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# **Inclusive Growth in Bangladesh: A Critical Assessment**

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- The presented paper, **Inclusive Growth in Bangladesh: A Critical Assessment**, is part of the study programme titled **Operationalizing Inclusive Growth in Bangladesh through Full and Decent Employment**
- This study is being conducted under the purview of Centre for Policy Dialogue's (CPD) flagship programme **Independent Review of Bangladesh's Development**  

- The results and interpretation may be further developed
- The research team for this particular paper includes:
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- Inclusive growth – the concept came into being after a long and tortuous journey
  - ✓ The evolution in the literature of growth, inequality and poverty must be taken into cognisance

	Growth	Free Market & Trade liberalization	Poverty	Inequality	Productive Employment	Capabilities/ Empowerment	Gender Inequality	Access to Infrastructure	Social Protection	Participation	Targeted Policies	Basic social Services	Good governance	Opportunity	Barriers for Investment	Benefits of Growth
Rostow (1956,1959)	x															
SAP and Basic Needs Approach (1970s-early 1990s)	x	x	x						x		x					
WDR: Attacking poverty (2000-01)	x	x	x					x		x	x	x	x	x		
Poverty Reduction Strategy Papers	x		x					x	x	x	x	x	x	x		
Kakwani & Pernia (2000)				x		x					x					
White & Anderson (2001)				x												
Ravallion & Chen (2003)			x													
Kakwani, Khandker & Son (2004)	x		x	x												
Kraay (2004)	x		x	x												
WDR: Equity & Development (2006)	x		x	x				x	x	x		x	x	x		
Ali & Son (2007)				x										x		
Bhalla (2007)			x		x	x										
Grosse, Harttgen & Klasen (2008)			x	x		x										
Son & Kakwani (2008)	x		x	x												
Ianchovichina & Lundstrom (2009)	x		x		x										x	
Habito (2009)			x													
Klasen (2010)				x										x		
Rauniyar & Kanbur (2010)	x			x		x			x	x				x		x
McKinley (2011)	x		x	x	x	x	x	x	x			x	x			
Ranieri & Ramos (2013)	x		x	x	x	x		x	x	x	x	x	x	x		x



- This paper interprets inclusive growth as a process which embraces pro-poor strategies, along with the growth outcomes, it concentrates on the distributional features of the 'benefit sharing', the comprehensive process of market participation, and how growth outcomes are generated (Bhalla, 2007; Ianchovichina and Lundstrom, 2009; Klasen, 2010, Kakwani and Pernia, 2000, Ramos, Ranieri and Lammens, 2013)
- The present paper seeks to present an analytical assessment of inclusive growth in Bangladesh based on a set of selected quantitative and qualitative indicators
  - ✓ To comprehend and underscore the adjoining sources/foundations of inclusive growth
  - ✓ To recognise the binding constraints to future economic growth
  - ✓ To suggest how far the attained economic growth has been inclusive in Bangladesh
  - ✓ To provide a cross-country comparison with a select set of developing countries
  - ✓ To provide a benchmark assessment of Bangladesh's journey towards development during the ongoing decade



### **Design of the inclusive growth index**

- Pros and cons of several other composite indices (i.e. HDI, MPI) were taken into cognisance
- This paper's approach was profoundly influenced by 'The Inclusive Growth and Development Report 2015' from World Economic Forum and 'Inclusive Growth Criteria and Indicators: An Inclusive Growth Index for Diagnosis of Country Progress' from ADB
- The assessment for Bangladesh was built on **7 pillars** and **42 indicators**, having equal number of indicators (6) for each dimension
- The pillars, and indicators under each pillar were selected based on the theoretical framework keeping the **developing country context** under purview. The recent list of sustainable development goals (SDG) indicators also influenced selection of the indicators
- **Seven countries** including Bangladesh, India, Pakistan, Nepal, Sri Lanka, Vietnam and Cambodia were selected for cross country comparison on the chosen indicators
- **Three discrete time periods** (2000, 2005 and 2010) were chosen for the comparison based on data availability



## Inclusive growth index: Pillars and indicators

Pillars	Indicators
1. Poverty and Inequality	The proportion of the population living below nationally determined poverty lines
	The proportion of the population living below the \$1.90 per day per person international poverty line in 2005 prices
	Global hunger index
	Gini coefficient
	Palma ratio
	The income share of the poorest 60% of the population
2. Growth and Structural Transformation	Real rate of growth of gross domestic product per capita
	Share of manufacturing in total value added
	Value of agricultural production per hectare
	Private investment as a share of GDP
	Export concentration index
	Value added per worker
3. Employment	Labour force participation rate
	Unemployment rate
	Youth (aged 15-24 years) unemployment rate
	Share of the employed in industry
	Share of the employed in manufacturing
	Share of own account and contributing family workers
4. Access to Infrastructure and Public Services	Proportion of the population with access to electricity
	Number of mobile phone subscribers per 100 people
	Number of internet users per 100 people
	Proportion of the population with access to safe water
	Proportion of the population with access to adequate sanitation
	Per cent of paved roads over total roads



## Inclusive growth index: Pillars and indicators

Pillars	Indicators
5. Health and Education	Under-5 mortality rate
	Percentage of those under age 5 years who are underweight
	Prevalence of stunting (low height-for-age) in children under 5 years of age.
	Percentage of births attended by skilled health staff
	Net secondary enrolment ratio
6. Gender Equality	Completion rate (lower secondary)
	Ratio of young literate females to young literate males (age 15–24 years)
	Female–male enrolment ratio in primary schools
	Female–male enrolment ratio in secondary schools
	Share of women in wage employment in the non-agricultural sector
	Female labour force participation rate
7. Governance and Institution	Early marriage, i.e. women who were first married by age 18 (% of women ages 20-24)
	Voice and accountability
	Political stability and absence of violence/terrorism
	Government effectiveness
	Regulatory quality
Rule of law	
Control of corruption	



## Construction of the index

a) **Normalisation of the indicators:** The indicators were transformed to a 1-10 scale (worst to best) using a linear min-max transformation. This can be presented as:

$$\mathit{indicator\ score} = 9 \times \frac{(\mathit{indicator\ value} - \mathit{sample\ minimum})}{(\mathit{sample\ maximum} - \mathit{sample\ minimum})} + 1$$

For indicators which exhibit worse outcomes with higher values:

$$\mathit{indicator\ score} = -9 \times \frac{(\mathit{indicator\ value} - \mathit{sample\ minimum})}{(\mathit{sample\ maximum} - \mathit{sample\ minimum})} + 10$$

b) **Aggregation towards pillar score:** Simple arithmetic mean, designating equal weight to all the constituent indicators, was used. Formally:

$$\mathit{pillar\ score} = \frac{\sum_{k=1}^K \mathit{indicator\ score}_k}{K}$$





**c) Aggregation towards composite index:** The composite index is basically a weighted average of the pillar scores.

Poverty and inequality; growth and structural transformation and employment received 20 per cent weight

Access to infrastructure and public services; health and education; gender equality; and, governance and institution received 10 per cent weight

In the aggregate inclusive growth index **1** represents the **worst** outcome while **10** represents the **best**

**d) Treatment of missing values:** Data availability has been a key hindrance while constructing this index.

Some relevant indicators perhaps could not be incorporated due to poor availability/absence of data for the selected countries. Moreover, consistent time series data was rarely available. In order to solve this issue:

- ✓ data for the nearest available period was used
- ✓ to reduce volatility/ generate data points, five or ten years moving average was taken



- **Merits of the index**

- ✓ This index utilises a **more comprehensive** set of indicators compared to the existing indices (e.g. Samans *et al*, 2015; McKinley, 2010)
- ✓ The index was deigned taking the **developing country (e.g. Bangladesh) context** into cognisance.
- ✓ The index could be used to carry out **cross country** as well as **intertemporal** comparison which offers further flexibility and applicability
- ✓ Individual assessment for each pillar can be carried out
- ✓ Distance from the best/worst outcome can be measured
- ✓ The index is easy to interpret
- ✓ The index provides the methodological contribution to develop such indicators



### Limitations of the index

- ✓ To some extent choice of indicators was dictated by **data availability**
  - Critical indicators regarding social protection, environment, technology, productivity and work environment could not be incorporated due to lack of comparable time series data
- ✓ The selection of indicators was made keeping the **developing country context** in mind. For a different set of countries – particularly developed ones – the selected indicators could be different
- ✓ Within a pillar, each indicator has equal weight. While constructing the composite index, the pillars' weights were assigned based on their perceived relative significance on the process of attaining inclusive growth. Although this process involves **implicit value judgment** – similar method was followed by McKinley (2010)
- ✓ The results of this index depend on the sample of countries due to the applied linear transformation technique. Any change in **country composition** will alter the outcome from this index. In this context, it is a suitable tool for the comparison of peer countries rather than countries on diverse stages of development



## Results from the inclusive growth index

- Poverty and inequality pillar**

Year	Bangladesh	Cambodia	India	Nepal	Pakistan	Sri Lanka	Vietnam	Bangladesh Ranking
2000	5.31	1.00	8.13	4.72	7.47	6.55	5.85	5
2005	6.65	5.50	6.09	2.77	7.78	5.83	6.13	2
2010	5.49	7.14	5.45	6.95	9.68	7.44	3.56	5

- ✓ Bangladesh performed reasonably well but increasing inequality and slow pace of poverty alleviation are concerns
- ✓ Cambodia: remarkable progress; Pakistan & Sri Lanka: gradual progress; Nepal & Vietnam: mixed trend; India: declining trend

- Growth and structural transformation pillar**

Year	Bangladesh	Cambodia	India	Nepal	Pakistan	Sri Lanka	Vietnam	Bangladesh Ranking
2000	4.30	3.98	6.52	3.17	4.48	8.93	7.40	5
2005	4.69	4.32	6.69	4.18	4.62	7.74	7.23	4
2010	5.08	3.74	7.20	4.56	3.61	7.94	7.81	4

- ✓ Bangladesh's performance moderate with an upward trend. Export concentration and labour productivity are key concerns
- ✓ India, Sri Lanka and Vietnam: consistently well; Nepal: gradually increasing; Cambodia & Pakistan: mixed trend



## Results from the inclusive growth index

- Employment pillar**

Year	Bangladesh	Cambodia	India	Nepal	Pakistan	Sri Lanka	Vietnam	Bangladesh Ranking
2000	5.41	5.01	5.09	6.27	4.56	5.75	6.38	4
2005	4.48	5.41	4.85	6.34	4.76	5.61	6.17	7
2010	5.04	6.12	3.99	6.18	4.32	5.58	6.44	5

- ✓ Bangladesh's performance was average. Youth unemployment, employment in industry/manufacturing should be areas of focus
- ✓ Nepal, Sri Lanka & Vietnam: consistently outperformed Bangladesh; Cambodia: gradual improvement; Pakistan: mixed trend; India: gradual decline

- Access to infrastructure and public services pillar**

Year	Bangladesh	Cambodia	India	Nepal	Pakistan	Sri Lanka	Vietnam	Bangladesh Ranking
2000	3.31	1.69	5.57	4.27	5.45	9.54	5.97	6
2005	3.76	1.81	4.90	3.87	6.47	8.22	7.50	6
2010	4.00	1.44	4.62	4.14	6.62	7.72	7.93	6

- ✓ Bangladesh's performance is improving though it lacks momentum. Access to electricity, road facilities and internet are key areas of concern
- ✓ Sri Lanka: stellar performance; Pakistan & Vietnam: gradually improving; Cambodia & Nepal: mixed trend; India: gradually deteriorating



## Results from the inclusive growth index

### • Health and education pillar

Year	Bangladesh	Cambodia	India	Nepal	Pakistan	Sri Lanka	Vietnam	Bangladesh Ranking
2000	3.57	2.23	3.94	2.91	3.55	10.00	7.02	4
2005	4.01	4.11	4.27	3.73	3.67	10.00	8.81	5
2010	2.95	4.43	3.36	3.38	1.55	9.87	8.49	6

- ✓ Bangladesh showed resilient performance. Better performance in education was compensated by sluggish development in health – particularly child nutrition and child birth facilities
- ✓ Sri Lanka & Vietnam: stellar performance; Cambodia: gradually improving; India, Nepal & Pakistan: mixed trend

### • Gender equality pillar

Year	Bangladesh	Cambodia	India	Nepal	Pakistan	Sri Lanka	Vietnam	Bangladesh Ranking
2000	5.64	7.11	3.84	3.68	2.56	7.78	9.08	4
2005	6.20	6.86	4.45	4.53	2.46	7.50	8.84	4
2010	5.99	7.33	4.30	6.30	1.04	6.67	8.62	5

- ✓ Bangladesh has been a strong performer. Early marriage and low female engagement in non-agricultural wage occupations are concerns
- ✓ Cambodia, Sri Lanka & Vietnam: great performance; Nepal: gradual improvement; India: mixed trend; Pakistan: below par and declining



## Results from the inclusive growth index

- **Governance and institution pillar**

Year	Bangladesh	Cambodia	India	Nepal	Pakistan	Sri Lanka	Vietnam	Bangladesh Ranking
2000	4.14	2.92	8.02	6.10	3.31	7.31	5.56	5
2005	2.60	3.71	8.09	4.22	3.73	8.46	5.84	7
2010	3.19	3.53	8.85	4.14	3.62	8.10	6.02	7

- ✓ Bangladesh displayed mixed performance. Regulatory quality, rule of law, and pervasive corruption key areas of concern
- ✓ India, Sri Lanka and Vietnam: better performers; Cambodia & Pakistan: mixed trend; Nepal: gradually declining



## Results from the inclusive growth index

- Inclusive growth index**

Year	Bangladesh	Cambodia	India	Nepal	Pakistan	Sri Lanka	Vietnam	Bangladesh Ranking
2000	4.67	3.39	6.09	4.53	4.79	7.71	6.69	5
2005	4.82	4.70	5.70	4.29	5.07	7.25	7.01	5
2010	4.74	5.07	5.44	5.33	4.81	7.43	6.67	7

- ✓ Bangladesh has **not performed adequately** in the attainment of inclusive growth
  - Could be deemed **on par** with Cambodia, Nepal and Pakistan
  - Still **lagging** behind India, Sri Lanka and Vietnam

Year	2000	2005	2010
Poverty and inequality	5.31	6.65	5.49
Growth and structural transformation	4.30	4.69	5.08
Employment	5.41	4.48	5.04
Access to infrastructure and public services	3.31	3.76	4.00
Health and education	3.57	4.01	2.95
Gender equality	5.64	6.20	5.99
Governance and institution	4.14	2.60	3.19
<b>Inclusive growth index</b>	<b>4.67</b>	<b>4.82</b>	<b>4.74</b>





## *Results from the inclusive growth index*

- During both 2000 and 2005, Bangladesh was ranked fifth amongst the seven selected countries
  - ✓ The position moved to seventh in 2010
- The key reason behind this is the **rapid progress** achieved by Nepal and Cambodia compared to the somewhat **plateaued** performance by Bangladesh. In contrast to Bangladesh, both Cambodia and Nepal exhibited impressive progress in poverty and inequality pillar. Similar can be said about health and education, and gender equality
- Between 2005 and 2010, Bangladesh showed **downward** performances in poverty and inequality, health and education, and gender equality. The combination of these ultimately lead to the decline in aggregate index
  - ✓ Relatively **slow pace in poverty reduction** as opposed to the comparators, **growing inequality** lead to the decline in poverty and inequality pillar
  - ✓ **Comparatively poor performance in education** indicators coupled with slow progress in health indicators resulted in the decrease of health and education pillar
  - ✓ **Deteriorating** comparative performance in **gender related education** indicators alongside **lower female employment related indicators** lead to the decline in gender equality pillar
- The two top performers – Sri Lanka and Vietnam – hold impressive figures in **growth and structural transformation, access to infrastructure and public services, and health and education**



- Bangladesh has performed:
  - ✓ **Moderately** well in reducing poverty and inequality, and achieving gender equality.
  - ✓ **Modestly** in employment and improving growth performance.
  - ✓ **Unconvincingly** in health and education, and governance and institution
  - ✓ Access to infrastructure and public services is exhibiting **gradual improvement but on a very low level**
- A number of 'peer' countries outperformed Bangladesh in the context of inclusive growth
- The indicators to a large extent are interrelated and integrated
- The present exercise may inform sectoral public policies



THANK YOU!