The Persistence and Transition of Rural Poverty in Pakistan: 1998-2004

Pakistan Institute of Development Economics, Islamabad

Introduction

- Poverty debate in Pakistan has largely focused on the poverty levels and its measurement issues
- Poverty dynamics which helps to understand the movements into poverty and movement out of poverty, have been rarely studied in Pakistan
 - i. Panel data requirement
 - ii. Analysis of two or more rounds of panel datasets

Poverty trends: a brief review

- Pakistan has not witnessed a secular decline in poverty for a long period
- Poverty is a rural phenomenon
- Changes in poverty levels since 1990s are largely due to
 - poverty changes in rural Sindh and to some extent in Balochistan
- The focus of this paper is to analyze the poverty dynamics in rural Punjab and Sndh

Objectives

- to examine the rural poverty trends across the provinces;
- to analyse the poverty dynamics in rural areas of two large provinces of the country

 Punjab and Sndh
- to explore the association between socioeconomic conditions of the households and poverty dynamics.

Data description

- Two panel datasets:
 - PRHS(2001 & 2004) and
 - PSES(1998 & 2000)
- The province Punjab has been divided into two categories:
 - Southern Punjab' and 'Central and North Punjab' to examine the poverty dynamics in the both regions

Sampled households of the PSES and PRHS

panel/attritio n	All	Rural	Urban	Province			
				Punjab	Sindh	KPK	Balo.
PSES-II (1998)	3564	2268	1296	1952	848	508	256
PSES-II (2000)	2774	1789	985	1650	604	338	182
Attrition (%)	22.2	21.1	24	15.5	28.8	33.4	29.1
PRHS-I (2001)	2740	2740	-	1077	816	45	395
PRHS-11 (2004)	1609	1609	-	929	680	0	0
Attrition (%)	41.3	41.3	-	13.7	16.7	100	100

Methodological framework

The official poverty line as applied on the PRHS and PSES datasets has been derived in five steps

- The inflation adjusted official poverty line for 2000-01 period (Rs. 723.4 per adult per month) was applied on the PIHS data to find the poverty rate for rural Punjab and Sindh (38.5 percent)
- A monthly per equivalent adult consumption of Rs 792.1 was derived by calculating the population percentile threshold value that generates the same poverty headcount rate of 38.5 percent using the PRHSI (2001) data
- An inter-temporal inflation rate of 15.2 percent between PRHSI (2001) and PRHS-II (2004) was estimated by weighting monthly CPIs by the number of observations for each corresponding month for PRHSI and PRHSII data. The poverty line for 2004 period was derived as Rs. 912.3 per adult per month by multiplying the PRHS-I poverty line (Rs 792.1)
- The same procedure was adopted for the PSES panel and the poverty line for 2000-01 period was deflated for the 1998-99 period

	Round-II				
	Poor Non-Poor				
Round- Poor		Chronic Poor	Moving Out (Transient)		
I Non-Poor		Moving In (Transient)	Non-Poor		

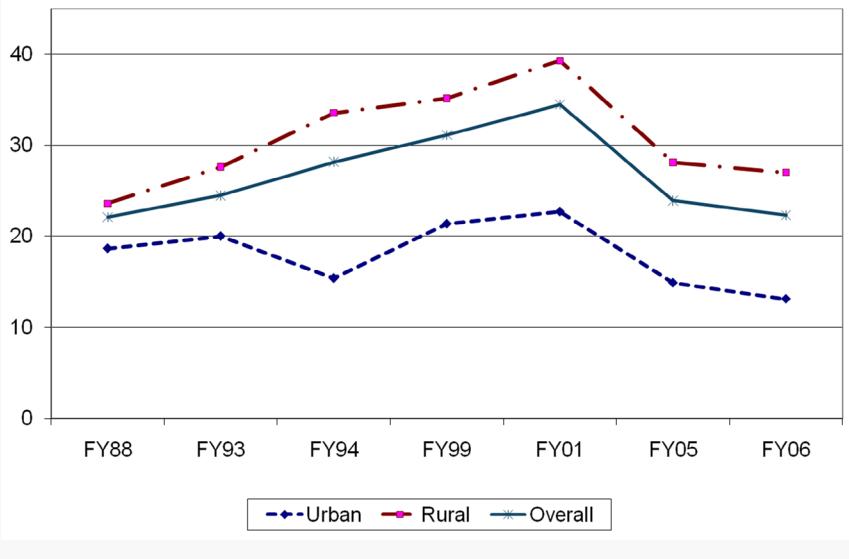
The following three models has been estimated to find out the correlates of poverty dynamics for PSES and PRHS datasets;

1)
$$PD_{psi} = a_{psi} + a_1 I_{psi} + a_2 Hd_{psi} + a_3 Rg_{psi} + \mu_{1i}$$

2)
$$PD_{pri} = a_{pri} + a_1 I_{pri} + a_2 Hd_{pri} + a_3 Rg_{pri} + \mu_{2i}$$

3) $PD_{pri} = a_{pri} + a_1 I_{pri} + a_2 Hd_{pri} + a_3 Rg_{pri} + a_4 \Delta As_{pri} + \mu_{3i}$

Poverty Trends in Pakistan



Trends in rural poverty across provinces (cross-section analysis)

Source	Pakistan	Punjab	Sindh	KPK	Balochistan		
Cheema (20	Cheema (2005)						
1992-93	27.6	25.4	28.6	34.9	26.2		
1993-94	33.5	33	30.2	38.2	36.8		
1996-97	30.2	27.9	19.2	42.4	41.6		
1998-99	35.1	34.6	34	43.7	21.3		
2000-01	39.3	36.9	45.1	43.6	37.5		
World Bank (2007)							
1998-99	33.8	32.2	34.5	43.3	21.6		
2000-01	39.1	33.8	48.3	44.4	39.3		
2004-05	34	33.4	28.9	41.9	35.8		

Incidence of rural poverty (cross-section analysis)						
					North	
	Punjab				and	
	and	Punjab	Sndh	South	central	
Source	Sndh	only	only	Punjab	Punjab	
PSESpanel						
1998	26.1	28.2	18.6	35.5	23.2	
2000	38.3	39.5	34.1	50	32.4	
PRHSpanel						
2001	38.6	28.3	50.7	37.9	19.3	
2004	26.2	21.5	31.3	28.7	14.6	

Poverty dynamics in rural Punjab and Sindh						
Change in poverty	Total sample	Total	Central – North	South	Sindh	
PSES (1998-2	2000)					
Chronic	21.3	23.6	17.6	31.4	14.1	
Moved out	10.2	10.5	9.5	11.9	9.2	
Fell into	23.3	21.9	19.3	25.3	27.6	
Never poor	45.2	44.0	53.6	31.3	49.0	
PRHS(2001-2004)						
Chronic	11.3	8.3	5.3	11.9	15.3	
Moved out	21.2	14.8	11.2	19.1	30.1	
Fall into	11.0	9.6	8.3	11.2	12.8	
Never poor	56.5	67.3	75.2	57.8	41.7	

Effects of socio-economic characteristics on poverty dynamics-PSES					
Correlates (1998)	Chronic Poor/	Moved out/	Moved into/		
	Non-poor	Non-poor	Non-poor		
Sindh/ North Punjab	-0.887*	-0.457* *	0.025		
South Punjab/ North Punjab	0.188*	0.325	0.570*		
Household size	0.396*	0.270*	0.226*		
Female is Head	-0.629* *	0.144	-0.717*		
Literacy of the Head	-1.239*	-0.574*	-0.741*		
Head is Employed	-0.527* *	-0.279	-0.495*		
Bectricity Connection	-1.161*	-0.883*	-0.623*		
Land Ownership	-1.228*	-0.730*	-0.398*		
Remittances Overseas	-0.1522*	-0.719	-0.067		

Effects of Socio-economic Characteristics on Poverty Dynamics-PRHS					
	Chronic Poor/	Moved out/	Moved into/		
Correlates (2001)	Non-poor	Non-poor	Non-poor		
South Punjab/North					
Punjab	0.136	0.317	0.129		
Sindh/North Punjab	1.183*	1.281*	0.620*		
Household size	0.269*	0.198*	0.173*		
Dependency Ratio	0.384*	0.234*	0.091		
Literacy of the Head	-0.483*	-0.449*	-0.265		
Health Expenditure	-0.001*	-0.001*	0.00		
House Structure	-0.667*	-0.232	-0.236		
Electricity	-0.564*	0.014	-0.616*		
Total Large Animals	-0.308*	-0.212*	-0.133*		
Total Small Animals	-0.067**	0.001	0.053*		
Land Holdings	-0.094*	-0.048*	-0.015*		
Agriculture Employed	-0.22	-0.461*	-0.264		
Construction Employed	0.196	0.529	0.909*		

Effects of Socio-economic Characteristics on Poverty Dynamics-PRHS					
Correlates (2001)	Chronic/ Non-poor	Moved out/ Non-poor	Moved into/ Non-poor		
∆ in Household Size	0.114*	-0.018	0.115*		
∆ in Dependency Ratio	0.408*	0.189	0.375*		
∆ in Large Animals	-0.105*	0.008	-0.026		
Δ in Land Holdings	-0.061*	-0.024* *	-0.602		

Summary

- Both chronic and transitory poverty is higher in Sindh and `southern Punjab' as compared to `central and northern Punjab'
- Household size increases the risk of remaining in poverty or being transitory poor. High dependency ratio is also associated with long-term poverty
- Both health (expenditure) and education level have a close association with poverty dynamics
- The proportion of households which depend on livestock only for their livelihood is small in Pakistan
- Ownership of both land and livestock works together to mitigate poverty and vulnerability in the country

Recommendations

- Reaping the demographic dividend
- Asset creation for the poor
- Health insurance for the poor