

# Inequality and Poverty in Bangladesh: Evidence from Household Surveys

**Dayal Talukder, PhD**

Lecturer

ICL Business School  
Auckland, New Zealand

Email: [dayal@icl.ac.nz](mailto:dayal@icl.ac.nz)

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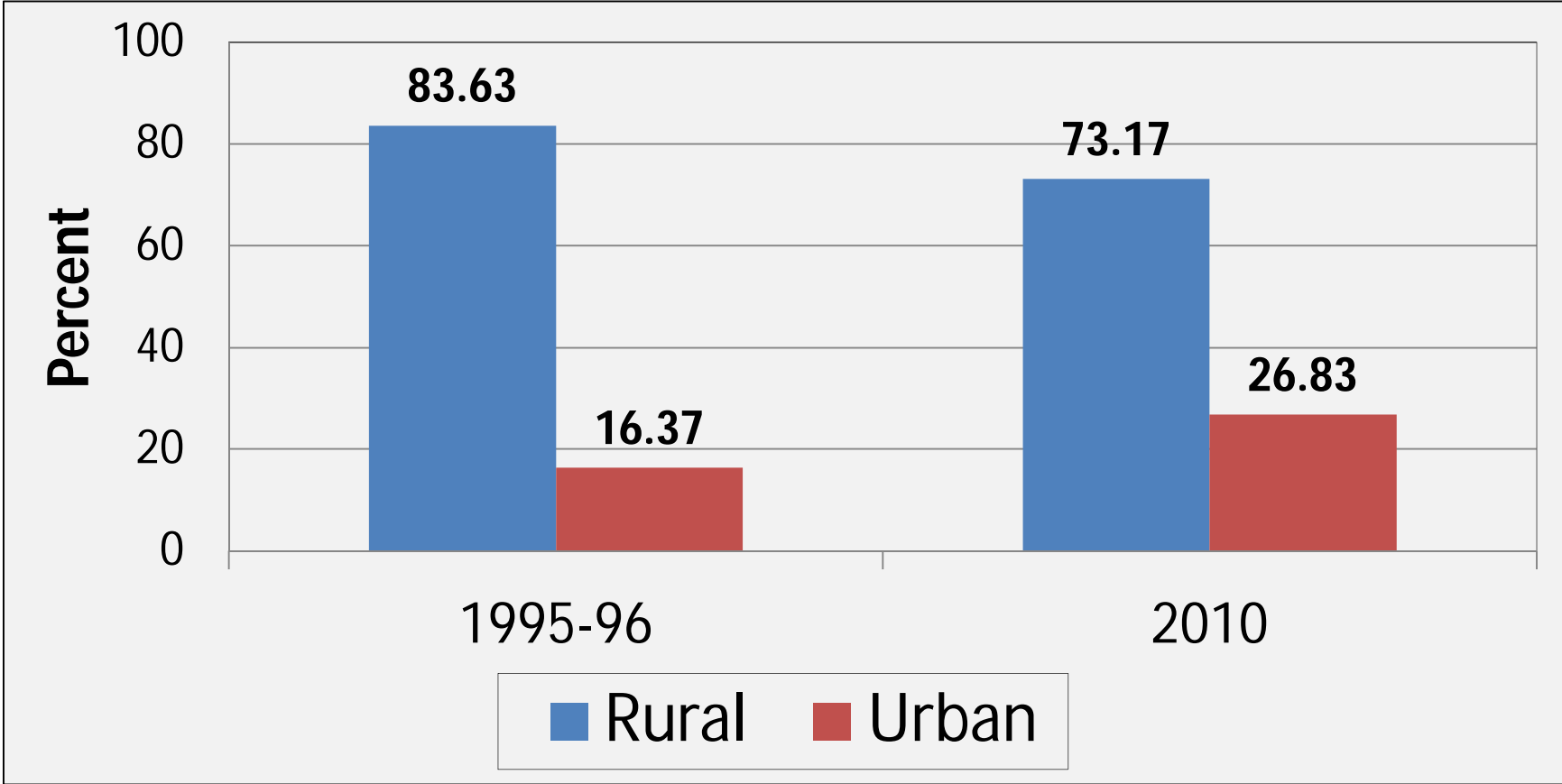
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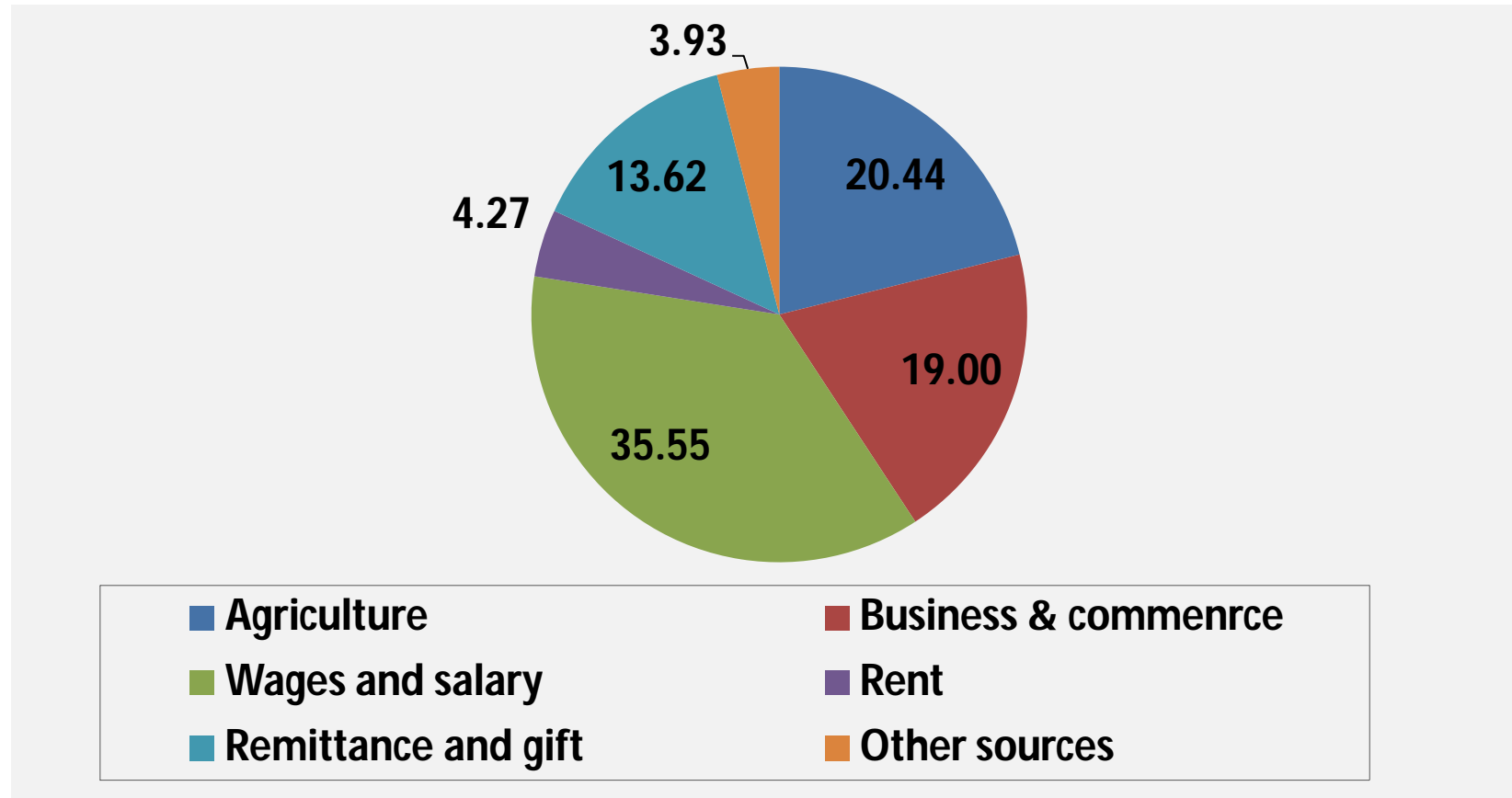
## Basic development indicators of Bangladesh economy

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

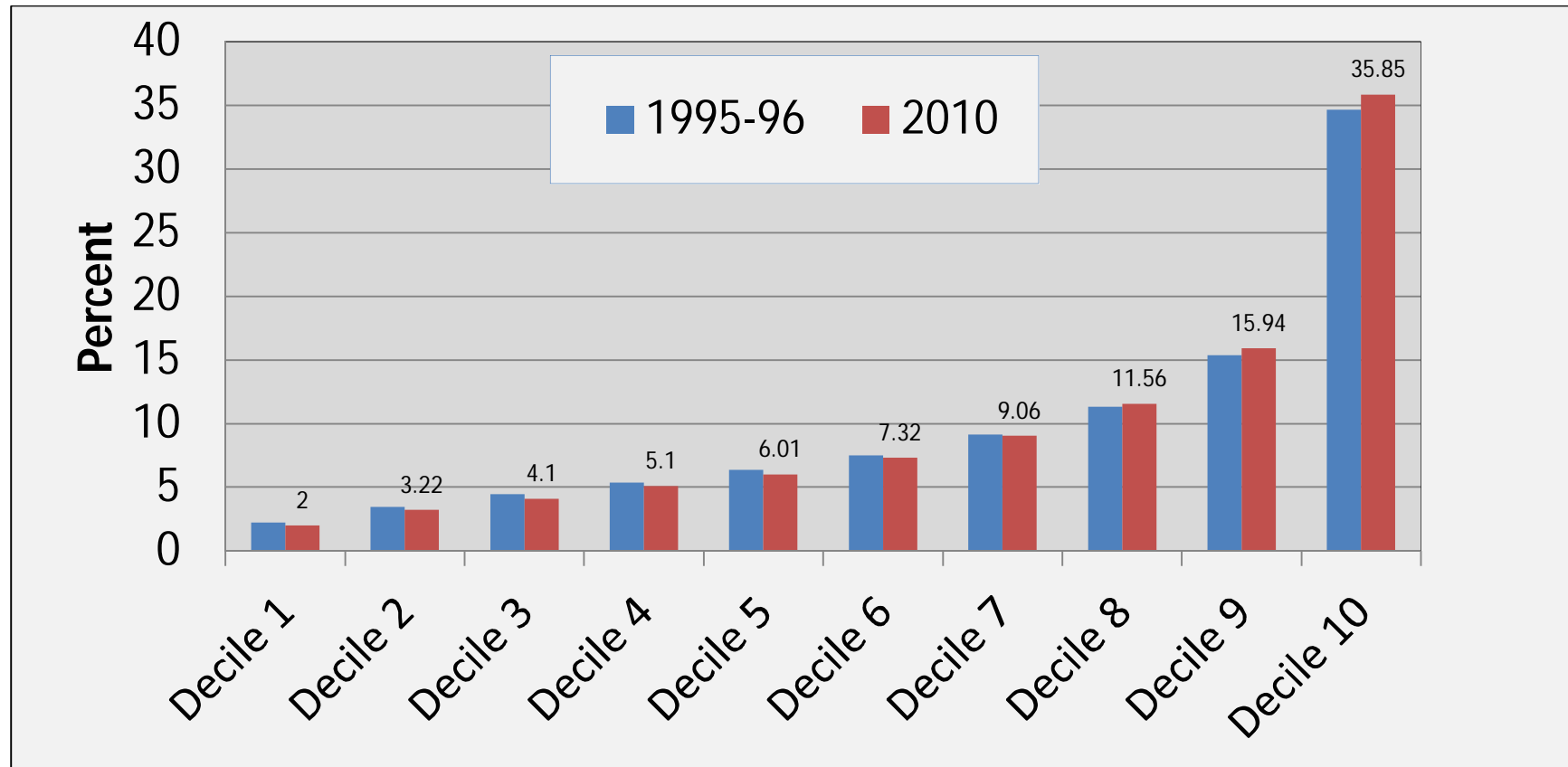
- **Economic growth contribute to poverty reduction subject to**
  - Initial level of inequality: low
  - Changes in inequality over time: decrease

## **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>
<b>Gini</b>	<b>0.38</b>	<b>0.39</b>	<b>0.42</b>	<b>0.46</b>	<b>1.40</b>

**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)
<b><i>National</i></b>	<b>21.3</b>	<b>27.9</b>	<b>47.5</b>	<b>26.5</b>	<b>29.3</b>	<b>41.3</b>
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
<b><i>Upper poverty line</i></b>			
Urban	35.3	20.8	-14.5
Rural	55.5	36.0	-19.5
<b>National</b>	<b>46.6</b>	<b>28.6</b>	<b>-18.0</b>
<b><i>Lower poverty line</i></b>			
Urban	13.5	8.0	-5.5
Rural	39.5	21.3	-18.2
<b>National</b>	<b>28.0</b>	<b>14.8</b>	<b>-13.2</b>

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
<b>Upper poverty line</b>						
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
<b>National</b>	<b>8.6</b>	<b>6.9</b>	<b>-1.6</b>	<b>2.4</b>	<b>2.4</b>	<b>0.0</b>
<b>Lower poverty line</b>						
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
<b>National</b>	<b>4.7</b>	<b>3.3</b>	<b>-1.4</b>	<b>1.2</b>	<b>1.0</b>	<b>-0.2</b>

**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
<b><i>Intra-sectoral effects:</i></b>				
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>						
<b>National</b>	<b>46.57</b>	<b>28.59</b>	<b>-17.99</b>	<b>-46.52</b>	<b>43.05</b>	<b>-14.51</b>
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>						
<b>National</b>	<b>28.02</b>	<b>14.77</b>	<b>-13.25</b>	<b>-27.97</b>	<b>55.52</b>	<b>-40.80</b>
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
<b>Upper poverty line</b>									
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
<b>National</b>	<b>1.62</b>	<b>2.43</b>	<b>0.80</b>	<b>3.32</b>	<b>4.40</b>	<b>1.08</b>	<b>4.32</b>	<b>5.75</b>	<b>1.43</b>
<b>Lower poverty line</b>									
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
<b>National</b>	<b>2.28</b>	<b>3.67</b>	<b>1.39</b>	<b>4.41</b>	<b>6.55</b>	<b>2.14</b>	<b>5.58</b>	<b>7.68</b>	<b>2.10</b>

**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

Dayal Talukder

Email: [dayal@icl.ac.nz](mailto:dayal@icl.ac.nz)