

Bangladesh's Achievements in Social Development Indicators: Explaining the Puzzle

Wahiduddin Mahmud^a, M Niaz Asadullah^b and Antonio Savoia^c

Introduction

Bangladesh has achieved rapid and spectacular improvements in many social development indicators during the last two decades or so. The decline achieved in infant and child mortality rates since the early 1990s, for example, is among the fastest in the developing world. Bangladesh has already eliminated gender disparity in primary and secondary school enrolment and is near to achieving universal basic education. Its success in reducing the population growth rate through the adoption of birth control methods is also unique among countries at similar per capita income levels. Within South Asia, Bangladesh has improved its position ahead of India and the region as a whole in a number of these indicators although its per capita income is still significantly below the regional average (Mahmud 2008).¹

The Exceptionality of Bangladesh

Cross-country comparisons show that in relation to per capita income, Bangladesh has transformed itself during this period from being a laggard to a clear leader in many of the indicators of health, education and demographic outcomes. This is evident from the regression results in Table 1 which show for different time periods the extent of deviations of the values of these indicators from what are expected at the level of per capita income of Bangladesh. These deviations for Bangladesh, along with their statistical significance, are derived from cross-country regressions run separately for each period with various social development indicators as the dependent variables and PPP-adjusted per capita income (log) as the independent variable along with a dummy variable for Bangladesh.

^aIGC and Economic Research Group, Dhaka ^bUniversity of Reading ^cUniversity of Manchester

Within South Asia, Bangladesh has improved its position ahead of India and the region as a whole in a number of indicators although its per capita income is still significantly below the regional average.

¹ For example, Bangladesh is now ahead of India in life expectancy at birth– 69.2 years compared to 65.8 years - while its GNI per capita (PPP adjusted) is 45 percent lower than that of India; see UNDP (2013), Table 1.

Bangladesh's above achievements may appear as a 'development puzzle', given the country's desperate initial conditions, still widespread poverty and allegedly poor record in governance adversely affecting the quality of public service delivery (Ahluwalia and Mahmud, 2004; Mahmud et al., 2008). Another element of the puzzle is that the improvements in social development indicators achieved thus far have been possible despite the fact that Bangladesh's public spending on both health and education as a proportion of GDP has remained lower than what is expected even at comparable low levels of per capita income (see the regression results in Table 1). Moreover, Bangladesh belongs to a regional belt, stretching across northern Africa, the Middle East, Pakistan, and northern India, that is characterized by patriarchal family structures along with female seclusion and deprivation. This makes its achievements all the more noteworthy.

Low-cost Solutions and Social Mobilisation

How has this progress been possible? Much of it seems to have been due to the adoption of low-cost solutions like the use of oral rehydration saline (ORS) for diarrhoea treatment leading to a decrease in child mortality, and due to increased awareness created by effective social mobilisation campaigns such as for immunization or contraceptive use or girls' schooling. The scaling up of programmes through spread of new ideas is helped in Bangladesh by a strong presence of non-government organisations (NGOs) and also by the density of settlements

and their lack of remoteness made possible by an extensive network of rural roads. Diarrhoea deaths that used to be the single major cause of under-five mortality in Bangladesh have now been greatly reduced by the widespread adoption of the ORS technology, including the use of homemade saline. Again, due to successful social campaigns, Bangladesh has become a leader among developing countries in the rates of child immunisation, which is another factor greatly contributing to the reduction in under-five mortality.² Maternal mortality has been greatly reduced in recent years mainly through easy access to prenatal care, while the rate of medically attended births remains extremely low even by the standards of low-income countries. Underlying these proximate factors, however, there has also been a broader process of social transformation affecting behavioural norms and attitudes such as towards female employment, fertility behaviour and parental incentives for investments in children's health and education (Mahmud 2008).

The government's commitment and support for welfare-oriented programmes have had undoubtedly an important role to play, although that is only part of the story. Among these programmes, the so-called 'food for education' programme has helped to bring children from poor rural households to the formal school system since the early 1990s, while female school enrolment has been promoted by the introduction of a universal stipend programme for female students attending secondary schools.³ The female stipend

programme has been described as the world's vanguard programme of this type having profound impact on parental attitudes and social norms regarding sending adolescent girls to schools.

The connectedness of rural communities has been facilitated by the fact that the government has made increasing budgetary allocations for developing extensive networks of rural roads.⁴ Besides promoting rural development generally, such dense transport links have helped in making services more accessible to the rural communities, especially to women, and in scaling up social development campaigns as mentioned above. A broad-based pattern of economic growth has also helped by creating employment opportunities for the poor, such as in the rapidly-growing ready-made garment industry that employs mostly women; and this may explain why even the poor families are increasingly sending their children to school.⁵

The NGO-led Approach

The other part of the story, however, has to do with the role of NGOs. Bangladesh may well be the world's leader in using NGOs as vehicles of social development. NGOs are involved both in the delivery of services and in the scaling up of the interventions through social awareness campaigns.⁶ For example, the initial spread of the use of oral saline for diarrhoea treatment was largely due to the work of BRAC, the largest development NGO in Bangladesh (Zohir 2004). The rapid expansion of microcredit programmes may also have been a contributing factor by promoting

² For example, percent of one-year-olds immunized against measles in 2005 is estimated to be 81 in Bangladesh compared to 58 in India and 74 for developing countries as a whole; see UNDP(2007), pp. 248-50). See also the results of cross-country regressions in Appendix Table A.2.

³ Under the 'food for education' programme, children from poor rural families were given wheat rations (later monetised) for regular school attendance.

⁴ The road density in Bangladesh, as measured by road length per unit of area, is approximately the same as that in the UK and is higher than in many other OECD countries; World Bank (2005), p. 37.

⁵ For example, a recent study has found links between girls' school enrolment and the growth of ready-made garment industry; see Heath and Mobarak (2012).

⁶ For a comprehensive account of the NGO sector in Bangladesh, see World Bank (2007).

social interactions and mobility for rural women. Besides the economic impact of microcredit on poverty, the mobilisation of women's credit groups may lead to non-economic gains through enhanced agency, empowerment and mutual support, thus creating the social environment for other development interventions to work better.

One advantage of this NGO-led approach has been that social development has been broad-based, since NGOs primarily work with the poor and are effective in motivating them through social campaigns. This, along with the fact that most of the gains have come from low-cost solutions, probably explain why there are less inequalities in social development indicators in Bangladesh than, say, in India. Thus, the estimates for the early 2000s reported in the UNDP's Human Development Report show that while the under-five mortality rate among the poorest 20 percent households was lower in Bangladesh than in India (121 compared to 131 per 100,000 live births), the reverse was true for the richest 20 percent households (72 in Bangladesh compared to 46 in India⁷). Another evidence of the broad-based nature of social development in Bangladesh is that the female advantage in primary and secondary school enrolment can be seen across all income groups.

It is remarkable that Bangladesh's achievements thus far do not exactly fit into any of the typical pathways to social and human development. Amartya Sen for example, distinguishes between 'income-mediated' and 'support-led' human development (Sen 1999: Chapter 2); of these, the former works through rapid and broad-based economic growth, which facilitates better standards of

living and better provision of social services. This is not the case in Bangladesh since the country is found to be clearly an outlier in its social development outcomes in relation to per capita income. Neither does Bangladesh represent the typical case of 'support-led' human development involving large public social spending on welfare-oriented programmes. As mentioned earlier, cross-country comparisons show that Bangladesh's public spending on both health and education as a proportion of GDP has remained lower than what is expected even at comparable low levels of per capita income (see Table A.1).

Future Risks and Challenges

The above narratives on Bangladesh's progress in social development achieved thus far also point to the future risks and challenges. As the gains from low-cost solutions are reaped, further progress may increasingly depend on increased public social spending and an improvement in service delivery systems. As discussed earlier, the declines from the very high initial child mortality have been largely driven by relatively inexpensive interventions such as child immunisation and oral saline treatment for diarrhoea. As the overall child mortality has declined, the ratio of neonatal mortality to under-five mortality has rapidly increased (World Bank 2005a, p. 27). Further reductions in child mortality will thus require more expensive child survival interventions, such as hospital-based care to avert neonatal mortality resulting from birth-related complications including underweight births. Similarly, lowering the currently high maternal mortality rate will also require the provision of relatively costly health services. Again, while remarkable progress has been made in school enrolment, especially

for girls, there are serious concerns now about the quality of education. Although gross primary enrolment rate in Bangladesh is ahead of the South Asian average, the school completion rate remains relatively low.

The progress in social development indicators has been achieved to a large extent by bypassing the widespread problem of poor governance afflicting service delivery across the social sectors in Bangladesh. This has been possible by keeping the public campaigns, such as for immunisation or 'social' marketing of contraceptives, outside the established structure of service delivery and also by involving the NGOs. But further progress through this route may prove increasingly difficult. Service delivery systems are highly centralised with very little mechanisms for accountability through community participation. The rural healthcare system is plagued by poor utilisation of services and widespread absenteeism of doctors – estimated to be as high as 75 percent according to a nationwide survey (Chaudhury and Hammer 2003). Similarly, the poor quality of schooling may make it difficult to sustain the gains in school enrolment, and there are signs of that already happening.⁸

The question remains: why has Bangladesh not achieved similar success with respect to "good governance" outcomes in public service delivery through the NGO route as it has achieved with respect to some social development outcomes? The NGO-based interventions in Bangladesh largely target households or individuals, mostly poor women, instead of using what Sen and Dreze (1995: pp.190-91) call "the agency of the public" such as involving local government institutions along with community-based organisations.

⁷ See UNDP, 2007, p. 255.

⁸ As can be seen from Table 1, the extent of Bangladesh's lead in girls' school enrolment rates has already narrowed in the most recent period. As for boys' enrolment rates, Bangladesh is in fact found to have recently reverted to its original laggard position; the regression results regarding this are not, however, shown in Table 1.

As such, the interventions are mostly effective in promoting self-interested behaviour for promoting individual household welfare, even if the benefits accruing to the targeted households have elements of 'public good' (e.g. immunisation, birth control, sanitation, etc.). The beneficiaries of NGOs are on the receiving side, often not conscious of what they ought to have as a matter of right. In the absence of effective local government, the NGOs

in Bangladesh work almost at parallel with the highly centralised public service delivery systems; as such, they can hardly work as intermediaries to enable the poor to claim public services or to sanction service failures.

Clearly, to consolidate the gains made thus far and make further improvements, the challenge lies not only in allocating more budgetary resources for public social spending,

but also in improving the governance structure of service delivery. That said, Bangladesh's experience shows that it is possible to achieve rapid progress in many social development indicators despite widespread poverty and governance dysfunction, by creating social awareness and using low-cost affordable solutions.

Table 1. Coefficient of the Bangladesh dummy showing deviation from expected performance in cross-country regressions of social development indicators with respect to per capita income (PPP-adjusted): 1981-2010

	1981-1985	1986-1990	1991-1995	1996-2000	2001-2005	2006-2010
Mortality rate, infant (per 1,000 live births)	13.21***	6.00	-2.39	-10.27***	-16.64***	-19.29***
Mortality rate, under-5 (per 1,000)	2.80	-7.86	-19.22***	-28.47***	-37.08***	-39.09***
Immunisation, DPT (% of children aged 12-23 months)	-22.39***	13.16***	12.38***	17.62***	14.51***	26.49***
Immunisation, measles (% of children aged 12-23 months)	-24.85***	12.31***	3.71	6.33***	17.07***	28.43***
School enrolment, primary, female (% gross)	-14.78***	-9.62**			14.34***	7.63**
School enrolment, secondary, female (% gross)	-4.60**	-5.12*		13.80***	14.84***	6.12**
Population growth (annual %)	-0.05	0.00	0.04	-0.22	-0.32**	-0.62***
Contraceptive prevalence (% of women aged 15-49)	-3.45	3.96	18.52***	22.93***	27.99***	19.71***
Fertility rate, total (births per woman)	-0.53***	-1.20***	-1.61***	-1.65***	-1.84***	-1.93***
Public spending on education, total (% of GDP)	-2.89***			-0.84**	-1.55**	-2.14***
Public health expenditure (% of GDP)			-0.79***	-0.98***	-1.30***	-1.82***

Notes: The regressions are run separately for each period with various social development indicators as the dependent variables and PPP-adjusted per capita income (log) as the independent variable along with a dummy variable for Bangladesh (i.e. Bangladesh = 1, all other countries = 0). The data are from World Development Indicators 2011 and are in respect of developing countries including low, upper- and lower-middle income ones (World Bank 2011). The variables refer to the respective period or are five-year averages for the period, as appropriate. Statistical significance at 1%, 5% and 10% levels are indicated, respectively, by ***, ** and * (two-tailed test based on heteroskedasticity-robust standard errors).

References

- Ahluwalia, Isher. J. and W. Mahmud (2004), "Economic Transformation and Social Development in Bangladesh", *Economic and Political Weekly*, September 4, 39(36): 4009-11.
- Chaudhury, N. and J. S. Hammer (2003), *Ghost Doctors: Absenteeism in Bangladesh Health Facilities*, Policy Research Working Paper 3065, Washington, DC: World Bank.
- Heath, Rachel and Mobarak (2012), "Supply and Demand Constraints on Education Investment: Evidence from Garment Sector Jobs and the Female Stipend Program in Bangladesh", memo., School of Management, Yale University, <http://faculty.som.yale.edu/mushfiqmobarak/Garments.htm>.
- Mahmud, W. (2008), "Social Development: Pathways, Surprises and Challenges", *Indian Journal of Human Development*, Jan-June, 2(1): 79-92.
- Mahmud, W., Sadiq Ahmed and Sandeep Mahajan (2008), "Economic Reforms, Growth and Governance: The Political Economy Aspects of Bangladesh's Development Surprise", in Brady, D. and Michael Spencer (eds.), *Leadership and Growth*, Chapter 8: 227-54, Washington, DC: World Bank on behalf of the Commission on Growth and Development.
- Sen, Amartya and Jean Dreze (1995), *India: Economic Development and Social opportunity*, New Delhi: Oxford University Press.
- UNDP (2007), *Human Development Report 2007/2008*, Oxford University Press, New York and Oxford, for the United Nations Development Programme.
- UNDP (2013), *Human Development Report*, New York: United Nations Development Program.
- World Bank (2005), *Promoting the Rural Non-Farm Sector in Bangladesh*, University press Limited, Dhaka, published for World Bank, Dhaka.
- World Bank (2005a), *Attaining the Millennium Goals in Bangladesh*, Washington, DC: World Bank (South Asia Region).
- World Bank (2007), *Economics and Governance of Nongovernmental Organizations in Bangladesh*, University press Limited, Dhaka, published for World Bank, Dhaka.
- Zohir, S. (2004), "NGO sector in Bangladesh: an Overview", *Economic and Political Weekly*, September 4, 39(36): 4109-13.

About the Author

Wahiduddin Mahmud is Country Director for IGC Bangladesh and Professor of Economics at the University of Dhaka. Together with Nobel peace prize winner Muhammad Yunus, he co-founded, and was chairman for the last ten years of Palli Karma Sahayak Foundation (PKSF), which is an apex institution for funding the microfinance programmes of NGOs in Bangladesh. He is also chairman of the Governing Body at the Economic Research Group in Dhaka.

Niaz Asadullah is a Lecturer in Economics at the University of Reading. He is also a Associate Research Fellow at the ESRC Centre on SKOPE at the University of Oxford as well as a Research Associate at both the Centre for the Study of African Economies and the Department of International Development at the University of Oxford.

Antonio Savoia is a Lecturer in Development Economics at the University of Manchester. Before joining the University of Manchester, Antonio has worked at the University of Exeter, the University of Reading and at the University of Bath.

About the IGC

The International Growth Centre (IGC) aims to promote sustainable growth in developing countries by providing demand-led policy advice based on frontier research. Based at the London School of Economics and in partnership with Oxford University, the IGC is initiated and funded by the UK Department for International Development (DFID).

The IGC has 14 active country programmes in 13 countries (Bangladesh, Ethiopia, Ghana, India (Bihar state and Central), Liberia, Mozambique, Pakistan, Rwanda, Sierra Leone, South Sudan, Uganda, Tanzania and Zambia) as well as 10 research programmes spanning topics such as trade, agriculture, macroeconomics and human capital.

Contact IGC in Bangladesh

For enquiries about this note and general enquiries about IGC, please contact bangladesh@theigc.org.

Contact IGC in London

International Growth Centre
The London School of Economics and
Political Science Houghton Street
London WC2A 2AE
United Kingdom
www.theigc.org