difficult to cut. Second, the level of domestic debt is quite high with interest payments constituting the largest single item of revenue expenditure on the part of the government – outstripping even major items like defense expenditures by a very wide margin.

D. What should be the broad contours of a strategy of Rural Poverty Reduction?

The broad thrust of anti poverty measures can take two forms. One is at the level of broad, sectoral policies toward the rural sector. The second is intervention at the microeconomic level of decision making within the family. A successful strategy for poverty reduction would mesh these two policies properly in an overall, consistent plan.

Sectoral policies towards rural poverty reduction would include measures on both the demand and supply side of the rural labor market as well as improving the institutional structure of labor markets. We briefly discuss these now.

Interventions at the Sectoral Level

Demand Side of the Labor Market

On the demand side, policy must attempt to increase the productivity of labor in rural areas so that the wage rate in the agricultural sector can go up. As discussed above, the scope for sustained direct increases in the agricultural wage is limited.

Arguably, whether rural poverty can be reduced depends significantly on the growth of a vibrant non-farm sector[20]. Typically workers take to non-farm work in the

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[20] *Using the ICRISAT panel data, Gaiha (1997) finds that if non-farm wages rise by a rupee agricultural wages would rise by about 16 paise. For similar evidence based on the NCAER survey, see Lanjouw and Shariff (2000). However, this is after all, a local estimate. If there is substantial*

rural sector for two reasons: (i) some workers may turn to this as a desperate means to eke out a living; (ii) there may be activities such as rural industries and infrastructure development which are complementary to agriculture. The latter have the scope, through increasing the demand for labor, to increase agricultural wages as well. The scope for judicious investment in these activities is vast and they have a substantial potential for growth. There are specific constraints to expansion of such activity. Capital is an obvious constraint. It is well known that capital investment in Indian agriculture has stagnated since about 1987 or so. An equally important, if not more important, problem is the inability to design self sustaining programs that will ensure the active and continued participation of the poor. (Islam [(1984, 1987)].

Improving the rural infrastructure would also increase labor demand. By opening up and linking hitherto isolated rural areas, roads and improved transport can play a critical role in facilitating the growth of poverty-reducing non-farm activities. Similar comments go for increasing electricity and telephone connections. Further, several studies have shown that there is a considerable range of technological options in infrastructure. In particular, labor-intensive technology can be used in a number of key areas, without compromising on quality or cost-effectiveness.

While the approach outlined above is often taken as synonymous with rural public works (RPW) programs, experience (especially with ILO's programs in this field in several countries) shows that it is possible to involve the private sector and communities in executing the infrastructure schemes. It is also possible to introduce elements of core labor standards (e.g., those relating to force and child labor, non-discrimination, wages, safety requirements, etc.) in their execution. Thus, although many experiences with RPW have been rather disappointing, that need not be an argument against such an approach. Rather, that should be an argument for devising and implementing programs that can successfully contribute to poverty reduction. Indeed, evaluations show that with good program design, especially based on decentralized planning and community involvement, and effective implementation, labor based approaches in infrastructure can make valuable contribution to the goal of poverty reduction. [Lipton (2001)]. To be effective, RPW should be self targeting in that they should pay less than the going market agricultural wage in order to attract the real poor and repel the non-poor. Two caveats are in order here. First, the RPW should be constantly monitored to ensure that fictitious payments are not being made to the non-poor by showing them as workers even when they are not working on it. Second, the RPW by their very nature, have typically focussed on giving current gains to the poor. Few implications for rural capital formation are typically present. This is essentially because working on RPW does not typically give the poor additional skills. To be sustainable, the RPW programs should concentrate on creating skills among the target workforce[21]. This would create assets to work on in the future and would also provide work for those whom the program left out.

The accumulation of skills, assets or human capital through RPW is, of course, easier said than done. For a RPW program to be successful several other factors are also relevant. First, timing issues are important. A RPW program during the lean season is surely more appropriate than during the busy harvest season when the demand for labor is already high. Also, the RPW program must be so designed so that

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expansion of non-farm activities, these effects may certainly go up. Thus the scale and design of these programs is quite important.

[21] *Ravallion has argued that this is a useful by-product of RPW programs but cannot be their main focus.*

the time spent on the program is flexible and fungible. In particular, if the intention is to get as many women involved as possible, allowances must be made for time to be spent for the family. Alternatively, child support systems would have to be set up in conjunction with the program. Another important factor seems to be allowance for payment by a combination of piece and time rates rather than merely by time rates. One reason for this is that workers may have set targets for income and piece rates give them the flexibility to pursue these targets. Self-targeting rather than direct targeting by group seems to be important in this case. However, this should be supplemented by the encouragement for the formation of pressure groups, which help detect leakage and identify obvious mistargeting. Another point to be noted is that the transaction cost to the poor of participating in RPW programs is quite high. These costs may include transport costs as well as the costs of bribing officials, costs of ensuring payment and so on. A successful RPW program design would be sensitive to these issues.

Labor Supply

On the supply side of the labor market, there should be an effort to organize these workers so that their negotiating power can be increased. Policy along a broad spectrum might be necessary in this connection. First, there is the question of the representation of the poor – particularly SC and ST – in major decision making bodies. The Panchayati Raj Institutions (PRI) and the Gram Sabha (GS) are two examples of important decision making organizations where the representation of the poor needs to be increased.

The minimum wage has been used as an anti poverty measure. But surely, whether this measure is successful depends much on how widely it can be applied and the labor market conditions. The relationship between minimum wages and poverty may not be so obvious. Whether the potential role of minimum wages in reducing poverty can be realized depends on several factors, e.g., the extent of coverage, the extent of compliance, the indirect effects of minimum wage on overall labor demand, effects on labor productivity, etc. For minimum wages to be effective in action against poverty, they have to be widely applied and complied with. Regulations relating to other aspects of the labor market, e.g., employment security, forms of contractual arrangement (especially, measures designed to put an end to exploitative practices) can also contribute to the fight against poverty. But in order to be effective, they also need to be applied widely.

Some Institutional Reform

Often, particularly in economically depressed areas where employers are an important source of credit to workers, labor and credit contracts can be interlinked. Thus a worker may get credit from the employer only if he/she is willing to work on the employer’s farm at lower than market wage rate. In such cases a policy that concentrates on only one market or one that is isolated may not serve much purpose. An integrated policy that jointly addresses this interlinkage may be necessary.

As has been observed by a number of authors, investment in education and training is a powerful tool to reduce poverty and improve labor productivity. In the rural economy, improved educational levels would raise labor productivity directly. There are several other positive indirect effects as well. Literate/educated people are more able to adopt modern farming technology, better medical and sanitary practices and be more aware of their rights and obligations. Particularly if the women in the family are educated, there is a better chance that the children will get educated and not be working. Education also enhances the capacity to respond to market opportunities in both farm and non-farm rural activities, and offers an access route to training and, through this, to better jobs. Training is also an important component of support services provided to raise productivity and incomes in the informal sector. From a policy perspective, it is important to note that given the widespread nature of rural poverty an individual-centered role for spreading literacy and education has its limitations. There is an important role for the community both in motivating the poor to get literate/acquire education and providing them support – in terms of sharing family chores and other activities -during this process. (Dreze and Sen (1997)).

This view of the role of human resource development would imply that in order to facilitate human resource development, policy interventions must be made at several levels. At the macro level policies are required to ensure that adequate provisions are made for expenditures in education and training and that these are allocated equitably. It is particularly important to ensure universal access to good basic education since this is most beneficial from the standpoint of poverty alleviation. Further, policy interventions are required to ensure that school fee and other cost-recovery measures do not prevent access by the poor to education and training. Positive measures to promote greater school enrolment and attendance by the poor will also often be required. At the same time, labor market interventions may often be required to remove barriers to the access of the poor to training opportunities. Finally, direct interventions will be required at the micro level. This will include, for example, ensuring that the primary schools have enough teachers and teaching material and that they are able to retain children and prevent their dropping out. Similarly adequate training will have to be given to adults to upgrade production among the poor in peasant agriculture. In addition, there may have to be adjustments to the school year to suit agricultural operations with relatively light school load during the peaks season and heavier activity during the slack season. Such targeted interventions also serve to promote new income-generating activities among the poor. It needs to be noted, however, that vocational and technical training in formal institutions benefits a relatively small proportion of the labor force, which may find jobs in the formal sector. In order to make a real contribution to the objective of poverty reduction, training systems must be geared to the tasks of imparting and upgrading skills for the informal sector and rural non-farm activities of the type that can raise the productivity and incomes of the poor.

PRI have been the basic conduit for funds for rural development and rural poverty alleviation. The argument behind this has essentially been that the characteristics of PRP, for example, would be better designed at the village level since there would be greater awareness of the needs of the local people at this disaggregated level than in state capitals or in New Delhi. Passing on responsibility to PRI could, in principle, lead to better design and execution of PRP. However there are important problems in this effort at decentralization. The PRI remain accountable for their budgetary operations to higher levels of government such as those in the Blocks or Districts. The latter are often interested only in achieving budgetary targets as reported by the PRI. Such reporting may be quite erroneous at times. PRI performance in respect of poverty alleviation is not the subject of close scrutiny. The GS, on the other hand, is more concerned with social development but since it does not have much administrative or financial power, it is moribund in many villages, particularly in the poorest areas of the country. If the PRI were answerable to GS for their anti-poverty performance and if such accountability was an input into budgetary decisions by higher-level governments in respect of PRI, it is likely that the anti-poverty performance of PRI would improve. However, the PRI and GS rarely function in tandem with each other. Important reform in this area would include making the PRI, which has the financial resources, accountable to the GS. Reports from the GS would act as an important input into the evaluation and continuation of PRI programs. Efforts would have to be taken to ensure that these two village-level institutions do not get overtaken by the rich and powerful of village society.

Some aspects of poverty, particularly transient poverty, can arise due to unfavorable labor market outcomes. Vulnerability in the labor market can arise out of a variety of reasons. Some of these are objective – say a failure of the monsoons. Others can be related to characteristics of certain groups. Such characteristics may make labor market outcomes for these groups unfavorable as a routine and these difficulties may be exacerbated by adverse agricultural shocks. Particularly susceptible to such adversity are workers with limited or no assets. These would include SC, ST and women. Even within the SC/ST groups women appear to be disadvantaged over men in this regard. Another group that is highly vulnerable in this manner is working children. Women face a disadvantageous situation in the labor market due to a variety of factors, e.g., lack of control over assets, competing domestic and labor market demands on time, lack of access to training, and discrimination in the labor market. Different types of interventions will be needed to address these various factors contributing to vulnerability. Legal and supervisory reforms will have to be undertaken to ensure that women do get proprietary rights over land and other assets and that these rights become socially acceptable. The problem of discrimination will have to be addressed through legislative action, combined with monitoring of compliance as well as the raising of awareness. Legislative action will need to be supplemented with education to bring about an attitudinal change in society toward the rights of women.

An important characteristic of poverty is that poor people are subject to more risk than the non-poor. The most important reason for this is, of course, that the poor have few assets to rely upon in the face of a crisis. For example, if the monsoons fail the poor will be at a greater risk than the non-poor. To alleviate the ensuing hardships for the poor, one needs to develop and maintain social funds. Two issues seem to be central here – first, the notion that the poor face large risks underscores the dynamic nature of poverty. Some of the poor then maybe transients in poverty and appropriate risk management would attend to their problems more than anything else. These are important implications for rural risk management and insurance strategies. Second, social protection recognizes that the most vulnerable to risk maybe the poorest among the poor and emphasizes the need to provide support to the poorest[22].

Poor people are excessively exposed to risk and have little ability to manage this. Such risk might engender shifting of the burden of adjustment to the weakest members in the family. Thus the emergence of child labor is often a result of bad risk realizations of the family. Such a family may send its children to work. Once in the workplace, successive shocks as well as the need for additional income may combine to keep these children in the workplace thus denying them the necessary human capital to keep them out of poverty in the future. Given the almost continual nature of the risk that the rural poor are exposed to, social insurance should be considered a mainstream rather than a residual activity or a “social safety net.”

The strategy of social protection should ideally be two pronged. First, it should provide temporary relief to the poor in the event of a crisis – a drought or a flood, for example. Second, it should aim at creating capital and physical assets that the poor may fall back upon in the event of a future crisis and, thus, reduce their dependence

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[22] *We have already noted that the poorest of the poor suffer the most during a severe economic crisis.*

on this temporary arrangement. This capital may take physical as well as social form. Examples of the latter include transfers between households who run out of food, communal labor for households with sick members, management of common property resources for the dry season, and sharing of knowledge between farmers about how to protect against bad harvests. Such strategies have been followed successfully in some parts of India's semi-arid tropics.

Other institutional changes that can reduce the risk of indebtedness include designing a flexible school year so that children can complete their education during the slack season, assuming they have to help out with farm work during the peak season. Similarly flexibility may be necessary in the payment schedule for school expenses so that children's school fees can be paid just after the harvest sales, when their parents' liquidity is high. Further, as shocks may lead to the marginalisation of individuals or groups, and spirals of deprivation, protecting against such shocks also contributes to social integration.

Clearly defining property rights is another area of institutional reform much needed as part of a poverty alleviating strategy. There are vast tracks of wastelands in the central parts of the country with ill-defined property rights. As a consequence local powerful interests have taken over these lands. If these lands were given to communal ownership of the poor, these could probably be developed as grazing grounds for cattle.

Interventions at the Level of the Family

The evidence presented in this paper has clearly brought out the fact that within the family there is considerable heterogeneity with regard to claims on consumption as well as household assets. The design of a PRP must be sensitive to the way crucial economic decisions get made within the family. Although the allocation of consumption within the poor household can hardly be influenced by a PRP, however decisions on saving, the allocation of time of the household members and human capital accumulation can certainly be influenced. A micro-finance program can influence savings decisions by making the interest rate charged on future loans contingent upon the profile of saving behavior of the household. Similarly, if a household that sends its children to work may be penalized when it comes to selecting workers for a RPW. Analogously, a household that is able to produce report cards and attendance records of its children in school can be preferred for selection for work or credit. Thus the PRP can affect current and future welfare of the household very significantly by making the terms of its engagement sensitive to the decision making process within the family. A step further would be to encourage the discussion and rationalization of such decision-making within the community. For instance, women's groups can help encourage the furthering of women's rights over property and savings and time allocation decisions. One woman alone in a family may not be able to push these through; however a women's group supporting this woman can help achieve these ends.

V. Concluding Comments: Actors in Rural Poverty Reduction

The question of the roles of different agencies – various levels of governments, NGOs and other civil society institutions, decentralized institutions such as PRI and GS, Self Help Groups (SHG) and international lending institutions - is a complex issue. Hence, only a few remarks pertaining to this can be made here under the assumption that the basic purpose of each of these institutions is to have a strong effect on rural poverty.

Central and State Level Governments

The primary responsibility for making expenditures on PRP rests with the central and state governments. The first task on hand must be to ensure sufficient funds for PRP. The currently high fiscal deficit (states and central government combined) at almost 10 percent of GDP and high debt servicing commitments (in excess of tax revenues collected from indirect taxes) does not bode well for this. At least since 1987, the capital and development components of central and state government expenditures have been declining [Jha (1999)]. This trend needs to be reversed. However, it should be pointed out that the pressures of the fiscal deficit are difficult to attribute to expenditures on PRP: Gaiha, Imai and Kaushik (2001) argue that with their present level of effectiveness, the expenditures on PRP such as RPW and IRDP can be reduced without really affecting the poor. The problem essentially is one of ensuring the successful design and implementation of the PRP.

The evidence on the effects that existing programs have had in alleviating poverty is, however, not very encouraging. Gaiha (1998) and Gaiha and Kulkarni (1998) argue that poverty alleviation measures have not been very effective and that economic growth, by itself, would not be able to make much of a dent on core poverty in India.

Moreover, there is reason to believe that the effectiveness of growth in reducing poverty would depend considerably on the pattern of such growth [Ravallion and Datt (1999)]. For example, if growth is primarily concentrated in the non farm sector its ability to reduce poverty in areas with "poor" initial conditions of rural development (in both absolute terms as well as relative to urban areas) and human resources, would be limited. In a country such as India rural and human resource development seem to be far more important for reducing mass poverty. Apart from ensuring adequate flow of funds to the PRP, these governments must take action on a wide canvas. Some of these are sketched below. First, there should be consistent and continual monitoring of the effectiveness of expenditures on PRP made in consultation with NGOs and lending agencies. Second the issue of targeting and leakage is central. This necessitates a constant flow of information between the PRI and GS on the one hand and these governments on the other. Third, the provision of basic health and education to the rural population as soon as possible is a must.

Fourth, there is considerable room for improving the scope and design of the Public Distribution System (PDS) designed to improve access to food for the poor. For example, Jha, Murthy, Nagarajan and Seth (1999) show that the pattern of allocation of foodgrains under the PDS to various states has not been based on demand. Mundle and Tulasidhar (1998) have argued that the PDS program has been poorly targeted, has had inadequate coverage and has, therefore, failed to shield the poor from stiff rises in the price of foodgrains that followed the fertilizer price and procurement price for foodgrain hike immediately after the reforms were put in place.

Fifth, innovative legal and institutional changes must take place. Several steps are required here. A facilitating environment in which women's rights to property and decision-making in the family are recognized is important. Second, cross issue linkage is important. Thus a RPW should not be enacted on its own but must have linkages to credit and other policies. Workers working on a RPW should be provided child-care facilities and efforts should be made to ensure that other transaction costs of participating in a RPW are minimized. Government policy should also recognize that markets for poor workers could be linked. Thus poor workers may be working on the farms of rich farmers because they are in debt to them. Sometimes, this results in the inhuman practice of bonded labor including bonded child labor. Credit policy of the government must, therefore, recognize the fact that loosening the credit constraint for these workers may impact upon them in the labor market as well. There are several such issues of inter-market linkage that government must be aware of.

Perhaps the most crucial area of government reform from the point of view of poverty reduction is that of local government. Not very long ago even external donors operated through the central government and several of them still do. Such capacity building efforts may have strengthened the central apparatus to carry out development but funds seemed to slip out. Several donors then turned to NGOs and bypassed local governments. Thus local government reforms are a crucial area for anti poverty action. Local governments need to become more accountable both to higher levels of government for the funds transferred to them as well as to their clientele – the people – for the effectiveness of these expenses. Thus local government officials and representatives of the people in PRI and GS should be mutually responsible to each other. In addition, since it has become clear that PRP get taken over by local elates, this trio needs to reinforce SHG as well as to encourage the formation of pressure groups of the poor.

Communities, NGOs and Donor Agencies

Communities and NGOs have played an important role in social protection. Micro-finance is a clear example of the role NGOs can play, and rotating credit funds show the potentials of community-based actions. Some trade unions have provided social insurance in the informal sector.

A challenge for donors is to familiarize themselves with such networks and recognize the constraints – financial, managerial, entrepreneurial or other - within which they function. This would help facilitate greater effectiveness of donor assistance. Furthermore, donors can also work with governments, in implementing regulatory frameworks including core labor standards, as well as implementing particular policies that directly help reduce poverty and vulnerability. At the same time, they can support NGOs that greatly contribute to social protection, as well as the private sector in promoting voluntary schemes.

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