Discussion: Institutional Challenges in Public Spending: The Case of Primary Education

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More and More Equal Education

Over the past two decades, Bangladesh achieved an unprecedented expansion in enrolment rates in basic education. As a result, the country's average schooling attainment has exceeded the average attainment in India and Pakistan and is approaching the averages in Sri Lanka, Indonesia, and Malaysia (Figure 7.4). This achievement was a result of effective education programs sustained since the early 1990s and a growing economy.

The most remarkable feature of this achievement is the dramatic increase in girls' enrolment rates and average years of schooling. This is worth noting because the large gains in women's schooling made possible the growth of its garment industry which, in turn, fuelled the country's recent economic growth, as noted in de Melo's comments in this volume. The study by Heath and Mobarak (2015) documents this positive interplay between the progress in women's education and the expansion of the garment industry. They found that young girls were more likely to be enrolled in school after garment jobs arrived, and that older girls were more likely to be employed outside the home in villages closer to garment factories. Although the growth of the garment industry spurred educational development, it was the government's conditional cash transfer program to encourage female enrolment at the secondary level, launched in 1994,⁵¹ that put the country firmly on the steeper path to progress. The stipend program increased girls' years of education by 14-25%, as well as changed several life outcomes for them: girls now marry later, have fewer children, work in the formal sector more than in the agricultural or informal sector, and enjoy greater autonomy in making decisions about household

⁵¹ Bangladesh's Female Secondary School Stipend Program made secondary education free for rural girls and gave girls a modest stipend upon enrolment.

		Residence			Wealth quintile			
Survey	Total	Urban	Rural	Poorest (Q1)	Q2	Q ₃	Q4	Richest (Q5)
2014 DHS 2011 DHS 2007 DHS 2004 DHS	3.I 2.5	4.7 4.6 4.2 3.8	3.I 2.5 I.9	o.6 o o	1.7 1.1	3·3 2·3	4.6 4.3 4 3.8	6.8 6.1

TABLE 7.1 Median number of years of education: both sexes, ages 15-49

Source: Demographic & Health Surveys (DHS), 2004-2014.

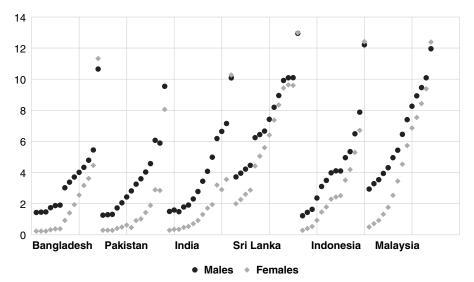


FIGURE 7.4 Estimated average years of schooling, adults 25 and over, males and females, Bangladesh and other Asian countries Source: Barro-Lee, 1950–2010; HCI, 2018.

purchases (Hahn, et al., 2018). These are long-term impacts that will yield significant spillover benefits in generations to come.

Bangladesh not only closed the gender gap in education but also narrowed the gaps between urban and rural areas and among income groups within a decade (Table 7.1). Innovative non-government and community programs, such as BRAC schools, for which Bangladesh is known, contributed to this progress. ⁵² In acknowledging its educational successes, the narrowing of these large disparities, especially when comparing wealth quintiles, deserves note. A

⁵² See, for example, Ahmed and Arends-Kuenning (2006), Ahmad and Haque (2011), and Asadullah, Savoia and Mahmud (2014).

	Expected years of school	Harmonized test scores	Learning-adjusted years of school
Pakistan	8.8	339	4.8
India	10.2	355	5.8
Bangladesh	11.3	368	6.5
Indonesia	12.3	403	7.9
Sri Lanka	13.0	400	8.3
Malaysia	12.2	468	9.1

TABLE 7.2 Learning-adjusted years of schooling in Bangladesh and comparator countries

Source: www.worldbank.org/content/dam/worldbank_hci/index.html#years-of-school/PAK& region=SAS.

previous review of the primary education sector concluded that Bangladesh's recurrent public spending in primary education has been largely pro-poor. Public spending per child in the poorest quintile of upazilas was 30% higher than in the wealthiest quintile, although this pro-poor spending has not eliminated large disparities (Steer, Rabbani, and Parker, 2014).

But Schooling Is Not Learning

The importance of learning, not just schooling, has been the focus of recent major education reports because of its critical contribution to economic growth and overall development (Education Commission, 2016; World Bank, 2017). When students go through school without acquiring basic knowledge and skills that they need for life and work, families, communities, and economies do not reap the potential benefits of education. In Bangladesh, as evidence cited in this chapter shows, learning outcomes have not risen apace with years of schooling. According to Asadullah and Chaudhury (2015), about half of the children fail to pass a written numeracy competence test, a finding that also holds for those who had completed primary school. While there is a statistically significant and positive correlation between schooling attained and numeracy competence, this relationship is quite low. Table 7.2 compares Bangladesh with other Asian countries with respect to the quantity and quality of schooling attainment (World Bank, 2020b). Because of deficiencies in the quality of schooling measured by harmonized test scores (Altinok, Angrist, and Patrinos, 2018), the expected schooling attainment in Bangladesh of 11.3 years is equivalent to just 6.5 learning-adjusted years. It performs better than India or Pakistan, but the distance from the other comparator countries is greater.

Improving the quality of primary education is inarguably Bangladesh's next education challenge. This chapter argues that institutional change in four areas are needed to meet this challenge: (1) high fragmentation due to the

complex coexistence of multiple actors; (2) inadequate financing resources; (3) low-quality teachers and poor teacher management in GPSs; and (4) lack of a common curriculum and teacher training.

Addressing the Fragmentation of Primary Education System

The high fragmentation of the primary education system in Bangladesh is evident. It consists of several types of primary schools under different central agencies, alongside many types of non-government schools. In addition, the public school system itself is overseen by deconcentrated administrative units, with local subdistricts (upazilas) playing a major administrative role. Nationalization of all schools, as recommended by this chapter, however, is hardly the solution to the problems that arise from high fragmentation. A diverse system of provision may be what the country needs in order to meet the diverse needs of its population, also as suggested by this chapter, and perhaps how Bangladesh was able to achieve the educational development it has today. Nationalization is likely to eliminate an important part of this diversity, in particular, the NGO and private schools that serve rural and poorer areas. Instead of nationalization, what may address the problems of fragmentation is a governance structure that is consistent with decentralized delivery and yet is led by a central agency that sets and oversees common standards of delivery, enforces regulatory guardrails across all schools, and monitors learning outcomes nationwide, all towards achieving shared goals. Even in a decentralized system that assigns responsibilities to local governments and is open to both public and private providers, the central government can – and should – have a critical role for leading a coherent national school system. This view is implied but not elaborated in this chapter's several recommendations, including that on the harmonization of multiple actors.

One important policy and programming tool for the central government is ensuring that timely and reliable information on the whole school system is widely available and that that information is used for decision-making and management. Especially in as large a school system as Bangladesh's, the flow of adequate school data is the key to facilitating decisions and removing implementation blockages, identifying spending gaps, and addressing workforce problems. For example, this chapter is right in calling attention to fraud and corruption in the certification, recruitment, and transfer of teachers and to the significant budgetary resources left on the table and unspent in spite of the low national expenditure allocation for education. These are indicators of the school system's weak management and poor implementation capacity. Without adequate system-wide data, those who formulate policies and manage programs are disadvantaged by not knowing whether their spending decisions and policies are appropriate and whether those decisions affect school performance. When system information is open and shared widely, politics and vested interests are also less likely to drive policy and spending decisions.

Studies have shown that robust accountability and transparency mechanisms help raise the quality of service delivery because the scope and complexity of what governments must do to achieve education goals is nearly impossible without reliable and timely data. This is a lesson that the best performing education systems have learned over time; Bangladesh could use it too in order to transform its primary education system.

Improving the Primary Education Workforce

A large part of this chapter is rightly devoted to institutional issues related to teachers. Teachers are the system's biggest investment and also its most powerful lever for change. How teachers are trained, recruited, inducted into the profession, supported, assessed, and compensated are all relevant to improving teacher performance in any education system. This chapter describes the multi-layered, highly complex mechanism for hiring teachers, that is nonetheless vulnerable to fraud and corruption and hires teachers who do not meet quality standards. This chapter also discusses how this recruitment process can be simplified and be more transparent and efficient. One change that this chapter identifies as a disincentive for improvement in teacher performance is the lack of prospects for promotion and recommends that an additional position of assistant headmaster be created so that teachers can aspire for a promotion. This chapter also argues that teacher salaries are too low and recommends an increase in basic teacher pay. Neither recommendation by itself is likely to obtain better teacher performance, however. What is missing from this chapter is a discussion of teacher reforms that are focused on achieving good teaching and more learning. If the aim is to improve teaching quality and learning, then these lessons, to highlight just a few, from other school systems would be useful:

- In recent reviews of the literature about effective teacher professional development, among the most recommended interventions are changing the pedagogy used in teacher training institutes so that it is more directed to individual levels; provide training with specific subject content rather than general theory since different subjects require different pedagogies; provide follow-up mentoring visits for new teachers and allow new teachers to practice with other teachers; support continuous learning opportunities for current teachers; and involve teachers in curriculum development (Popova, et al., 2018). Many resources are spent on teacher development programs, so a reform of these programs would raise significantly the cost-effectiveness of public spending on education.
- Studies have shown that financial incentives do improve the supply of new teachers and the performance of current teachers (e.g. Duflo, Hanna and Ryan, 2012), but the design of these incentives matter. This chapter recommends increasing teacher pay. Higher salaries do not guarantee better

performance, however. Indonesia's experience with a national unconditional increase in teacher salaries in the early 2000s serves as a cautionary tale. The government was expecting a doubling of teacher salaries to improve teacher morale, motivation, and job satisfaction, thereby increasing teacher effort and ultimately student learning. After the pay increase, teachers were indeed more satisfied with their income and less likely to report financial stress, were less likely to have a second job and worked fewer hours on second jobs, but they did not score better on tests of teacher subject knowledge and did not reduce absenteeism and student learning did not improve (de Ree et al., 2015). Key lessons from other countries about how to make financial incentives more effective are summarized by Imberman (2015): first, the choice of metrics and the incentive structure matters for its effectiveness; poorly designed schemes can make outcomes worse while also more costly. Second, incentives should be based on multiple outcomes, of which better student performance is one of several metrics and at least one of which should be qualitative (e.g. principal evaluation or classroom observations). Third, teachers should be rewarded for reaching certain performance targets, such as for their students performing better relative to a set of comparison students.

• A teacher accountability mechanism is broader than using financial incentives for performance; it should link teacher performance also to promotion and retention outcomes. Its goal is to make teaching an attractive and rewarding profession by recognizing and rewarding high ability and good performance. Effective teacher evaluation systems share a common set of features (Kraft et al., 2018): (1) the use of multiple measures of teacher performance including test-based performance measures such as value-added measures or student growth percentiles, and a qualitative assessment such as classroom observation by school principals or senior teachers; (2) the use of evaluation ratings to inform career ladders and personnel decisions such as promotion and retention. For example, Singapore's teacher performance appraisal process feeds into career ladders by highlighting teachers' abilities to collaborate with each other, their emerging leadership skills, and their teaching skills as part of the regular evaluation system (NCEE, 2016). The model includes three paths that a teacher can follow: a teaching track, a leadership track, and a senior specialist track, and each of these tracks has its own career ladder. Through the teaching track, teachers can aspire first to be Senior Teachers, then they can become Lead Teachers, and then progress further to the level of Master Teachers.

Hossain *et al.* (2017) warn that reforms that are related to teacher performance are difficult because teachers are politically important in Bangladesh, as they are in many other countries, so reforms that are 'more carrot than stick' are more likely to be acceptable, but their success depends on the inherent motivations of teachers. This is a reminder that successful teacher reforms need an astute political leader in the education system.

Increasing Resources for Education

The world of the future will require higher levels of skills and the ability of individuals to acquire new skills throughout life, to know how to adapt to changing social and environmental conditions, and to work flexibly. This is why higher school quality and better academic outcomes is the next education challenge for Bangladesh. Ensuring that the primary education system is equipped to meet that challenge will require greater resources for schools and better management of those resources. This chapter makes a good case for expanding the resources for primary education given the empirical evidence on the returns to economic development and poverty reduction of basic education in Bangladesh, the very low share of education spending to GDP of Bangladesh compared to that of comparator countries, and the poor physical condition of schools and the need for schools to provide more services to low-income students such as meals.

The increase in education expenditures must be accompanied also by a willingness of the education leaders at different levels of government to take bold measures to make those additional resources count. Wastage and leakage of resources due to fraud and corruption must be reduced, and education resources must be allocated to where they can contribute most to higher school quality. Research on other developing countries suggest some useful measures to try, but even better would be for Bangladesh to invest in more program experimentation and evaluations on how to improve quality.