

Inequality and Poverty in Bangladesh: Evidence from Household Surveys

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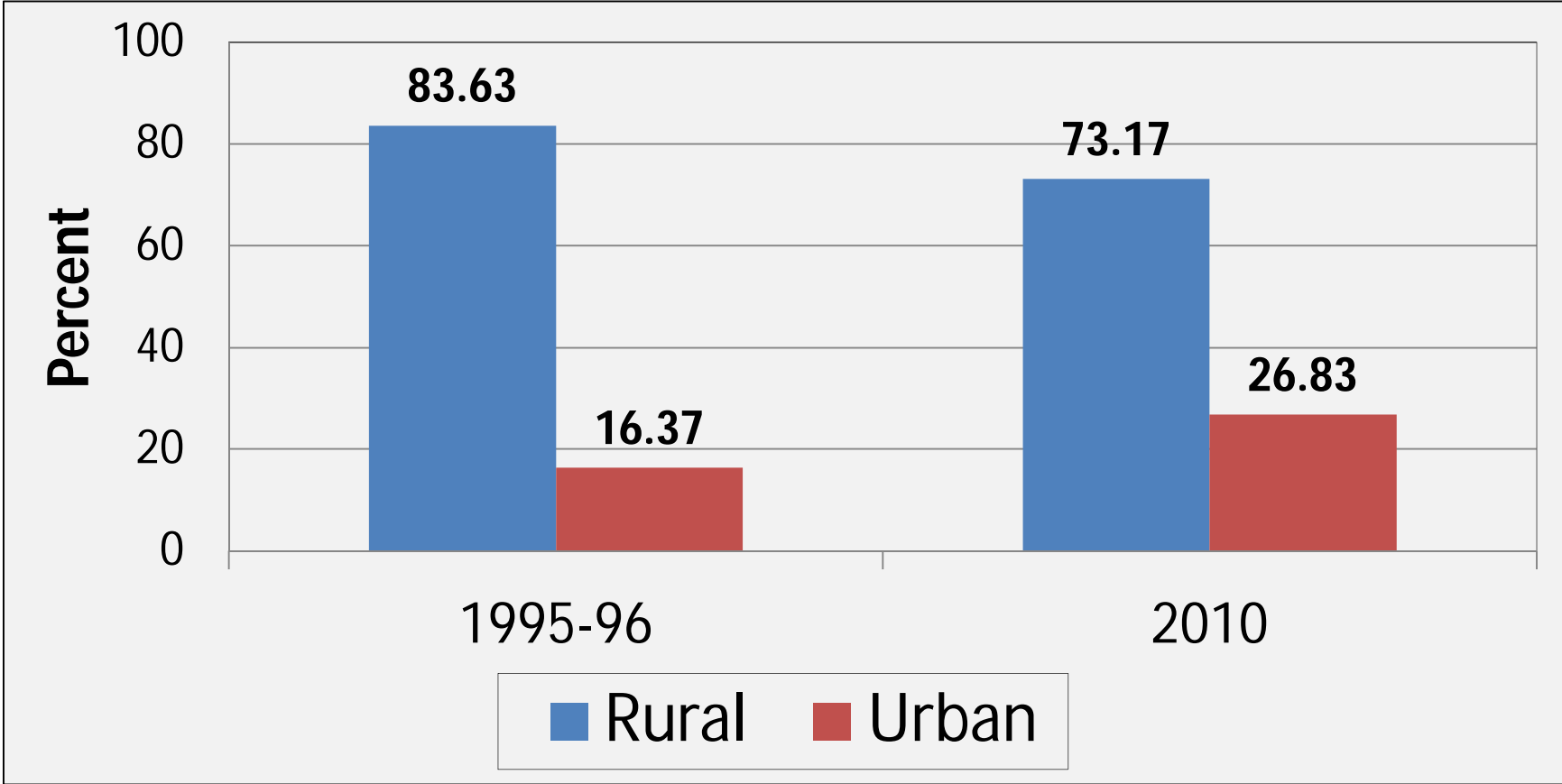
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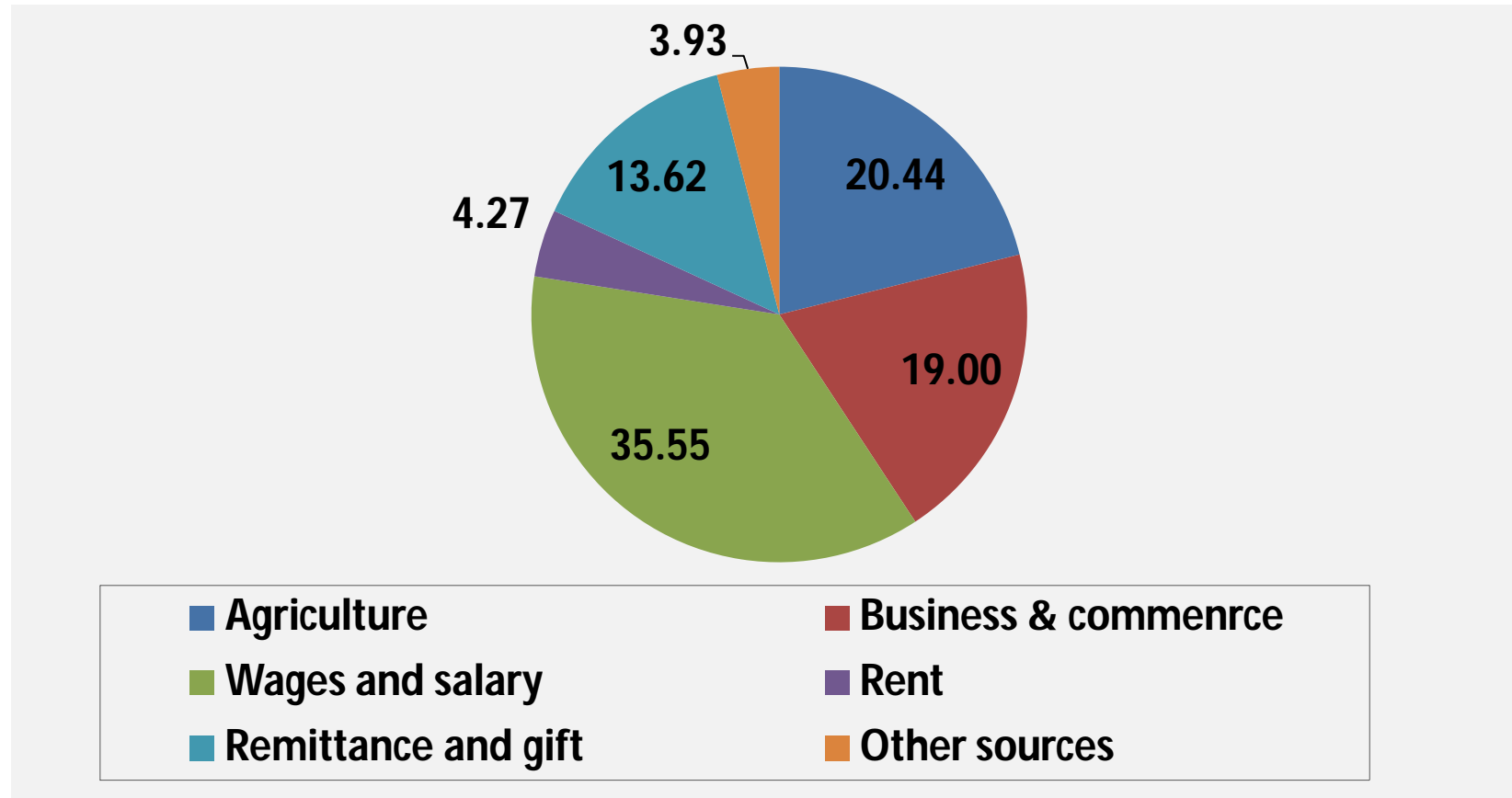
Basic development indicators of Bangladesh economy

Indicators	2010
Land area (sq km)	147570
Population (million)	162
Population density (per sq km)	1229
GDP (billion US dollars)	89.38
GNI per capita (US dollars)	590
Real GDP per capita growth (percent)	4.3
Life expectancy at birth (year)	66
Infant mortality (per 1000 live births)	52
Adult literacy (% of 15+ population)	55
Population below national poverty line (latest survey year 2005)	40
Child malnutrition (% of children under 5 years)	42

Percentage share of rural and urban households



Percentage share of income of household by main income sources: 2010



Economic performance and poverty reduction

- Average growth in GDP (1995-96 to 2010):
5.8%
- Average poverty reduction over this period:
1.2%
 - Poverty reduction: **insignificant**

Research objective, Scope and limitation

Objectives:

To investigate a link between economic growth, inequality and poverty

To decompose inequality and poverty by rural and urban households

Scope

Period: 1995-96 to 2010

Rationale of period selection: Post-liberalisation

Limitations:

Secondary data: HIES 1995-96 and HIES 2010 from Bangladesh Bureau of Statistics (BBS)

Theoretical and empirical aspects

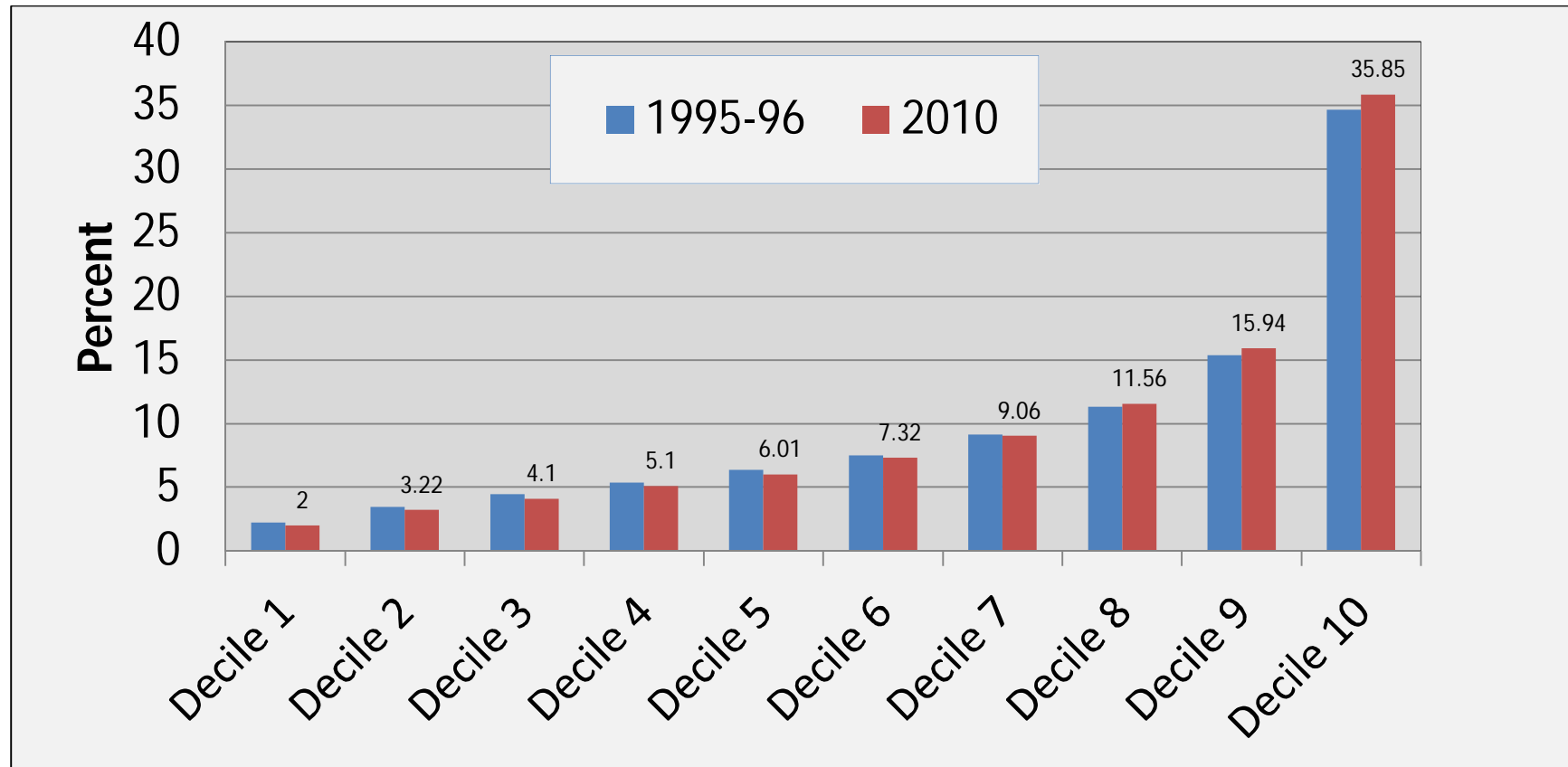
- **Economic growth contribute to poverty reduction subject to**
 - Initial level of inequality: low
 - Changes in inequality over time: decrease

Methodology

- **Poverty and inequality measures:**
 - Haughton and Khandker (2009)
- **Sectoral decomposition of changes in poverty and growth-inequality decomposition**
 - Datt and Ravallion (1992)
 - Ravallion and Datt (2002)
 - Ravallion and Chen (2003)
 - Ravallion (2004)

Inequality in Bangladesh: an overview

Percentage share of household income by decile



Inequality:

Gini coefficient for household income distribution

	1995-96	2000	2005	2010	<i>Average change (%)</i>
Gini	0.38	0.39	0.42	0.46	1.40

Note: Change shown between years 1995-96 and 2010

Decomposition of inequality by urban and rural areas

	1995-96			2010		
	GE(0)	GE(1)	GE(2)	GE(0)	GE(1)	GE(2)
<i>National</i>	21.3	27.9	47.5	26.5	29.3	41.3
Urban	25.6	29.2	41.6	22.0	23.1	29.4
Rural	13.5	14.0	45.1	17.9	22.7	38.9
Within-group inequality	13.2	20.1	39.6	19.9	23.0	35.1
Between-group inequality	8.0	7.9	7.9	6.6	6.3	6.2
Between as a share of total	37.8	28.1	16.6	24.8	21.5	15.0

Overall Poverty: Poverty Headcount Rate

	1995-96	2010	Change
<i>Upper poverty line</i>			
Urban	35.3	20.8	-14.5
Rural	55.5	36.0	-19.5
National	46.6	28.6	-18.0
<i>Lower poverty line</i>			
Urban	13.5	8.0	-5.5
Rural	39.5	21.3	-18.2
National	28.0	14.8	-13.2

Note: Changes shown between years 1995-96 and 2010

Overall Poverty: Poverty Gap and Squared Poverty Gap

	Poverty Gap			Squared Poverty Gap		
	1995-96	2010	Change	1995-96	2010	Change
Upper poverty line						
Urban	7.7	5.4	-2.3	2.7	2.0	-0.7
Rural	9.2	8.4	-0.9	2.2	2.8	0.6
National	8.6	6.9	-1.6	2.4	2.4	0.0
Lower poverty line						
Urban	3.7	2.0	-1.7	1.3	0.6	-0.6
Rural	5.4	4.4	-1.0	1.2	1.3	0.1
National	4.7	3.3	-1.4	1.2	1.0	-0.2

Note: Changes shown between years 1995-96 and 2010

Urban-rural Poverty Decomposition

	<i>Upper Poverty Line</i>		<i>Lower poverty Line</i>	
	Absolute change	Percentage change	Absolute change	Percentage change
Change in poverty	-17.99	100.00	-13.25	100.00
Total Intra-sectoral effect	-17.26	95.98	-12.62	95.24
Population-shift (inter-sector) effect	-0.96	5.34	-1.24	9.33
Interaction effect	0.24	-1.32	0.60	-4.56
<i>Intra-sectoral effects:</i>				
Urban	-6.38	35.49	-2.42	18.30
Rural	-10.88	60.49	-10.19	76.94

Note: Changes shown between years 1995-96 and 2010

Growth and redistribution decomposition of poverty changes

	1995-96	2010	Actual change	Change in incidence of poverty		
				Growth	Redistribution	Interaction
<i>Upper poverty line</i>						
National	46.57	28.59	-17.99	-46.52	43.05	-14.51
Urban	35.26	20.79	-14.47	-35.26	46.94	-26.15
Rural	55.50	36.03	-19.46	-55.40	39.48	-3.54
<i>Lower poverty line</i>						
National	28.02	14.77	-13.25	-27.97	55.52	-40.80
Urban	13.47	7.97	-5.50	-13.47	58.43	-50.46
Rural	39.51	21.27	-18.24	-39.41	52.58	-31.40

Note: Changes shown between years 1995-96 and 2010

Elasticity of Poverty with Respect to the Inequality

	Poverty Headcount Rate			Poverty Gap			Squared Poverty Gap		
	95-96	2010	Change	95-96	2010	Change	95-96	2010	Change
Upper poverty line									
Urban	2.34	2.40	0.14	4.55	4.76	0.21	5.42	6.15	0.73
Rural	1.06	1.23	0.17	1.06	2.78	1.73	1.97	4.07	2.10
National	1.62	2.43	0.80	3.32	4.40	1.08	4.32	5.75	1.43
Lower poverty line									
Urban	2.51	3.93	1.41	5.32	7.25	1.93	7.03	8.36	1.33
Rural	1.07	1.98	0.91	1.78	4.28	2.50	2.77	5.61	2.84
National	2.28	3.67	1.39	4.41	6.55	2.14	5.58	7.68	2.10

Note: Changes shown between years 1995-96 and 2010

Conclusions

Bangladesh experienced high economic growth during 1995-96 to 2010
Inequality also increased over this period

So poverty reduction was insignificant

**If inequality were held constant at the 1995-96 level,
Bangladesh could reduce poverty to zero in 2010**

Rural households experienced a larger reduction in poverty than urban households

income sources of urban households: more diverse causing higher inequality

Policy recommendation: government should formulate policy to reduce inequality for significant poverty reduction

policies include: income transfer to poor, progressive income tax

THANK YOU

Questions? Comments

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