Growth and Distribution: The Bangladesh Experience

1. National Growth and Inequality

Since the turn of the 1990s Bangladesh's GDP growth has embarked on a rising trajectory, taking the Bangladesh economy to a substantially higher growth path. Growth of GDP accelerated from about 3.7 percent in the first two decades to 4.8 percent in the 1990s and further to 5.8 percent in the 2000s. The growth spurt, in combination with continued slowdown in population growth, has resulted in a fairly rapid increase in per capita income.

However, the degree of income inequality, as measured by the Gini coefficient, has increased from an average of 0.38 in the 1980s to 0.44 in the 1990s and further to 0.46 in the 2000s (Table 1). Thus while the average living standard is rising faster than ever, the gap between the rich and the poor is also widening faster than before.

Rural income inequality has increased consistently from 1991/92 to 2010 (Table I), and yet rural consumption inequality has remained virtually constant since 1995/96 (Table II). The widening of income inequality has not posed an obstacle to poverty reduction in rural Bangladesh so far as microfinance and to some extent, remittances, has served to decouple consumption distribution from income.

Regarding the income distribution in urban Bangladesh, there are severe concerns regarding the official statistics and the methodologies used to measure income disparities. A common problem with all household surveys is that they fail to adequately capture households at the two extreme tails of the income distribution (Khan 2009). Also, different methodologies (Palma 2011) showed how the wealthiest quintile of the income distribution has outgrown the poorest quintile, and contrary to the trend revealed by the Gini coefficient, displaying a tendency of income inequality to rise over time.

Ideas for growth
www.theigc.org

2. The Determinants of Inequality

Two factors have likely caused the link between economic growth and income inequality:

- The period of rapid growth since the early 1990s has witnessed very slow growth in real wage - far below the growth of labour productivity. Although the reduced real cost of production led to large gains in terms of competition on the global market, the export led growth favoured owners of non-labour factors of production such as land and capital against labour, eventually resulting in a widening of income distribution.

- Remittances account for more than 10 percent of GDP but its indirect contribution is expected to be higher as expenditure of recipient households generates further income through accelerator/multiplier effect. But even as remittances contribute to growth, it also serves to widen income inequality since it is mainly the relatively better off households who can afford to bear the initial cost of sending workers abroad.

3. Investing in Human Capital

The key to equitable growth must lie in ensuring that the fruits of economic development are enjoyed more equitably by a broad spectrum of the population. For this, individuals from the currently disadvantaged segments of the society must be able to seize the employment opportunities opened up by the future growth process and which necessitates accumulation of human capital. The dual policy aim therefore is to spur demand for investment in human capital (education and health) of the poor and at the same time expansion of education facility and health services that are accessible to the poor.

4. Inequality in Health outcome

Bangladesh's achievement on the health front has been widely acclaimed for health outcomes indicators such as life expectancy and child mortality as well as indicators of health services such as coverage of immunization. However the headline numbers and trends for several health indicators mask the persistent inequality between the poor and the rich[1]. The reason lies in either increasing or persistent inequities in the distribution of

---

[1] Based on the analysis of multiple rounds of the *Demographic and Health Surveys* (DHS) which collects data on household asset and thus enables disaggregation of various health indicators/ outcomes by wealth quintile

Ideas for growth
www.theigc.org

healthcare for children and increasing inequity in women's health outcomes - the two major determinants of children's health.

Malnutrition in children, as measured by stunting and underweight, has been a persistently serious problem in Bangladesh in the past. While there has been good progress in reducing the magnitude of malnutrition in Bangladesh, the same cannot be said about inequality in nutritional status between children from poorer and richer backgrounds. Similar trends in inequality in child health is observed in mortality indicators - infant mortality and under-five mortality, and morbidity indicators - prevalence of fever, prevalence of diarrhoea and prevalence of acute respiratory infection (Table VI). Rising inequality in women's health is especially severe in the case of ante-natal care, for which the ratio of shortfall between the poorest and richest quintiles has increased from 2.2 in 1997 to 5.5 in 2011 (Table IX).

5. Policy Recommendations

Many countries Latin America, Asia and Africa have implemented Conditional Cash Transfer (CCT) programs, with the objective of reducing inequalities in human capital accumulation which in turn is expected to poverty and inequalities in income and consumption and also enhance economic growth in the medium to long term. CCTs, primarily social assistance programmes, provide monetary transfers to targeted households on the condition that they comply with a set of behavioural requirements, for example, attendance at health care centres for preventive interventions, school enrolment for children etc.

CCT-type safety-net programs are unique in their use of multi-sectoral interventions, often adopting experimental or quasi-experimental design, have also been pioneers in bringing rigorous impact evaluation methodologies to the social development sphere.

Given the multidimensionality of CCT programs and the empirical evidence of its efficacy in addressing inequality in health outcomes, CCTs could be a suitable policy instrument for Bangladesh. They address demand-side barriers, have a synergistic focus on investments in health, education and nutrition, and combine short-term transfers for income support with incentives for long-run investments in human capital.

Broadly a CCT can be a justified policy instrument when private investment in human capital (among the poor) is suboptimal from a social point of view and there is persistent inequality. Secondly, CCTs maybe more politically viable in comparison to large scale redistribution of income as cash transfer are conditioned on "good behaviour" or compliance of the poor beneficiary households. In addition conditional as opposed to

Unconditional Cash Transfer (UCT) is more appropriate for tackling imperfect information or incomplete altruism in poor families.

In order for CCTs to have significant effects on final outcomes in health, a number of issues need to be addressed.

Firstly, CCTs should be designed to target poor households (for whom there is a stronger rationale for redistribution) than under-invest in the human capital of their children. It is essential to target nutrition-specific interventions in critical priority groups (pregnant and lactating women, new-born babies, under 5 children, adolescent girls) and integrating them into the existing and new social protection programs is needed. Appropriate upscaling of water and sanitation components is also necessary. The impact of CCT programs on human capital outcomes is directly linked to the program's ability to affect the behaviour. The right conditions would be different in each case and would require different means of enforcement.

In designing CCT programs for Bangladesh, constraints at the household level must be looked into including poor parenting practices, inadequate information, or other inputs into the production of education and health. Another constraint to be mindful of is that if the quality of services is very low, perhaps, especially for the poor, then increased use of such services induced through a CCT may not yield large benefits in and of itself. The impact is therefore contingent on the supply of quality, accessible health and education services; impact may increase with strengthened links to the labour market, and a greater focus on early childhood and transient support to households facing shocks.

The setting of size of transfer and recipient are critical design aspects in CCT programs. In calibrating the optimal transfer departing from the heterogeneity of the target households, the key parameter maybe based on the magnitude of the elasticity of the relevant outcomes to the benefit level. The transfer recipient's gender also an important aspect in program design as empirical literature in developing countries including Bangladesh suggest that as relative female intra-household bargaining power improves, consumption preferences favor basic needs which promote child welfare.

CCT programs cannot be thought of in isolation from other social policies. Most CCT programs assume that existing supply side capacity is sufficient to meet CCT beneficiary demand or that the beneficiaries can use their additional cash from the monetary transfer to incentivize the supply-side. However there is little evidence that programs have been effective in improving supply side capacity. Therefore ensuring adequate level of service provision is essential for the success of CCT intervention and this need to consider in the

outset.

In the presence of supply constraints, the cash incentive scheme has been modestly effective in stimulating increased utilization services, thus the need for conditionality. Moreover, there is little indication that when beneficiaries learn that access to health care is a right it will result in enhanced demand for services and provider accountability, underscoring the need for external monitoring on the quality of service is essential.

In Bangladesh, CCT programs can be at the forefront of public sector intervention within social safety net clusters. However, CCT programs are costly and require moderate level of government involvement and administrative capacity. The programs require a robust service delivery and systems infrastructure in place; given the extent of complexity of a CCT program in terms of components and conditionalities, implementation, monitoring and evaluation efforts could be substantial. To ensure effective coordination between various implementation and monitoring authorities it may be useful to delegate the organization and administrative responsibilities to a single line ministry.

CCT programs often fail to reach vulnerable groups and foster transparency and accountability at the community level. Centralized programs have been criticized for limiting the engagement of local governments and civil society and it is clear that in limited capacity environments, a greater reliance on local communities is warranted.

Though CCT programs are not a panacea, they can certainly form part of comprehensive social and economic policy strategies for Bangladesh, in its effort towards achieving equitable economic growth and development.

6. Inequality in Education

While income inequality and poverty have led to large differentials in the educational outcomes between the wealthiest and the poorest quintile (graph), inequality in education has itself contributed to exacerbate income inequality. The reverse causality is evidenced by the returns of education in the job market. Workers with higher level of education are found proportionally more in occupations with higher salaries. Also, workers with little or none education are found more in the informal sector and, for any given level of education, returns of formal sector are higher than the informal one. Thus, less educated workers are penalized twice – once through lower return from lower education and again through further reduction in return because of working in the informal sector.

Ideas for growth
www.theigc.org

DIRECTED BY
LSE
UNIVERSITY OF OXFORD

FUNDED BY
UKaid
from the British people

To reduce the disparities caused by the inequality to the access to education, policies need to be addressed to the achievement of universal rate of enrolment to primary and secondary school and the reduction of the high dropout rate of the students from the poorest quintiles.

7. Policy Recommendations

- Conditional Cash Transfers (CCTs) proved to be largely effective in increasing school participation among the households of the intermediate segment of the lower income distribution. However their success is compounded by the large cost effectiveness ratio. In Mexico, the Progresa programme only increased the additional year of student participation by 0.3 per $100 spent. However, poorest marginal households tend to be more reluctant in participating in CCTs. As evidenced by the Bangladeshi experience with CCTs (Female Stipend Programme and Primary School Stipend Programme), ensuring a transparent system of eligibility and an efficient monitoring system is a key requirement for policies aimed at reducing unequal access to education.

- Unconditional Cash Transfers could be more helpful when targeted to the poorest beneficiaries: reducing the cost of conditionality and the cost of schooling (i.e. less frequent medical check-ups) while increasing the amount of cash transfer, could dramatically increase the schooling outcomes of the extreme poor.

- School meal programmes are also effective tools to increase school participation among the poorest. Mainly, school meal subsidies seem to be more successful when addressing gender disparities.

- Interventions aimed at increasing the awareness among parents and students on the schooling returns proved to be successful and efficient. Because the only costs of this program were the one-time meeting and the parents' time to attend, the cost ratio benefit is extremely low as an additional 20.7 years of education were attained for every $100 spent.

- Treating children for intestinal worms that can make them tired, anaemic, and unable to attend school, led in past projects in between 2.7 years and 13.9 years of education for every $100 spent. Recent large-scale deworming programs have cost less than 50 cents per child per year, suggesting an even higher level of cost-effectiveness than the evidence reported in this review.

Ideas for growth
www.theigc.org

DIRECTED BY
LSE | UNIVERSITY OF OXFORD

FUNDED BY
UKaid
from the British people

Different interventions have disparate advantages and cost-effectiveness potentials according to the educational target they intend to reach.

As evidenced in this chapter, school meals programme proved to be very effective in reducing gender disparities in the poorest quintile. At the same time, UCTs can be more effective than CCTs in increasing schooling among the extreme poor while it may be true the opposite when the target are the least poor beneficiaries.

As multiple goals necessitate a corresponding multiplicity of policy instruments, it is important to introduce and test policies with a multidimensional approach in order to reach the heterogeneous needs of their beneficiaries.

To do so, policy makers need to rigorously test the impact and the efficiency of educational policies that they are willing to initiate, preferably through an experimental setting as for the phase-in pilot schemes of the Progresa programme in Mexico.

Trend in Disparities in Attendance rates at Primary and Secondary Levels						
	1993	**1996/97**	**1999/00**	**2004**	**2007**	**2011**
Primary Net Attendance Rate (%)						
Bottom Quintile	56.69	64.04	63.40	73.84	80.18	77.24
Top Quintile	82.42	84.59	80.87	87.53	85.10	82.21
Percent age point difference	25.73	20.56	17.47	13.69	4.92	4.97
Secondary Net Attendance Rate (%)						
Bottom Quintile	3.50	8.79	9.60	11.05	18.42	20.27
Top Quintile	49.06	48.07	52.54	53.21	50.32	47.29
Percent age point difference	45.56	39.29	42.94	42.16	31.90	27.02

Source: Demographic and Health Survey (DHS) data processed by World Bank's World Development Indicators (WDI) 2014.

IGC
International
Growth Centre

Table VI: Socio-Economic Differentials in Childhood Mortality and Morbidity					
	1996/97	**1999/00**	**2004**	**2007**	**2011**
Infant mortality					
All	82	72	65	52	43
Bottom Quintile	97	93	90	66	50
Top Quintile	57	58	65	36	29
Ratio (bottom to top quintile)	1.7	1.6	1.4	1.8	1.7
Under five mortality					
All	116	95	88	65	53
Bottom Quintile	141	140	121	86	64
Top Quintile	76	72	72	43	37
Ratio (bottom to top quintile)	1.9	1.9	1.7	2.0	1.7
Prevalence of fever (%)					
All	31.0	37.2	40.2		36.5
Bottom Quintile	31.6	39.7	42.6	38.9	40.7
Top Quintile	30.0	35.3	37.7	34.8	29.0
Ratio (bottom to top quintile)	1.0	1.1	1.1	1.1	1.4
Prevalence of diarrhoea (%)					
All	7.6	6.1	7.5	9.8	4.6
Bottom Quintile	8.8	6.3	8.7	10.2	5.5
Top Quintile	6.4	6.4	6.1	8.1	4.4
Ratio (bottom to top quintile)	1.4	1.0	1.4	1.3	1.3
Prevalence of acute respiratory infection (ARI) (%)					
All	12.8	n.a.	19.3	13.0	5.8
Bottom Quintile	12.7	n.a.	21.4	16.5	7.3
Top Quintile	10.6	n.a.	14.1	8.1	5.1
Ratio (bottom to top quintile)	1.2	n.a.	1.5	2.0	1.4

Notes: (1) Reference period for mortality is five years preceding the survey.
(2) Absolute values of ARI data for 2011 are not comparable with earlier years because of definitional differences, but the ratio between quintiles may still be comparable.

Source: Gwatkinet al. (2007) and NIPORT et al. (2005, 2009, 2013).

DIRECTED BY
LSE
UNIVERSITY OF OXFORD

FUNDED BY
UKaid
from the British people

International
Growth Centre

Table IX: Socio-Economic Differentials in Maternal Care (percent)					
	1996/97	**1999/00**	**2004**	**2007**	**2011**
Ante-natal care visits to a medically trained person					
All	29.0	33.4	48.8	51.7	54.7
Bottom Quintile	16.0	19.4	24.9	30.8	30.3
Top Quintile	62.3	69.8	81.1	83.5	87.4
Ratio of shortfall	2.23	2.67	3.97	4.19	5.53
Iron Supplementation					
All	…	36.4	50.0	54.8	…
Bottom Quintile	…	21.2	31.6	38.9	…
Top Quintile	…	62.8	76.1	75.9	…
Ratio of shortfall		2.12	2.86	2.54	
Delivery attended by a medically trained person					
All	8.1	12.1	13.2	18.0	32.1
Bottom Quintile	1.8	3.5	3.3	4.8	12.2
Top Quintile	29.8	42.1	39.4	51.0	63.9
Ratio of shortfall	1.40	1.67	1.60	1.94	2.43

Note: Ever married women aged 15-49 years with live births in the three years preceding the survey.

Source: Gwatkinet al. (2007) and NIPORT et al. (2005, 2009, 2013).

Ideas for growth
www.theigc.org

DIRECTED BY
LSE
UNIVERSITY OF OXFORD

FUNDED BY
UKaid
from the British people